MAXTENA

Product & Custom IoT Solutions Catalog 23 24

GNSS/GPS (L1/L2/L5)
GLONASS/ BEIDOU/ Galileo
5G/4G/LTE
Wi-Fi/ Bluetooth/ ZigBee

LoRa/Sigfox/NB-IoT/ISM
SATCOM
Defense
Transportation

Combination
Accessories
Custom Iot solutions

Content

Content

Content

Content

Content

Content

Content

Content

Content

Content

Content

Content

Content

Content

Content

Content

Content

Maxtena at Glance

Controlling wireless networks and energy distribution in the spatial domain on the RF level is the final frontier of wireless communications.

Maxtena provides advanced beamforming antennas, RF and Cybersecurity products & solutions for terrestrial and satellite-based networks. Our Dynamic Aperture Technology TM (DAT) and CybeRF technologies empower our customers to develop unparalleled solutions for GNSS, SATCOM, LTE, WIFI, IOT, OT, Military and terrestrial applications which are used on Land, Air or Sea.

We use proprietary and patented technologies to design extremely lightweight and high-performance RF antennas and systems for a variety of communications spectrums.

Headquartered in Washington DC Metro, and having additional offices in North America and Europe, Maxtena is at the forefront of wireless innovation.

We are Inventing the Future of Wireless Technology

Our Values

Commitment to Innovation

Our management team has a proven record of delivering innovative products to the marketplace. We have the ability to define a market need, research and develop a product, set up production, and execute on production.

Commitment to Our Customers and Partners

We believe that each product we deliver and service we render should not only meet, but exceed the expectation of our customer. We have a strong record of maintaining existing business relationships in the government and commercial sectors and protecting critical intellectual property through patents and trade secrets.

Commitment to Our Team

We pride ourselves on building a diverse workforce with exciting opportunities and exceptional benefits for our team members. Our core values – creative, involved, exceptional, and innovative – are the foundation of our collaborative and inventive work environment. We believe that by promoting teamwork and cooperation we will be able to find continued success and promote professional growth.

Commitment to Quality

We take great ownership in product design, development and implementation. The strive for excellence and highest integrity of quality is our commitment to products, services, and customer relationships.

Deal Valued Customer,

Maxtena was founded in 2007 with a singular vision of creating the first commercially viable, digitally steerable, beamforming antenna system. The passion and focus from founders Stani Licul and Nathan Cummings resulted in years of research and product development that culminated with the creation of Maxtena's patented Dynamic Aperture Technology (DAT™) for beamforming systems. Following from those pioneering efforts, in 2013 Maxtena became the first company to commercialize a beamforming system capable of simultaneously tracking multiple satellites while on-the-move. Today Maxtena's beamformers enable communications on tens of thousands of mobile platforms anywhere on planet Earth for both terrestrial and satellite-based networks.

Maxtena has lead the industry in pioneering its patented Helicore™ compact quadrifilar antenna technology. Maxtena's Helicore technology has been globally adopted in both satellite communications and satellite navigation markets due to its high performance and small size. The first Helicore based product was introduced in 2010 and Helicore products have sold in millions in a wide variety of devices and industries.

Maxtena's core values today include a passion for innovation and research with a central tenet of product realization. These values have allowed Maxtena to expand its product offerings to include a wide variety of integrated wireless devices with advanced hardware and software that fully utilize its DAT and Helicore technologies.

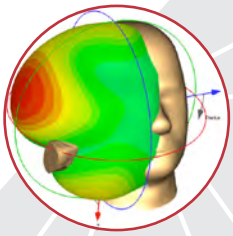
With warm regards,

Stani Licul
Chief Executive Officer Maxtena Inc.

Why Maxtena is your antenna supplier of choice?

- Patented Technology
- REACH
- Certifications
- Quality assurance
- RoHs compliance
- ISO 9001

Manufacturing **cutting-edge antenna** solutions for the connected world



State-of-the **art design** and test Chambers facilities

Support off-the-shelf orders & **fully customized** integrations

Unrivaled Beamforming Solutions

Large Portfolio of External & Embedded antennas

Global presence

Products Overview

Helix Antennas

We offer a unique set of patented helix antennas for satellite communications. Our advanced helical antennas operate across several satellite networks from GNSS, Iridium, Inmarsat, Thuraya and Globalstar to C-band, S-band and X-band frequencies. We also offer several antennas that work across multiple networks. The antennas are available in different sizes and form factors. We produce both external antennas that come in a range of rugged housings, as well as embedded antennas. Our embedded antennas are custom built to fit perfectly in your device's own housing. We have developed countless first-to market helix innovations, and our antennas are currently being used in multiple major SATCOM & IOT Applications, Tracking and Navigation Devices and Military Communications Equipment.

Microstrip Antennas

We offer a large portfolio of both active and passive advanced conformal wave microstrip antennas. The antennas are available in several different sizes and configurations depending on customer requirements. This included externally mounted and or embedded antenna solutions. The active antennas can be customized with different filtering, LNA, cable lengths and connectors upon request. All of our microstrip antennas offer high performance with a very low profile. The antennas are ideal for various professional IOT applications. The compact size and lightweight features of the microstrip antennas make them perfect for various commercial and industrial uses. By utilizing various RF and material advances, Maxtena is the leader in conformal antenna solutions used for IOT, Automotive and Autonomous applications.

Defense Solutions

Maxtena's ruggedized advanced antennas and wireless solutions are integrated into a variety of platforms including vehicle tracking equipment, UAVs, military tactical radios and manpacks. Our products are designed and qualified to support applications on the ground, in the air, and at sea. We offer a unique set of patented helix antennas for satellite communications. The antennas are available in different sizes and form factors. We produce both external antennas that come in a range of rugged housings, as well as embedded antennas. Our embedded antennas are custom built to fit perfectly in your device's own housing.

Products Overview

Iridium solutions

From maritime and military, to mining and UAV's and IOT, Maxtena offers Iridium technology to empower OEMs, customers, and end users across various industries to manage their heavy equipment fleets more efficiently — optimizing overall performance, improving safety for equipment and crews, and remote communication and beyond line of sight control and command. The Iridium antennas and modems are available in several different sizes depending on customer requirements. We produce both external antennas that come in a range of rugged housings, as well as embedded antennas. These antennas can be customized with different cable lengths and connectors upon request. Iridium modems are provided for embedded designs along with complete plug and play products with cloud connected services. We provide also complete Iridium IOT solutions including trackers and value add products. Iridium provides real time access to high-value data letting you or your customers take actions to prevent potential failures and avoid costly consequences.

Cellular /Wifi/4G Antennas

We offer a wide selection of antennas across a broad range of frequencies between 700- 960 MHz, 1710-2170 MHz and 2500-2700 MHz, dual-band 2.4GHz/5GHz, cellular, and Bluetooth antennas. It enhances connectivity for multiple devices in nearly any location. Our antennas are purpose-built to provide compact, high gain, and a constant worldwide connectivity. The antennas are available in several different sizes depending on customer requirements. We produce both external antennas that come in a range of rugged housings, as well as embedded antennas. These antennas can be customized with different cable lengths and connectors upon request. We have developed countless high-performance antennas, and they are currently being used in multiple IOT devices (Wearables, Routers, Smart Home, UAV/Drone, and Connected Vehicles).

5G Antennas

We offer high performing 5G antennas that provide coverage for all lower and mid 5G bands along with custom solutions for mm wave frequencies. By offering the most comprehensive portfolio of external antennas with different mounting options, omnidirectional radiation patterns for easy integration in wireless communication devices, we are the leaders of 5G antenna solutions. Our 5G antennas are great for telematics systems, remote surveillance, asset tracking and any IOT system applications. All of our 5G antenna solutions are fully customizable and optimized for the customers system.

LTE & MIMO Antennas

Our advanced patented LTE & MIMO antennas are available in rugged, low profile form factors. We utilize the latest advances in antenna designs and bring to market the best performing LTE/MIMO antennas in the world. Our antennas are optimized for outstanding isolation specifications and performances. This allows our customers to have the best and most innovative solutions on the market. We have developed cutting edge MIMO antennas and our antennas are currently being used in multiple major commercial transport, HD video monitoring, buses, and trains.

Products Overview

SigFox/LoRA/ISM Antennas

We offer a wide selection of SigFox/LoRA/ISM antennas that operate within the 902-928 MHz, 2.4 GHz and 5.7-5.8 bands and include a wide variety of indoor and outdoor antennas. ISM antennas are ideal for various installations for IOT, smart metering, digital signage, and industrial monitoring. The antennas are available in several different sizes depending on customer requirements. These antennas can be customized with various cable lengths and connectors upon request. All of our external antennas are IP67 rate which allow for the most environmentally challenging installations.

Rail & Transportation Antennas

Our patented & fully EN 50155 Certified Rail 4x4 MIMO LTE antennas are the most advanced solutions available. They ensure the most optimal data aggregation connectivity by providing outstanding RF performances.
As technology capabilities increase, the world is becoming more connected and so does the demand for a smart, and fastest growing transportation market. Maxtena is the industry leader in developing new antenna technologies for vehicle – to – vehicle (V2V) and vehicle – to – anything (V2X) applications. We have developed cutting edge dedicated short-range communications (DSRC) antennas which are vehicle and DSRC transponder agnostic. All DSRC antennas are available for external and internal automotive applications. At Maxtena, we offers the most advanced train and rail antennas in rugged, low profile form factors.

GNSS Timing Antennas

Our GNSS Timing antennas are state of the art designed and developed rugged solutions which are IP69K rated and vertisile for any installation necessary. The antennas are fully customizable and feature high gain LNA's along with superb filtering capabilities.
Precise time is crucial to a variety of economic activities around the world. Communication systems, electrical power grids, and financial networks all rely on precision timing for synchronization and operational efficiency. GNSS enables users to determine the time to within 100 billionths of a second, without the cost of owning and operating atomic clocks. Maxtena has the latest antenna technology and products for professional precision timing applications.

Accessories

Maxtena offers a high variety of antenna accessories including mounting brackets, RF Cable, cable sub assemblies, pins, connectors and value added services. Custom solutions are available upon request. Our mounting applications: Magnet, wall, screw, pole, and adhesive mounting antennas.

Markets

Industrial IOT

Our antennas are designed for reliable performance in high precision, heavy-duty GNSS tracking applications and various IOT communications. They support a diverse range of applications such as precision agriculture, IOT, Smart City, Asset management, asset tracking, mobile computing devices and mining equipment.

Military

Our ruggedized antennas can be integrated externally or internally with Military/ Defense applications including Military Radios, UAVs, soldier worn communication gear and satellite phones and radios. They can support forces on the ground, in the air, or on the sea.

Autonomous & Automotive

Drones, Robotics, Autonomous Vehicles are some of the many products you can find that are using our antenna solutions. Our compact antennas provide OEMs with fewer mechanical constraints to compensate for when designing cutting-edge equipment.

Market opportunities

The antenna Market opportunities is segmented by type (helical antenna, patch antenna, MIMO Antenna, 5G antenna, and DSRC antenna),by application (GNSS, LTE-Wifi, Military, Maritime, and transportation), by product (Drone, trackers, automotive devices, and DAS applications), and also by geography.

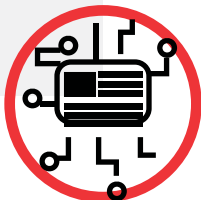
Our mission

"Our mission is to design and manufacture cutting-edge antenna solutions for the connected world. We'll support off-the-shelf orders as well as fully customized integrations."

Basics for choosing the applicable antenna

Technology

- Frequency bands(WIFI, GPS, …)
- Technology (helix, patch, conformal antennas, Smart antennas, MIMO, UWB, Connected Array, Aperture antenna…)
- Features (Antenna gain, directivity, VSWR, bandwidth, Impedance, axial ratio …)

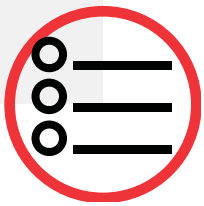


Applications

- Mounting options (Screw mount, Magnet Mount, Adhesive mount …)
- Connector Type (SMA, TNC, U.FL...)
- Dimensions
- Certifications

Requirements

- Polarization
- Radiation patterns
- High spectral efficiency & high throughput
- Frequency range signal



Others

- Additional mounting options
- Custom connector & cable
- Mounting brackets

For more information
visit maxtena.com

Applications

Some commons applications include autonomous, M2M, and asset tracking. While many of our products are multi-platforms, some specific antennas are more suitable with regards certain applications.

Maxtena Technology

Our commitment to innovation is unprecedented. Our technologies power some of today's most cutting-edge wireless solutions. These solutions allow consumers to seamlessly access data from anywhere in the world. Here we take an approach where the next advances in wireless communications will come from looking at fundamental problems from the antenna/electromagnetic perspective. This new perspective lends itself to novel technologies to drive the new Internet infrastructure with smaller and higher efficiency devices, enable more bandwidth and combat interference. Two of our most successful and highly sought-after technologies include Helicore and Microstrip Patch. We are proud to present you with the technologies on which our products are designed and engineered.

Helicore

Our patented Helicore technology provides an extremely example and low-cost platform for designing different antenna products where pattern, polarization purity, efficiency and size are the driving design parameters. Patented Helicore technology uses air as the dielectric core and minimizes typical losses associated with ceramic materials. Helicore technology is pushing antenna limits in terms of axial ratio, bandwidth, and pattern stability. The design itself allows easy active circuitry and ltering addition due to the independent nature of feed and antenna structure. Helicore technology addresses widely known issues with ceramic materials and ceramic antenna manufacturing processes which create wide dielectric constant variations due to material, temperature, and humidity variations. Those variations are rejected in reduced performan-ce of ceramic antennas and low manufacturing yields.

KEY ADVANTAGES AND FEATURES:

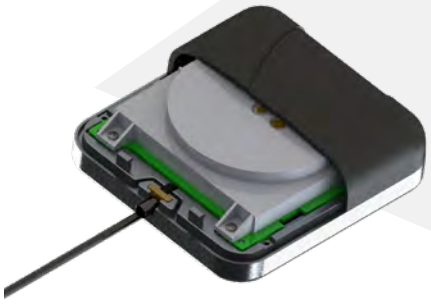
- Active circuitry and filtering integrated with antenna
- Differential of single-ended architecture
- Smaller in size
- Lower manufacturing cost
- Lighter in weight compared to ceramic solutions
- Superb axial ratio at lower elevation angles for significant multipath rejection
- Multiband and wideband capabilities (e.g. L1-L2, GPS-GLONASS, etc…)
- Meets 200 V/m susceptibility requirements
- Superb noise figure performance
- Ground-plane independent design

Conformal wave

Our Microstrip technology offers a truly optimized wireless system. We are pioneering the optimization of the microstrip antenna by using proper electromagnetic grounding schemes to optimize solutions for the highest efficiency and axial ratio purity. Our technology incorporates the ground plane and creates highly optimized solutions for the application. Microstrip antennas are typically low performance and do not give the desired performance to the customer in more complex integrations where the antenna ground plane is reduced, or other parts of the device are interfering. This results in significantly lower efficiency and deteriorated axial ratio purity. We offer a technology that uses an electromagnetically co-optimized antenna and ground plane combination that enhances the system performance.

KEY ADVANTAGES AND FEATURES:

- Antenna and ground plane co-optimization for maximum performance
- Efficiency can be as much as 40% higher than regular patch technology
- Axial ratio purity improved by as much as 3 dB compared to conventional technology



Maxtena Technology

DAT

DAT™ (Dynamic Aperture Technology) is an advanced platform designed for building a new generation of low-cost user terminals that will enable higher data throughputs, stronger link integrity, and lower power consumption for aerial, maritime, and land mobile communications. One of the major impediments in mobile communications is the antenna technology. To deliver "rich" data content a new technology is required. The major complication is that in a mobile environment communication happens between moving objects. Things get significantly more complicated with satellite communications where a satellite is also moving with the respct to the end user on Earth. The current state of the art user terminals is still relying on mechanically steered or fixed solutions. These solutions either exhibit poor efficiency or are cost prohibitive. Maxtena has created the DAT™ platform to address these issues. The applications for our DAT™ platform are numerous. The typical applications are for mobile satellite communications on the move, including land, aerial, and maritime applications. However, other applications such as radar and direction-finding systems are also possible. Our DAT™ platform allows for low cost, small size, and low weight applications, which could be ideal for high-data terminals for UAV's and other aeronautical platforms.

KEY ADVANTAGES AND FEATURES:

- Achieves omni-directional coverage with the high performance of a directional antenna
- Single beam or multi-beam in single aperture/multibeam aggregation – higher throughput even on legacy systems
- Software configurable/software controlled aperture for a variety of applications and reconfigurations
- Digital sensor and gyroscopic control for accurate tracking of satellites and platform dynamics
- Interference nulling for better signal to noise
- Tracking and performing interference detection for link integrity and sustained high throughput
- Extremely low power design due to distributed power amplifier approach
- Fast satellite acquisition and tracking from computationally efficient algorithms
- Digitally steered beams eliminate all moving parts
- Scalable platform accommodates wide range of frequencies and satellite networks – L to Ka band
- Mobile platform dynamics over 360 degrees per second turning ratios

Optimized Microstrip

We are pioneering the optimization of the microstrip antenna by using proper electromagnetic grounding schemes to optimize solutions for the highest efficiency and axial ratio purity. Our technology incorporates the ground plane and creates highly optimized solutions for the application. Microstrip antennas are typically low performance and do not give the desired performance to the customer in more complex integrations where the antenna ground plane is reduced, or other parts of the device are interfering. This results in significantly lower efficiency and deteriorated axial ratio purity. We offer a technology that uses an electromagnetically co-optimized antenna and ground plane combination that enhances the system performance.
Our technology incorporates the ground plane and creates highly optimized solutions for your applications. Microstrip antennas are typically low performance and do not give the desired performance to the customer in more complex integrations where the antenna ground plane is reduced, or other parts of the device are interfering. This results in significantly lower efficiency and deteriorated axial ratio purity. We offer a technology that uses an electromagnetically co-optimized antenna and ground plane combination that enhances the system performance.

KEY ADVANTAGES AND FEATURES:

- Antenna and ground plane co-optimization for maximum performance
- Efficiency can be as much as 40% higher than regular patch technology.
- Axial ratio purity improved by as much as 3 dB compared to conventional technology

Maxtena Technology

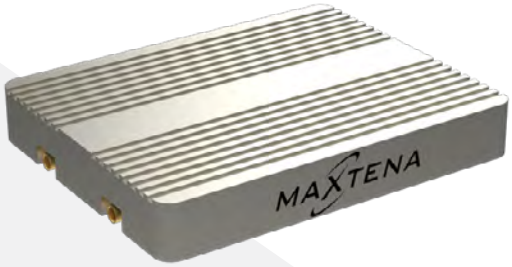
SDRX

Software defined radio module can accommodate different waveform implementations and support a variety of wireless applications. Combined with our DAT Beamforming Technology enables native RF Cybersecurity for unprecedent secure communications. Software defined radio module small size and low weight makes it ideal for different UAV applications. Maxtena develops full end-to-end cloud connect wireless solutions based on our MAXWAY Platform.

The applications for our SDRX platform are numerous. The typical applications are for mobile satellite communications on the move, including land, aerial, and maritime applications. However, other applications such as radar and direction-finding systems are also possible. Our SDRX platform allows for low cost, small size, and low weight applications, which could be ideal for high-data terminals for UAV's and other aeronautical platforms.

KEY ADVANTAGES AND FEATURES:

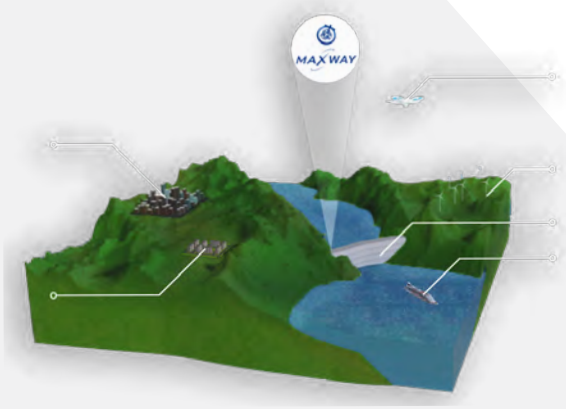
- Fully customizable embedded Linux OS development environment
- Fully customizable to accommodate different waveform implementations (e.g. BPSK/QPSK/OFDM/QAM)
- Native Cloud connect environment via MAXWAY platform.
- Multiple Transport capability for robust redundant network solutions (5G/LTE, WIFI, Lora Wan, Iridium, Inmarsat, Thuraya)
- Low Power Core Processor
- Open and application-oriented platform
- Supports Network idle and Low power standby.
- User Interfaces: Ethernet, SPI, USB, UART, USIM
- Customizable user interface (GPIO)
- Native RF Cybersecurity



Maxtena Technology

Introducing MaxWay

MaxWay is hosted on Microsoft's trusted, redundant, and secure MS Azure service to provide reliable, consistent, and secure service for clients. MaxWay provides user defined access to Iridium Short Burst Data for Provisioning, Data Management, and Billing. MaxWay is a MS Azure Cloud platform, available as a secure Website GUI, or as an Application Programming Interface Web Service. MaxWay is our custom, in-house designed and built airtime platform, designed, written, updated, and modified by Maxtena's own in-house Software Engineering Team. Contact your Maxtena account manager for more information if interested in our API.



Features

- Custom in house designed platform
- Advanced efficiency
- Custom Reports anytime & anywhere
- Multiple User Profiles

Advanced Monitoring Systems

An advanced Driven data Management platform for the iOT solutions.

Using either our easy and comprehensive GUI or directly interfacing your systems with our customizable API, MaxWay allows you full control of your Iridium airtime, allowing you to provision, activate, test, and deploy your IoT solution across the street or across the globe.

Offering next-gen technology for your iOT solutions

MaxWay offers best-in-class technologies for air, land, and sea solution anywhere in the earth.

Iridium IoT systems can be a complex conglomerate of devices from literally dozens of manufacturers, each with its own data delivery requirements and destinations, and with different requirements in SBD setup.

for more information
visit maxtena.com

Iridium Connected®

As a certified Iridium Connected® solution, MaxWay provides seamless connectivity for end-to-end user for customizable reports, and real time dashboard.

About Maxtena

Maxtena founded in 2007

Advanced Wireless Development Laboratory including **SATIMO** anechoic antenna range.

Dynamic Aperture Technology invented in 2008. Pioneer in **Advanced Beamforming Systems**

#1 UAV GNSS RTK Antenna Solution

50+ Patents and Patent Pending Innovations

Sold over **5 million antennas and beamforming** systems to date.

In house manufacturing and strong **EMC** partnerships

$20M Research & Development Investment

#1 in Iridium Next Antenna Solution

Custom Iot Solutions

Feasibility support

Our Approach

The design of new products relies on the extensive use of accurate computer simulation models. Our technical staff has a unique knowledge in electromagnetic simulation and numerical modeling gained through years of experience working on embedded antenna designs and general RF problems in both industry and academia.

Every aspect of the electrical design is considered by our proprietary simulation models – from the geometry and material characteristics of the antenna enclosures to the effects of parasitic reactance on printed circuit board traces. We also consider the statistical variation of component tolerances in actual production.

Benefits to Our Approach

Our simulation techniques and methodologies have been validated successfully over a wide range of products. It has always been our goal to leverage innovative computer simulations to dramatically reduce the product design cycle and to minimize prototyping expenses. Throughout development our customers can expect:

- Added risk mitigation
- Decreased prototyping costs
- Schedule acceleration

What Our Customers Can Expect

- Development of simplified 3-D simulation model
- Investigation into design trade-offs
- Antenna optimization based off customer provided bounds
- Estimation of user proximity effects on antenna performance
- Preliminary assessment of compliance with respect to performance requirements

Antenna Measurement

Our Approach

By investing in the SATIMO Starlab Anechoic Chamber we have state of the art measurement capabilities at our fingertips. We use the SATIMO Starlab Anechoic Chamber to measure radiative characteristics of the antenna for both passive and active systems. We are also equipped to provide customers with TRP and TIS measurements.

Benefits to Our Approach

Our advanced measurement capabilities ensure that product development cycle progresses without setbacks. Additional value to our measurement approach include:

- Quick troubleshooting
- Customized radiation pattern data post processing
- Radiated performance tracking throughout product development cycle

What Our Customers Can Expect

- TRP measurements
- TIS measurements
- Multiple antenna correlation and efficiency
- 3-D complex antenna pattern

Custom Iot Solutions

Antenna Integration

Our Approach

By leveraging the most advanced electromagnetic simulation software available, we can accurately predict the performance of new designs before any hardware is built. Prototyping is then used to verify the correlation between the design and final product. Our in-house measurement capabilities allow for quick turn prototype validation. In addition to antenna design, we provide antenna integration support for customers that require a high level of device integration.

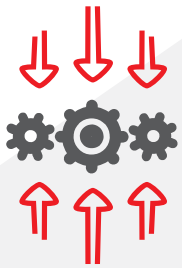
Benefits to Our Approach

Our integration services include both the electrical path, from the antenna to receiver and beyond, as well as the mechanical and industrial design support for devices that are either space or geometry limited. The benefits also include:

- Accurate first design
- Minimization of design iterations
- Quick turnaround
- Fast assessment of design modifications and adaptation
- Predictable results

What Our Customers Can Expect

- Import devices full 3-D mechanical database
- Development of fully featured simulation model
- Determination of the optimal grounding map
- PCB RF layout optimization
- Complete assessment of compliance and requirements
- Result verification through initial prototyping



Antenna Manufacturing

Our Approach

Maxtena's philosophy for manufacturing is to provide minimal overhead and more competitive price points. As a result of this philosophy we are committed to outsourced manufacturing capabilities where capital investment and overhead costs are minimized due to their distribution across a large customer base. Our strategy uses both oversea and US based facilities and we only use ISO certified contract manufacturers. Each prospective CM is required to complete a quality questionnaire and submit to a full quality audit.

Benefits to Our Approach

Our diversified manufacturing strategy allows us to support production ranging from a few units to large volume manufacturing. Additional value to our manufacturing approach include:

- Quality Assurance
- Fully capable of meeting all production requirements

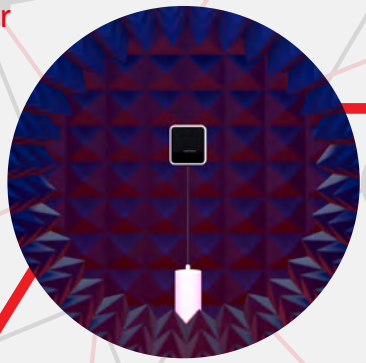
What Our Customers Can Expect

- Cost effective low volume production
- Competitive high volume manufacturing
- Scalable production model
- ITAR registered CM
- Quality assurance with innovative and proprietary end of line testing methodologies

The high precision of Maxtena's antennas relies on the cutting-edge testing and measurement capabilities of our company. Our antenna designs are approved before manufacturing, using ultra high accuracy testing, and measurements.

Key Components Of Our Measurement system

The Anechoic Chamber

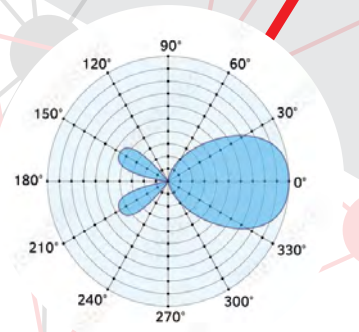


Vector Network Analyzers (Up To 20 Ghz)

Environment Test Equipment

Positioning Controller

GPS Satellite Recognition



Antenna Measurement Software

Antenna development process

FEASIBILITY STUDIES

The design of new products relies on the extensive use of accurate computer simulation models. Our engineering staff has a unique knowledge in electromagnetic simulation and numerical modeling gained through years of experience working on embedded antenna designs and general RF problems in both industry and academia. Every aspect of the electrical design is considered by our proprietary simulation models – from the geometry and material characteristics of the antenna enclosures to the effects of parasitic reactance on printed circuit board traces. We also consider the statistical variation of component tolerances in actual production.

WHAT TO EXPECT

- Development of simplified 3-D simulation models
- Investigation into design trade-offs
- Antenna optimization based off customer provided bounds
- Estimation of user proximity effects on antenna performance
- Preliminary assessment of compliance with respect to performance requirements

CHAMBER TESTING

Maxtena has in-house the latest in antenna and RF measurement capabilities. We use the SATIMO Starlab Anechoic Chamber to measure radiative characteristics of the antenna for both passive and active systems. We are also equipped to provide you with TRP and TIS measurements.

WHAT TO EXPECT

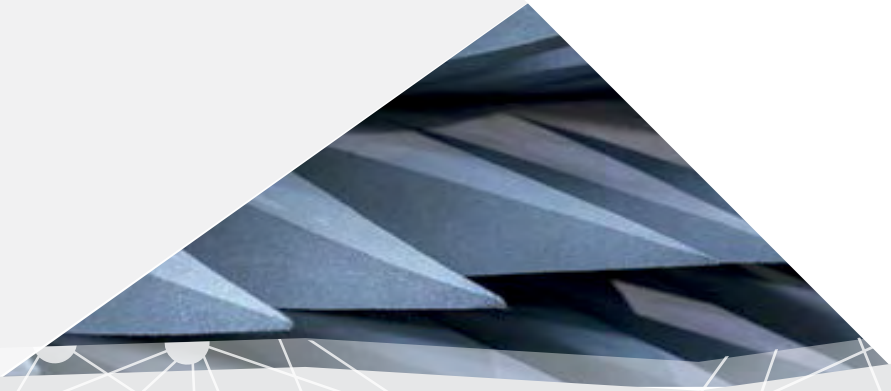
- Multiple antenna correlation and efficiency
- 3-D complex antenna pattern
- Antenna input response
- TRP/TIS measurements

PROTOTYPING

By leveraging the most advanced electromagnetic simulation software available, we can accurately predict the performance of new designs before any hardware is built. Prototyping is then used to verify the correlation between the
design and final product. Our in-house
measurement capabilities allow for quick turn prototype validation. In addition to antenna design, we provide antenna integration support for clients that require a high level of device integration.

WHAT TO EXPECT

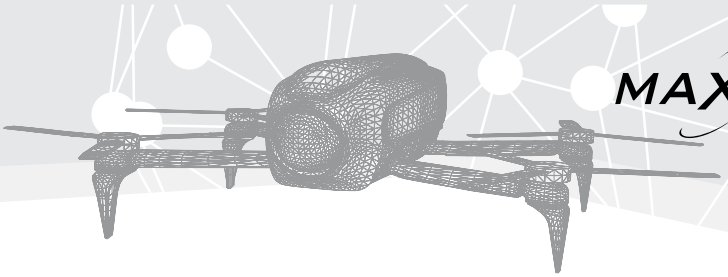
- Import devices full 3-D mechanical database
- Development of fully featured simulation models
- Determination of the optimal grounding map PCB RF layout optimization
- Complete assessment of compliance and requirements
- Result verification through initial prototyping



Helix Antennas

MAXTENA

Helix antennas



We offer the most advanced patented and innovative RF antenna solutions for a variety of GNSS, IOT, LTE and ISM applications. Our Helicore™ antennas are the best performing and lightest helix solutions available. The patented Helicore™ technology offers both a weight advantage and performance advantage for the most demanding applications and environments. The antennas can be used for GNSS, LTE, ISM and SATCOM networks and can either be embedded or used externally with a device. Our helix antennas can get a signal in many more orientations compared to a block ceramic antenna. If the orientation of the unit is not always toward the sky then one of our helix antennas will be the ideal choice as an antenna ground plane is not required.

Applications

- Unmanned Autonomous Vehicles
- UAV's – Drones
- Handheld devices
- Industrial IOT
- Military Radios
- Precision GNSS
- SATCOM
- RTK
- Security & Law Enforcement

Helical GPS L1
External

M1575HCT-22P-SMA

High Performance Passive GPS Antenna

Part #: 100-00043-01

✓ GPS band ✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra-light weight ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	1dB (typical)/ 1.5db (max)
Axial Ratio	-0.5 dBic (typical)
VSWR	1.5 (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	38 mm (height) x 18.5 mm (diameter)

M1575HCT-22P-MR

High Performance Passive GPS Antenna

Part #: 100-00042-01

✓ GPS band ✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra-light weight ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	-0.5 dBic (typical)
Axial Ratio	1dB (typical)/ 1.5db (max)
VSWR	1.5 (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / MR
Dimensions	47.1 mm (height) x 18.5 mm (diameter)

M1575HCT-15A-SMA

High Performance Active GPS Antenna

Part #: 100-00028-07

✓ GPS band ✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra-light weight ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz (GPS)
Antenna element peak gain	28 dBic (typical) @ 3.3 V
Axial Ratio	1dB (max) @ zenith

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	38 mm (height) x 18.5 mm (diameter)

M1575HCT-GN

High performance GPS Passive Antenna

Part #: 100-00146-01

✓ Very low axial ratio ✓ IP-67 mounted ✓ Ultra light weight - 45 grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	1.8 dBic (GPS)
Axial Ratio	0.2 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	38 mm (height) x 18.5 mm (diameter)

M1516HCT-P-EXT-MCX

Helical L1 GPS GLONASS Passive External Magnet Mount Antenna /MCX W/CONNECTOR

Part #: 100-00114-04

✓ Very low axial ratio ✓ Ground plane independent ✓ Magnet mount ✓ 500 mm LRM100 coaxial cable ✓ MCX connector
✓ Available in SMA, SMB, and TNC connector

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz / 1602MHz
Antenna element peak gain	1.5 dBic
Axial Ratio	0.5 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet mount / TNC, SMA, SMB, or MCX
Dimensions	52.85 mm (height) x 36 mm (diameter)

M1516HCT-P-EXT-SMB

Helical L1 GPS GLONASS Passive External Magnet Mount Antenna / SMB W/CONNECTOR

Part #: 100-00114-03

✓ Very low axial ratio ✓ Ground plane independent ✓ Magnet mount ✓ 500 mm LRM100 coaxial cable ✓ MCX connector
✓ Available in SMA, SMB, and TNC connector

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz / 1602MHz
Antenna element peak gain	1.5 dBic
Axial Ratio	0.5 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet mount / TNC, SMA, SMB, or MCX
Dimensions	52.85 mm (height) x 36 mm (diameter)

M1516HCT-P-EXT-SMA

Helical L1 GPS GLONASS Passive External Magnet Mount Antenna / SMA W/CONNECTOR

Part #: 100-00114-02

Very low axial ratio Ground plane independent Magnet mount 500 mm LRM100 coaxial cable MCX connector
Available in SMA, SMB, and TNC connector

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz / 1602MHz
Antenna element peak gain	1.5 dBic
Axial Ratio	0.5 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet mount / TNC, SMA, SMB, or MCX
Dimensions	52.85 mm (height) x 36 mm (diameter)

M1602HCT-22P-MR

High Performance Passive GPS/GLONASS Antenna

Part #: 100-00042-03

Very low axial ratio IP-67 mounted and unmounted Ultra light weight Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (GLONASS)
Antenna element peak gain	-0.5 dBic (typical)
Axial Ratio	1 dB (typical) / 1.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA
Dimensions	38 mm (height) x 18.5 mm (diameter)

Helical GPS L1
Embedded

M1516HCT-22-P

High performance GPS GLONASS Antenna

Part #: 108-00073-01

GPS band · Very low axial ratio · Easy integrate 3 pin connectors · Ultra light weight - 2 grams · Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (GLONASS)
Axial Ratio	1 dB (typical) / 1.5 dB (max)
Polarization	RHCP
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Weight	2 grams
Dimensions	35.2 x 24mm

M1575HCT-22-P-TK

Helical GPS ANTENNA TUNING KIT

Part #:401-00001-01

GPS band · Very low axial ratio · Easy integrate 3 pin connectors · Ultra light weight - 2 grams · Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	-0.5 dBic
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Dimensions	24.30 x 12.85mm

M1575HCT-22-P-E1

Helical Passive GPS Antenna

Part #:108-00033-01

GPS band · Very low axial ratio · Easy integrate 3 pin connectors · Ultra light weight - 2 grams · Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	-0.5 dBic
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Dimensions	24.30 x 12.85mm

M1575HCT-22-P-E2

Helical Passive GPS Antenna

Part #:108-00033-02

GPS band Very low axial ratio Easy integrate 3 pin connectors Ultra light weight - 2 grams Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	-0.5 dBic
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Dimensions	24.30 x 12.85mm

M1575HCT-22-P-E3

Helical Passive GPS Antenna

Part #:108-00033-03

GPS band Very low axial ratio Easy integrate 3 pin connectors Ultra light weight - 2 grams Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	-0.5 dBic
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Dimensions	24.30 x 12.85mm

M1575HCT-22-P-E4

Helical Passive GPS Antenna

Part #:108-00033-04

GPS band Very low axial ratio Easy integrate 3 pin connectors Ultra light weight - 2 grams Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	-0.5 dBic
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Dimensions	24.30 x 12.85mm

M1575HCT-22-P-E5

Helical Passive GPS Antenna

Part #:108-00033-05

GPS band · Very low axial ratio · Easy integrate 3 pin connectors · Ultra light weight - 2 grams · Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	-0.5 dBic
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Dimensions	24.30 x 12.85mm

M1575HCT-22-P-E6

Helical Passive GPS Antenna

Part #:108-00033-06

GPS band · Very low axial ratio · Easy integrate 3 pin connectors · Ultra light weight - 2 grams · Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	-0.5 dBic
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Dimensions	24.30 x 12.85mm

Helical GPS/GLONASS L1 External

M1516HCT-15A-SMA

High-Performance Active Antenna

Part #: 100-00107-01

✓ High performance dual stage LNA active antenna ✓ GPS and GLONASS L1 band ✓ A screw-on design ✓ An integrated SMA connector ✓ Ultra-light design ✓ IP67 ✓ Very light - 10.6 grams

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Antenna element peak gain	-0.5 dBic
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Connector
Dimensions	24.30 x 22 x 12.85 mm

M1516HCT-GN

GPS GLONASS Passive Antenna

Part #: 100-00150-01

✓ Very low axial ratio ✓ IP-67 mounted ✓ Ultra-light weight-45 grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) / 1602 MHz (Glonass)
Antenna element peak gain	1.8 dBic (GPS) / -1.7 dBic (Glonass)
Axial Ratio	0.2 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA male
Dimensions	135 mm (height) x 18.5 mm (diameter)

M1516HCT-P-EXT

GPS GLONASS Passive Antenna

Part #: 100-00114-01/02/03/04

✓ Very low axial ratio ✓ Ground plane independent ✓ Magnet mount ✓ 1,500 mm LRM100 coaxial cable ✓ TNC, SMA, SMB, MCX connector

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) / 1602 MHz (Glonass)
Antenna element peak gain	1.8 dBic (GPS) / -1.7 dBic (Glonass)
Axial Ratio	0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount/ TNC, SMA, SMB, MCX connectors
Dimensions	52.2 mm (height) x 36 mm (diameter)

Helical GPS/GLONASS L1
External

M1516HCT-P-SMA

High Performance L1 GPS GLONASS Passive Antenna

Part #: 100-00002-02

✓ Very low axial ratio ✓ IP-67 mounted ✓ Ultra-light weight ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) / 1602 MHz (Glonass)
Antenna element peak gain	1.5 dBic (GPS) / 1.5 dBic (GLONASS)
Axial Ratio	0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA connector
Dimensions	2.20 mm (height) x 36 mm (diameter)

M1561HCT-22P-MR

High Performance Passive GPS/GLONASS/Beidou Antenna

Part #: 100-00042-06

✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra light weight ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz 1602 MHz 1561 MHz
Antenna element peak gain	-0.5 dBic (typical)
Axial Ratio	1 dB (typical) / 1.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA
Dimensions	38 mm (height) x 18.5 mm (diameter)

MULTIBAND-HELIX-1539

Helical OMNISTAR-GPS-GLONASS-BDS ANTENNA

Part #: 100-00049-01

✓ Ultra-Compact 8 Element Multiband ✓ RHCP Helix ✓ Beidou/GPS L1/GLONASS/Omni-star ✓ Maxtena patented Helicore™
✓ Light-weight ✓ Air-dielectric design ✓ U.FL coaxial 50 Ohm termination

Key electrical specifications:

Parameter	Specification
Frequency	1539 -1610 MHz
Gain at 0 elevation	7 dBic (typ) @1575MHz
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Connector
Dimensions	Ø19.6 x 29.20 mm

Explore

Our product

M1516HCT-P-EXT

M1516HCT-P-EXT

The M1516HCT-P-EXT is a dual band, high performance antenna designed for both GPS and GLONASS, and built on Maxtena proprietary Helicore® technology. This technology provides exceptional pattern control, polarization purity and high efficiency in a very compact form factor.

The M1516HCT-P-EXT is an external magnet mount antenna, featuring a 1,500 mm LRM100 coaxial cable with integrated connector. This product is ideal for applications requiring high quality reception of both GPS and GLONASS signals.

The M1516HCT-P-EXT will be available either as an off-the-shelf antenna housed in rugged housing or as an embedded antenna option which is mounted on the inside of a customer's designed enclosure

For the embedded version, Maxtena provides support for installation and integration of the embedded antenna to offer an exceptional antenna performance. Maxtena can embed the antenna in any housing, then tune the antenna to match their housing's materials, electronics, and space.

Features

- Very low axial ratio
- Ground plane independent
- Magnet mount
- 1,500 mm LRM100 coaxial cable
- TNC, SMA, SMB, MCX connector

Suggested Applications include

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement

M1561HCT-22-P

Passive GPS GLONASS Beidou Antenna

Part # : 108-00073-02

GPS, GLONASS and Beidou bands Very low axial ratio Easy integrate 3 pin connectors Ultra light weight - 2 grams Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (GLONASS) 1561 MHz (Beidou)
Axial Ratio	1 dB (typical) / 1.5 dB (max)
Polarization	RHCP
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Weight	2 grams
Dimensions	26.9 x 12.8mm

M1516HCT-P-UFL

High Performance L1 GPS GLONASS Passive embedded Antenna

Part #: 108-00072-01

Very low axial ratio IP-67 mounted Ultra-light weight (3 grams) Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) / 1602 MHz (GLONASS)
Antenna element peak gain	1.5 dBic (GPS) / 1.5 dBic (GLONASS)
Axial Ratio	0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ U.FL connector
Dimensions	33 mm (height) x 13.2 mm (diameter)

M1580HCT-P-SMA

GPS/BEIDOU/GLONASS PASSIVE ANTENNA

Part #: 100-00180-01

Very low axial ratio Superb multipath rejection IP-67 Rated Ground plane independent Omni Directional High Gain & Efficiency

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Passive gain	-2.5 dBic (typical)
Axial Ratio	1 dB (max) @ zenith

Key mechanical specifications:

Parameter	Specification
Connector	SMA
Dimensions	Ø 18.5 × 38 mm

Helical GPS/GLONASS/ Beidou Embedded

M1580HCT-22-P

Passive GPS GLONASS Galileo Antenna

Part #: 108-00073-03

GPS, GLONASS and Galileo (E1) bands Very low axial ratio Easy integrate 3 pin connectors Ultra light weight - 2 grams Ground plane independent

Key electrical Specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (GLONASS) 1176.45 MHz (Beidou)
Antenna element peak gain	1 dB (typical) / 1.5 dB (max)
Polarization	RHCP
VSWR	≤ 1.5

Key mechanical Specifications:

Parameter	Specification
Connector	U. FL coaxial 50 Ohm termination
Weight	2 grams
Dimensions	26.9 x 12.8 mm

Discover

Our new L1 L2 L5 L-Band

Multi-Frequency Active Antenna

M9HCT-A-SMA

Maxtena introduces the world's most advanced, smallest, patented GNSS antenna for high precision and autonomous multi-frequency applications. The M9HCT-A-SMA antenna is a high accuracy, multi-frequency active helix GNSS antenna + L-band corrections services. The revolutionary design will offer simultaneous GNSS reception on L1: GPS, GLONASS, Galileo, Beidou, L2: GPS L2C, Galileo E5B and GLONASS L3OC and L5: GPS + L-band corrections in a rugged, compact and ultra-lightweight form factor. The antenna is a perfect match for high precision applications.

The M9HCT-A-SMA is a great fit for the UAV markets where high performance and low weight are driving features in antenna selection. The M9HCT-A-SMA active helix design features Maxtena's patented compact and lightweight Helicore® technology.This technology provides excellent pattern control, polarization purity and high efficiency in a very compact form factor.The M9HCT-A-SMA is ground plane independent and offers extremely low power consumption and minimal phase center variation over azimuth crafted for high precision applications. The antenna offers superb axial ratio ensuring multipath error is mitigated.

For the embedded version, Maxtena provides support for installation and integration of the embedded antenna to offer an exceptional antenna performance. Maxtena can embed the antenna in any housing, then tune the antenna to match their housing's materials, electronics and space.

Features

- GNSS/QZSS-L1/L2,QZSS-L6, GLONASS-G1/G2,Galileo-E1/E6, Beidou-B1/B3 + L-band
- Rugged IP67 rating with SMA mount
- Small form factor
- Ground plane independent
- GIS, RTK and other high accuracy GNSS applications
- Low power consumption
- Low phase center variation over azimuth and elevation and among different samples
- Ultra-lightweight
- Automotive grade electronics

Suggested Applications include

- UAV/ Drones
- Unmanned Ground Vehicles (UGV)
- Unmanned Systems
- High Precision Navigation
- Military & Security
- Agriculture & FarmTech
- Handheld GNSS Devices

M1580HCT-GN

GPS Beidou Glonass Passive Antenna

Part #: 100-00151-01

Very low axial ratio IP-67 mounted Ultra light weight - 45 grams Ground plane independent

Key electrical Specifications:

Parameter	Specification
Frequency	1561 MHz (Beidou) 1575 MHz (GPS) 1602 MHz (Glonass)
Antenna element peak gain	1.3 dBic (Beidou) 1.8 dBic (GPS) -1.7 dBic (Glonass)
Axial Ratio	0.2 dB (typical)

Key mechanical Specifications:

Parameter	Specification
Mounting option / Connector	SMA male
Dimensions	135 mm (height) x 18.5 mm (diameter)

M1580HCT-22-P

Passive GPS GLONASS Galileo Antenna

Part #: 108-00073-03

GPS, GLONASS and Galileo (E1) bands Very low axial ratio Easy integrate 3 pin connectors Ultra light weight - 2 grams
Ground plane independent

Key electrical Specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (GLONASS) 1176.45 MHz (Beidou)
Axial Ratio	1 dB (typical) / 1.5 dB (max
Polarization	RHCP
VSWR	≤ 1.5

Key mechanical Specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Weight	2 grams
Dimensions	26.9 x 12.8mm

M4HCT-22-P

Passive GPS GLONASS Galileo Beidou Antenna

Part #: 108-00073-04

GPS, GLONASS ,Galileo, Beidou bands Very low axial ratio Easy integrate 3 pin connectors Ultra light weight - 2 grams
Ground plane independent

Key electrical Specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (GLONASS) 1176.45 MHz (Beidou)
Axial Ratio	1 dB (typical) / 1.5 dB (max
Polarization	RHCP
VSWR	≤ 1.5

Key mechanical Specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Weight	2 grams
Dimensions	26.9 x 12.8mm

Helical L1 GPS/GLONASS/ Galileo/Beidou External

M4HCT-A-SMA

Multi-Frequency Active Antenna

Part #: 100-00117-01

✓ Quadrifilar helix antenna ✓ Rugged IP67 rating with SMA mount ✓ Small form factor ✓ Ground plane independent ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Ultra-lightweight ✓ Automotive grade electronics

Key electrical Specifications:

Parameter	Specification
Frequency	1559-1607 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	0.5 dB
Axial Ratio	Max 0.9 dB @ the Zenith
Conducted Gain	3 0 dB ±3 dB

Key mechanical Specifications:

Parameter	Specification
Mounting option / Connector	Screw on design/ SMA connector
Dimensions	51 mm (height) x 34 mm (diameter)

Discover

Our new

GNSS L1/L2/L5 tactical grade M10HCT-TNC antenna

M10HCT-A-TNC

Maxtena has introduced the newest and most sophisticated GNSS L1/L2/L5 tactical grade antenna. The M10HCT-TNC is part of the Maxtena helical antenna family featuring superb filtering and RF antijamming mitigation capabilities.
It is a fully patented active GNSS L1/L2/L5 antenna designed for GNSS high-precision and autonomous multi-frequency applications.
The new M10HCT-TNC antenna will offer concurrent GNSS reception covering all L1/L2/L5 GPS, Galileo, Glonass, Beidou bands including L-Band correction. Services coverage in a IP67 rugged, compact, and ultra-lightweight form factor.

M10HCT-TNC is designed to meet MIL-STD-810 requirements and highlights cutting- edge technology and are designed to work in high RF noise environments.
The M10HCT-TNC is ground-plane independent and offers extremely low power consumption and minimal phase-center variation over azimuth crafted for GNSS high-precision applications. The antenna offers superb axial ratio, ensuring multipath error is mitigated. Several filtering groups allow this antenna to have superb filtering capabilities and RF antijamming mitigation capabilities.
The antenna is ground plane independent and comes in three versions: Screw mount, magnet mount and embedded..
For the embedded version, Maxtena provides support for installation and integration of the embedded antenna to offer an exceptional antenna performance. Maxtena can embed the antenna in any housing, then tune the antenna to match their housing's materials, electronics and space.
Maxtena has been at the forefront of RF & Antenna innovation over the past 15 years and the M10HCT-TNC represents the next generation of sophisticated GNSS tactical grade antennas.

Features

- Full GPS, Galileo, Glonass, BeiDou bands coverage (L-Band correction)
- Low Axial Ratio
- Low Noise Figure
- Ground plane independent
- Low power consumption
- Low phase center variation over azimuth and elevation
- Rugged IP67 rating
- RoHs compliant
- Automotive grade electronics

Suggested Applications include

- UAV/Drones
- Unmanned Ground Vehicles (UGV)
- Unmanned Systems
- High Precision Navigation
- Military & Security
- Agriculture & FarmTech
- Marine systems

Helical L1 GPS/GLONASS/ Galileo/Beidou Embedded

M4HCT-22-P

Passive GPS GLONASS Galileo Beidou Antenna

Part #: 108-00073-04

GPS, GLONASS ,Galileo, Beidou bands Very low axial ratio Easy integrate 3 pin connectors Ultra light weight - 2 grams Ground plane independent

Key electrical Specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (GLONASS) 1176.45 MHz (Beidou)
Axial Ratio	1 dB (typical) / 1.5 dB (max)
Polarization	RHCP
VSWR	≤ 1.5

Key mechanical Specifications:

Parameter	Specification
Connector	3 Pin OR U.FL
Weight	2 grams
Dimensions	26.9 x 12.8mm

M4HCT-A-EMB

Embedded L1 GPS/GLONASS/Galileo/Beidou Active Antenna

Part #: 108-00074-01

Quadrifilar helix antenna Small form factor Ground plane independent GIS, RTK and other high accuracy GNSS applications Low power consumption Low phase center variation over azimuth and elevation and among different samples Ultra-lightweight Automotive grade electronics

Key electrical Specifications:

Parameter	Specification
Frequency	1559-1607 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	0.5 dB
Axial Ratio	Max 0.9 dB @ the Zenith
Conducted Gain	3 0 dB ±3 dB

Key mechanical Specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	34.60 mm (height) x 28.50 mm (diameter)

MULTIBAND-HELIX-1539

Helical OMNISTAR-GPS-GLONASS-BDS ANTENNA

Part #: 100-00049-01

Ultra-Compact 8 Element Multiband RHCP Helix Beidou/GPS L1/GLONASS/Omni-star Maxtena patented Helicore™ Light-weight Air-dielectric design U.FL coaxial 50 Ohm termination

Key electrical specifications:

Parameter	Specification
Frequency	1539 -1610 MHz
Gain at 0 elevation	7 dBic (typ) @1575MHz
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Connector
Dimensions	Ø19.6 x 29.20 mm

Helical L1/L2 GPS/GLONASS External

M1227HCT-A2-SMA

Rugged L1/L2 GPS GLONASS Active Antenna

Part #: 100-00004-02

✓L1/L2 GPS-GLONASS bands ✓Rugged IP-67 rating ✓Superior out-of-band rejection ✓50 V/m jamming resistant ✓Very low noise figure ✓SMA mount ✓Ground plane independent ✓GIS & RTK applications ✓Ultra-light weight - 24 grams (typical)

Key electrical Specifications:

Parameter	Specification
Frequency	1217-1250 MHz (L2) / 1565-1610 MHz (L1)
Antenna element peak gain	1217-1250 MHz (L2) / 1565-1610 MHz (L1)
Axial Ratio	0.5dB (L1), 0.5dB (typical) 1dB (max)
Conducted Gain	30 dBic @ 1227MHz (typical) 28 dBic @ 1575 MHz (typical) 28 dBic @ 1602 MHz (typical)

Key mechanical Specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	50x30 mm

M1227HCT-SMA-GN

L1/L2 GPS GLONASS ACTIVE ANTENNA/SMA

Part #: 100-00105-01

✓Very low axial ratio ✓IP-67 mounted ✓Ultra lightweight - 45 grams ✓Ground plane independent

Key electrical Specifications:

Parameter	Specification
Frequency	1565-1610 MHz (L1) 1217-1250 MHz (L2)
Antenna element peak gain	2 dBic @ 1227 MHz 2 dBic @ 1575 MHz
Axial Ratio	Max 0.9 dB @ the Zenith
Conducted Gain	≤ 1 dB (0.5 dB typical) (L2) ≤ 1 dB (0.5 dB typical) (L1)

Key mechanical Specifications:

Parameter	Specification
Connector	SMA Connector
Dimensions	Ø 18.5 × 135 mm

M1227HCT-TNC-G

L1/L2 GPS GLONASS ACTIVE ANTENNA/TNC

Part #: 100-00133-02

✓Very low axial ratio ✓IP-67 mounted ✓Ultra lightweight - 45 grams ✓Ground plane independent

Key electrical Specifications:

Parameter	Specification
Frequency	1559-1607 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	0.5 dB
Axial Ratio	Max 0.9 dB @ the Zenith
Conducted Gain	3 0 dB ±3 dB

Key mechanical Specifications:

Parameter	Specification
Mounting option / Connector	TNC Connector
Dimensions	34.60 mm (height) x 28.50 mm (diameter)

M7HCT-A-SMA

Rugged L1/L2 GPS GLONASS Active Antenna

Part #: 100-00069-01

Quadrifilar helix antenna Rugged IP67 rating with SMA mount Small form factor Ground plane independent GIS, RTK and other high accuracy GNSS applications Low power consumption Low phase center variation over azimuth and elevation and among different samples Ultra-lightweight Automotive grade electronics

Key electrical Specifications:

Parameter	Specification
Frequency	1192-1231 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1
Antenna element peak gain	Max 1.2 dB @ the Zenith Max 0.9 dB @ the Zenith
Axial Ratio	Max 0.9 dB @ the Zenith
Conducted Gain	30 dB ±3 dB

Key mechanical Specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	51 mm (height) x 34 mm (diameter)

Helical L1/L2 GPS/GLONASS Embedded

M1227HCT-A-EMB

Embedded L1/L2 GPS GLONASS Active Antenna

Part #: 108-00044-01

✓L1/L2 GPS-GLONASS bands ✓ Superior out-of-band rejection ✓ 50 V/m jamming resistant ✓ Very low noise figure ✓ SMA mount ✓Ground plane independent ✓ GIS & RTK applications ✓ Ultra-light weight

Key electrical specifications:

Parameter	Specification
Frequency	1217-1250 MHz (L2) / 1565-1610 MHz (L1)
Antenna element peak gain	L1 28 dBic / L2 30 dBic
Axial Ratio	L1 0.5 dB (typical) / 1 dB (max) L2 0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	35.2 x 24mm

M7HCT-A-EMB

Embedded L1 GPS/GLONASS/Galileo/Beidou

Part #: 108-00075-01

✓Quadrifilar helix antenna ✓ Rugged IP67 rating with SMA mount ✓ Small form factor ✓ Ground plane independent ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Ultra-lightweight ✓ Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1559-1607 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	0.5 dB
Axial Ratio	Max 0.9 dB @ Zenith
Conducted Gain	30 dB ±3 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	34.60 mm (height) x 28.50 mm (diameter)

M9HCT-A-SMA

Rugged L1/L2/L5 GPS GLONASS/ L-band corrections Active Antenna

Part #: 100-00174-01

✓ Quadrifilar helix antenna ✓ Rugged IP67 rating with SMA mount ✓ Small form factor ✓ Ground plane independent ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Ultra-lightweight ✓ Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1192-1231 MHz 1559-1606 MHz 1164-1189 MHz (L5) 1539 - 1559 MHz
Antenna element peak gain	1.3 dB / 0.5 dB / 0.5 dB / 1.5 dB
Axial Ratio	≤ 1.2 dB @ Zenith ≤ 0.9 dB @ Zenith 1.1 dB @ Zenith ≤ 0.5 dB
Conducted Gain	30 dB ±3 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	51 mm (height) x 34 mm (diameter)

M9HCT-A-EMB

Embedded active Antenna (L1, L2, LL5, & L-band)

Part #:108-00082-01

- Quadrifilar helix antenna
- Small form factor
- Ground plane independent
- GIS, RTK and other high accuracy GNSS applications
- Low power consumption
- Low phase center variation over azimuth and elevation and among different samples
- Ultra-lightweight
- Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1192-1231 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	1.1 dB / 0.5 dB
Axial Ratio	Max 1.2 dB @ Zenith Max 0.9 dB @ Zenith
Conducted Gain	30 dB ±3 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	34.60 mm (height) x 28.50 mm (diameter)

M1227HCT-A2-SMA

Rugged L1/L2 GPS GLONASS Active Antenna

Part #: 100-00004-02

L1/L2 GPS-GLONASS bands Rugged IP-67 rating Superior out-of-band rejection 50 V/m jamming resistant Very low noise figure SMA mount Ground plane independent GIS & RTK applications Ultra-light weight - 24 grams (typical)

Key electrical specifications:

Parameter	Specification
Frequency	1217-1250 MHz (L2) / 1565-1610 MHz (L1)
Antenna element peak gain	2 dBic @ 1227 MHz (typical) / 2 dBic @ 1575 MHz (typical)
Axial Ratio	0.5dB (L1), 0.5dB (typical) / 1dB (max)
Total Gain	30 dBic @ 1227 MHz (typical) 28 dBic @ 1575 MHz (typical) 28 dBic @ 1602 MHz (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	50x30 mm

M4HCT-A-SMA

Multi-Frequency Active Antenna

Part #: 100-00117-01

Quadrifilar helix antenna Rugged IP67 rating with SMA mount Small form factor Ground plane independent GIS, RTK and other high accuracy GNSS applications Low power consumption Low phase center variation over azimuth and elevation and among different samples Ultra-lightweight Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1559-1607 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	0.5 dB
Axial Ratio	Max 0.9 dB @ the Zenith
Conducted Gain	30 dB ±3 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design/ SMA connector
Dimensions	51 mm (height) x 34 mm (diameter)

M7HCT-A-SMA

Rugged L1/L2 GPS GLONASS Active Antenna

Part #: 100-00069-01

Quadrifilar helix antenna Rugged IP67 rating with SMA mount Small form factor Ground plane independent GIS, RTK and other high accuracy GNSS applications Low power consumption Low phase center variation over azimuth and elevation and among different samples Ultra-lightweight Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1192-1231 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1
Antenna element peak gain	Max 1.2 dB @ the Zenith Max 0.9 dB @ the Zenith
Axial Ratio	Max 0.9 dB @ the Zenith
Conducted Gain	30 dB ±3 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	51 mm (height) x 34 mm (diameter)

Helical Multi-Frequency bands
External

M8HCT-A-SMA

Rugged L1/L2/L5 GPS GLONASS Active Antenna

Part #: 100-00124-01

Quadrifilar helix antenna ✓ Rugged IP67 rating with SMA mount ✓ Small form factor ✓ Ground plane independent ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Ultra-lightweight ✓ Automotive grade electronics

Key electrical Specifications:

Parameter	Specification
Frequency	1192-1231 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1 1164-1189 MHz (L5)
Antenna element peak gain	1.1 dB / 0.5 dB / 0.5 dB
Axial Ratio	Max 1.2 dB @ Zenith Max 0.9 dB @ Zenith 1.1 dB @ Zenith
Conducted Gain	30 dB ±3 dB

Key mechanical Specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA Connector
Dimensions	51 mm (height) x 34 mm (diameter)

M9HCT-A-SMA

Rugged L1/L2/L5 GPS GLONASS/ L-band corrections Active Antenna

Part #: 100-00174-01

Quadrifilar helix antenna ✓ Rugged IP67 rating with SMA mount ✓ Small form factor ✓ Ground plane independent ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Ultra-lightweight ✓ Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1192-1231 MHz 1559-1606 MHz 1164-1189 MHz (L5) 1539 - 1559 MHz
Antenna element peak gain	1.3 dB / 0.5 dB / 0.5 dB / 1.5 dB
Axial Ratio	≤ 1.2 dB @ Zenith ≤ 0.9 dB @ Zenith 1.1 dB @ Zenith ≤ 0.5 dB
Conducted Gain	30 dB ±3 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA Connector
Dimensions	51 mm (height) x 34 mm (diameter)

M10HCT-A-SMA

L1 – L2 – L5 Active GNSS Antenna

Part #: 100-00282-02

L1/L2/L5 Full GNSS Bands ✓ Low Axial Ratio ✓ Low noise figure ✓ Ground plane independent ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Rugged ✓ MIL-STD-810G

Key electrical specifications:

Parameter	Specification
Frequency	1164-1300 MHz /1539-1610 MHz
Peak gain	3.3 dBi / 3.4 dBi
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount / SMA
Dimensions	Ø80 x 40 mm

M10HCT-A-TNC

L1 – L2 – L5 Active GNSS Antenna

Part #: 100-00282-01

✓ Full GPS, Galileo, Glonass, BeiDou bands coverage including L-Band correction services coverage ✓ Low Axial Ratio ✓ Low Noise Figure ✓ Ground plane independent ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Rugged IP67 rating ✓ RoHs compliant ✓ Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1164-1300 MHz /1539-1610 MHz
Peak gain	3.3 dBi / 3.4 dBi
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / TNC
Dimensions	Ø80 x 40 mm

M1227HCT-A-EMB

Embedded L1/L2 GPS GLONASS Active Antenna

Part #: 108-00044-01

✓L1/L2 GPS-GLONASS bands ✓ Superior out-of-band rejection ✓ 50 V/m jamming resistant ✓ Very low noise figure ✓ SMA mount ✓Ground plane independent ✓ GIS & RTK applications ✓ Ultra-light weight

Key electrical specifications:

Parameter	Specification
Frequency	1217-1250 MHz (L2) / 1565-1610 MHz (L1)
Antenna element peak gain	L1 28 dBic / L2 30 dBic
Axial Ratio	L1 0.5 dB (typical) / 1 dB (max) L2 0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	35.2 x 24mm

M4HCT-A-EMB

Embedded L1 GPS/GLONASS/Galileo/Beidou Active Antenna

Part #: 108-00074-01

✓Quadrifilar helix antenna ✓ Small form factor ✓ Ground plane independent ✓ GIS, RTK and other high accuracy GNSS applications ✓Low power consumption ✓Low phase center variation over azimuth and elevation and among different samples ✓Ultra-lightweight ✓Automotive grade electronics

Key electrical Specifications:

Parameter	Specification
Frequency	1559-1607 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	0.5 dB
Axial Ratio	Max 0.9 dB @ the Zenith
Conducted Gain	3 0 dB ±3 dB

Key mechanical Specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	34.60 mm (height) x 28.50 mm (diameter)

M7HCT-A-EMB

Embedded L1 GPS/GLONASS/Galileo/Beidou

Part #: 108-00075-01

✓Quadrifilar helix antenna ✓ Rugged IP67 rating with SMA mount ✓ Small form factor ✓ Ground plane independent ✓GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Ultra-lightweight ✓ Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1559-1607 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	0.5 dB
Axial Ratio	Max 0.9 dB @ Zenith
Conducted Gain	30 dB ±3 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	34.60 mm (height) x 28.50 mm (diameter)

Helical Multi-Frequency bands
Embedded

M8HCT-A-EMB

Embedded L1/L2/L5 GPS GLONASS Active Antenna

Part #: 108-00076-01

✓ Quadrifilar helix antenna ✓ Small form factor ✓ Ground plane independent ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Ultra-lightweight ✓ Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1192-1231 MHz 1559-1606 MHz 1164-1189 MHz (L5)
Antenna element peak gain	1.1 dB / 0.5 dB / 0.5 dB
Axial Ratio	Max 1.2 dB @ Zenith Max 0.9 dB @ Zenith 1.1 dB @ Zenith
Conducted Gain	30 dB ±3 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	34.60 mm (height) x 28.50 mm (diameter)

M9HCT-A-EMB

Embedded active Antenna (L1, L2, LL5, & L-band)

Part #: 108-00082-01

✓ Quadrifilar helix antenna ✓ Small form factor ✓ Ground plane independent ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Ultra-lightweight ✓ Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1192-1231 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	1.1 dB / 0.5 dB
Axial Ratio	Max 1.2 dB @ Zenith Max 0.9 dB @ Zenith
Conducted Gain	30 dB ±3 dB

Key mechanical specifications:

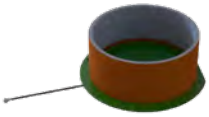
Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	34.60 mm (height) x 28.50 mm (diameter)

M10HCT-A-EMB

L1 – L2 – L5 Active GNSS Antenna

Part #: 180-00090-02

✓ Full GPS, Galileo, Glonass, BeiDou bands coverage including L-Band correction services coverage ✓ Low Axial Ratio ✓ Low Noise Figure ✓ Ground plane independent ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Rugged IP67 rating ✓ RoHs compliant ✓ Automotive grade electronics



Key electrical specifications:

Parameter	Specification
Frequency	1164-1300 MHz /1539-1610 MHz
Peak gain	3.3 dBi / 3.4 dBi
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / U.FL
Dimensions	Ø71 x 31 mm

Iridium/GPS/GLONASS

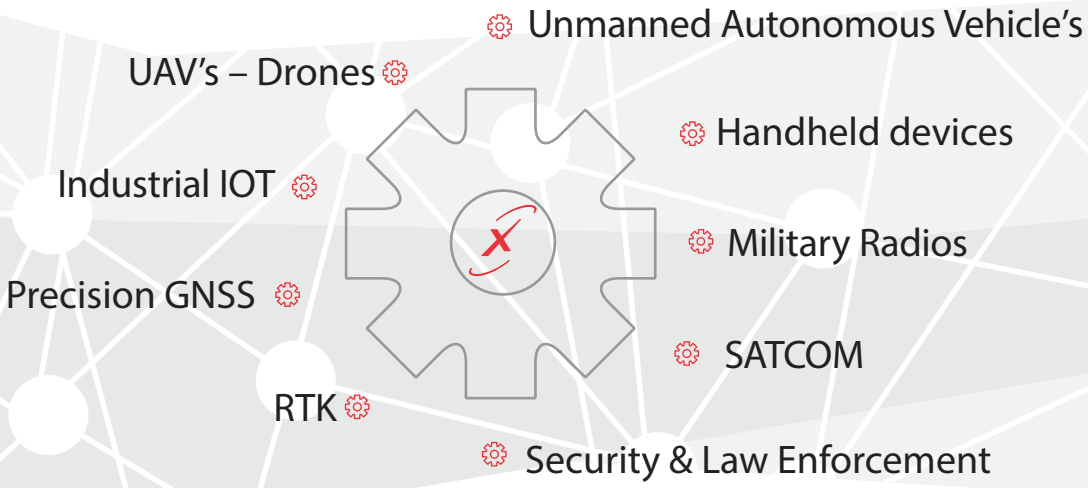
MAXTENA

Iridium/GPS/GLONASS

Maxtena's line of GPS and GLONASS helix antenna can get a signal in many different orientations compared to a block ceramic antenna. If the orientation of the unit containing the antenna is not always toward the sky then one of our helix antennas will be the ideal choice as an antenna ground plane is not required.

Maxtena's line of Iridium antennas are fully Iridium network certified and designed to complement a wide range of applications, including fleet, asset and personal tracking, handheld devices, satellite telephony, utility monitoring, and more.

Applications



Helical Iridium/ GPS/GLONASS
External

M1610HCT-GN

GPS GLONASS Iridium Passive Antenna

Part #: 100-00149-01

✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra-light weight-45grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (Glonass) 1621 MHz (Iridium)
Antenna element peak gain	3.8 dBic (GPS) -1.7 dBic (Glonass) 2.0 dBic (Iridium)
Axial Ratio	0.2 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA male
Dimensions	135 mm (height) x 18.5 mm (diameter)

M1600HCT-P-SMA

High Performance Iridium/GPS/GLONASS Passive Antenna

Part #: 100-00050-01

✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra-light weigh- 11grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium) 1575 MHz (GPS) 1602 MHz (GLONASS)
Antenna element peak gain	2.8 dBic (Iridium) -3 dBic (GPS) 0 dBic (GLONASS
Axial Ratio	0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	48 mm (height) x 18.5 mm (diameter)

SatFleet

Low Prole, Iridium Certied, Active GPS Fleet Antenna for Iridium Voice/Data and GPS

Part #: 100-00045-01

✓ Superior Iridium Voice/Data performance ✓ Iridium ground plane independent ✓ High performance helix Iridium antenna ✓ Rugged IP-67 housing ✓ Low profile with screw mount ✓ Superb low elevation performance ✓ Low weight

Key electrical specifications:

Parameter	Specification
Frequency	1621 MHz 1575.42 MHz
Antenna element peak gain	1.4dBic (typical) @ broadside 5.5 dBic
Axial Ratio	1.5 dB (typical) 1.5 dB (typical) / 2.5 dB (max)

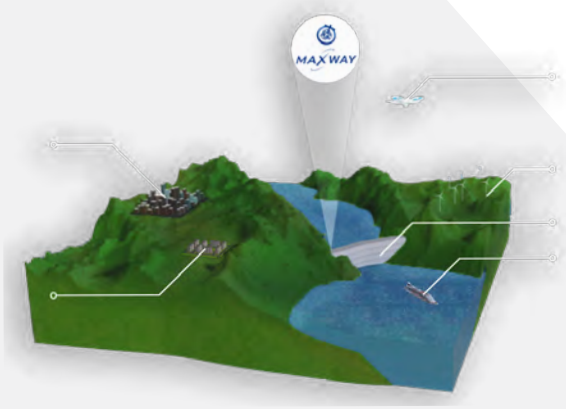
Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design
Dimensions	61 x 50 x 116 mm

Maxtena Technology

Introducing MaxWay

MaxWay is hosted on Microsoft's trusted, redundant, and secure MS Azure service to provide reliable, consistent, and secure service for clients. MaxWay provides user defined access to Iridium Short Burst Data for Provisioning, Data Management, and Billing. MaxWay is a MS Azure Cloud platform, available as a secure Website GUI, or as an Application Programming Interface Web Service. MaxWay is our custom, in-house designed and built airtime platform, designed, written, updated, and modified by Maxtena's own in-house Software Engineering Team. Contact your Maxtena account manager for more information if interested in our API.



Features

- Custom in house designed platform
- Advanced efficiency
- Custom Reports anytime & anywhere
- Multiple User Profiles

Advanced Monitoring Systems

An advanced Driven data Management platform for the iOT solutions.

Using either our easy and comprehensive GUI or directly interfacing your systems with our customizable API, MaxWay allows you full control of your Iridium airtime, allowing you to provision, activate, test, and deploy your IoT solution across the street or across the globe.

Offering next-gen technology for your iOT solutions

MaxWay offers best-in-class technologies for air, land, and sea solution anywhere in the earth.

Iridium IoT systems can be a complex conglomerate of devices from literally dozens of manufacturers, each with its own data delivery requirements and destinations, and with different requirements in SBD setup.

for more information
visit maxtena.com

Iridium Connected®

As a certified Iridium Connected® solution, MaxWay provides seamless connectivity for end-to-end user for customizable reports, and real time dashboard.

SatFleet 3in1

Low Profile, Iridium Certified, Active GPS Fleet Antenna for Iridium Voice/Data and GPS

Part #: 100-00131-01

✓ Superior Iridium Voice/Data performance ✓ Iridium ground plane independent ✓ High performance helix Iridium antenna ✓ Rugged IP-67 housing ✓ Low profile with screw mount ✓ Superb low elevation performance ✓ Low weight

Key electrical specifications:

Parameter	Specification
Frequency	1621 MHz 1575.42 MHz 1602 MHz (Glonass)
Antenna element peak gain	1.6 dBic (typical) @ broadside 5.5 dBic 5.5 dBic
Axial Ratio	1.7 dB (typical) 1.5 dB (typical) / 2.5 dB (max) 1.5 dB (typical) / 2.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design
Dimensions	61 x 50 x 116 mm

M1610HCT-22P-MR

High Performance Passive Iridium/GPS/GLONASS Antenna

Part #: 100-00042-09

✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra light weight ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz 1602 MHz 1616-1626 MHz
Antenna element peak gain	-0.5 dBic (typical)
Axial Ratio	1 dB (typical) / 1.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA
Dimensions	38 mm (height) x 18.5 mm (diameter)

M1600HCT-22P-MR

High Performance Passive Iridium/GPS Antenna

Part #: 100-00042-08

✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra light weight ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium) 1575 MHz (GPS)
Antenna element peak gain	-0.5 dBic (typical)
Axial Ratio	1 dB (typical) / 1.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA
Dimensions	38 mm (height) x 18.5 mm (diameter)

M1600HCT-P-UFL

High Performance Iridium Passive Embedded Antenna

Part #: 100-00064-01

✓ Very low axial ratio ✓ Iridium bands ✓ Ultra light weight - 3 grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	2.8 dBic (Iridium)
Axial Ratio	0.2 dB (typical) / 0.5 dB (max)

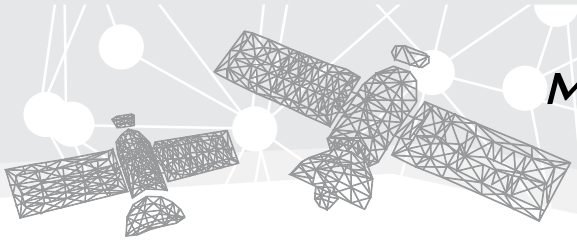
Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	61 x 50 x 116 mm

SATCOM Antenna Systems

MAXTENA

Iridium



From maritime and military, to mining and oil and gas, Maxtena oers Iridium technology to empower OEMs, customers, and end users across various industries to manage their heavy equipment eets more eciently — optimizing overall performance, improving safety for equipment and crews, and connecting to meet intelligence. The antennas are available in several dierent sizes depending on customer requirements.

Maxtena's line of Iridium antennas are fully Iridium Network Certied and designed to complement a wide range of applications, including feet, asset and personal tracking, handheld devices, satellite telephony, utility monitoring and more.

We produce both external antennas that come in a range of rugged housings, as well as embedded antennas. These antennas can be customized with dierent cable lengths and connectors upon request. Iridium provides real time access to high-value data letting you or your customers take actions to prevent potential failures and avoid costly consequences.

Applications

- LBS & M2M applications
- Handheld devices
- Law enforcement
- Mining equipment
- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- Iridium (SBD) Short Burst Data

Discover

Our bestseller

M1621HCT-P-SMA Iridium Certified Passive Antenna

M1621HCT-P-SMA

The M1621HCT-P-SMA is a high performance Iridium Certified passive antenna designed for wireless applications.

The antenna is built on proprietary Maxtena Helicore® technology. This technology provides exceptional pattern control, polarization purity and high efficiency in a very compact form factor.

The M1621HCT-P-SMA is a screw-on design, featuring an integrated SMA connector and is rated IP-67 when mounted for added protection. This product is designed for applications requiring high quality reception of the Iridium network.
Compliant with any Iridium Modem (9602, 9603, and 9523)
Measures: 48 mm (height) x 18.50 mm (width)

Features

- Optimized for Iridium network
- Very low axial ratio
- IP-67 mounted and unmounted
- Ultra-light weight
- Ground plane independent

Suggested Applications include

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Iridium (SBD) Short Burst Data
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices

For the embedded version, Maxtena provides support for installation and integration of the embedded antenna to offer an exceptional antenna performance. Maxtena can embed the antenna in any housing, then tune the antenna to match their housing's materials, electronics, and space.

M1621HCT-GN

High performance Iridium Antenna

Part #: 100-00147-01

✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra-light weight-45grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1621 MHz (Iridium)
Antenna element peak gain	2.0 dBic (Iridium)
Axial Ratio	0.25 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA male
Dimensions	135 mm (height) x 18.5 mm (diameter)

M1621HCT-P-SMA

High Performance Iridium Passive Antenna

Part #: 100-00003-02

✓ Very low axial ratio ✓ IP-67 mounted ✓ Ultra light weight - 11 grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	2.8 dBic (Iridium)
Axial Ratio	0.2 dB (typical)/ 0.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design/ SMA male
Dimensions	48 mm (height) x 18.5 mm (diameter)

M1621HCT-EXT1

Iridium Certified Passive External Magnet Mount Antenna

Part #: 100-00044-01

✓ Optimized for the Iridium network ✓ Very low axial ratio ✓ TNC, SMA, SMB, MCX connector ✓ Ground plane independent ✓ Magnet mount ✓ Ultra-light weight - 52 grams

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	1 dBic (typical)
Axial Ratio	0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount /TNC, SMA, SMB, MCX connectors
Dimensions	52.20 mm (height) x 36 mm (diameter

M1621HCT-22P-MR

High Performance Passive Iridium Antenna

Part #: 100-00042-07

Very low axial ratio · IP-67 mounted and unmounted · Ultra light weight · Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	-0.5 dBic (typical)
Axial Ratio	1 dB (typical) / 1.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA
Dimensions	38 mm (height) x 18.5 mm (diameter)

M1621HCT-P-UFL

Helical Iridium Certified Passive Embedded Antenna

Part #: 100-00032-01

✓ Optimized for Iridium Network ✓ Low axial ratio ✓ Ultra light weight - 3 grams ✓ Custom cable length and connector ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	2.8 dBic (typical)
Axial Ratio	0.2 dB (typical) / 0.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA
Dimensions	Ø 13.2 mm x 33 mm

Iridium SFX Antennas
External

M1621HCT-HP

Iridium SFX High-profile antenna

Part #: 100-00083-01

✓ Iridium SFX 9770 compliant ✓ IP66 ✓ ROHS compliant ✓ Ground plane independent ✓ High gain ✓ Low axial ratio

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	1.7 dBic (typical)
Axial Ratio	2.2 dB (typical) / 3.3 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	TNC
Dimensions	Ø 45 mm x 125 mm

M1621HCT-LP-SM

Iridium SFX Hole mount Low-profile antenna

Part #: 100-00101-01

✓ Iridium SFX 9770 compliant ✓ IP66 ✓ ROHS compliant ✓ Ground plane independent ✓ High gain ✓ Low axial ratio
✓ Through hole mount ✓ Low profile

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	2.5 dBic (typical)
Beamwidth	147°

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	TNC
Dimensions	Ø 79.5 mm x 38 mm

M1621HCT-LP-MM

Iridium SFX Magnet Mount Low-profile antenna

Part #: 100-00101-02

✓ Iridium SFX 9770 compliant ✓ IP66 ✓ ROHS compliant ✓ Ground plane independent ✓ High gain ✓ Low axial ratio
✓ Magnet mount ✓ Low profile

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	2.5 dBic (typical)
Beamwidth	147°

Key mechanical specifications:

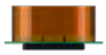
Parameter	Specification
Mounting option / Connector	TNC
Dimensions	Ø 84 mm x 37.4 mm

M1621HCT-LP-UFL

Iridium SFX Embedded low-profile antenna

Part #: 100-00101-03

Iridium SFX 9770 compliant IP66 ROHS compliant Ground plane independent High gain Low axial ratio



Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	2.5 dBic (typical)
Beamwidth	147˚

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	TNC
Dimensions	Ø 60.15 mm x 38.3 mm

M1600HCT12-UFL

Thuraya helical Passive Antenna

Part #: 100-00108-01

✓ Very low axial ratio ✓ Ultra light weight - 11 grams ✓ Ground plan independent

Key electrical specifications:

Parameter	Specification
Frequency	1525 MHz - 1660.5 MHz
Antenna element peak gain	3.5 dBic @ 1540 MHz (typical) 3.5 dBic @ 1640 MHz (typical)
Axial Ratio	1.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	U. FL
Dimensions	100 mm (height) x 12 mm (diameter)

M1590HCT-HP-TH

Thuraya Rugged high-performance Antenna

Part #: 100-00137-01

✓ Optimized for Thuraya network ✓ Very low axial ratio ✓ IP66 and RoHS compliant ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1525 MHz - 1660.5 MHz
Antenna element peak gain	3.0 dBic (typical)
Axial Ratio	2.2 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	a mast mount design/TNC connector
Dimensions	125 mm (height) x 45 mm (diameter)

M1590HCT-SMA

Inmarsat high-performance Active Antenna

Part #: 100-00068-01

✓ Superior out-of-band rejection ✓ Very low axial ratio ✓ Pattern constant with frequency ✓ Ultra-light weight ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1525 MHz - 1660.5 MHz
Antenna element peak gain	1.5 dBic @ 1540 MHz (typical) 1.5 dBic @ 1640 MHz (typical)
Axial Ratio	1.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Connector
Dimensions	51 mm (height) x 30 mm (diameter)

M1590HCT-LP-MM

Inmarsat Low Profile Antenna – Magnet Mount

Part #: 100-00183-02

✓ Very low axial ratio ✓ Ground plane independent ✓ Magnet mount ✓ 1,500 mm LRM100 coaxial cable ✓ TNC, SMA, SMB, MCX connector

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) / 1602 MHz (GLONASS)
Antenna Peak Gain	1.5 dBic (GPS) / 1.5 dBic (GLONASS)
Axial Ratio	0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount/ TNC, SMA, SMB, MCX connectors
Dimensions	52.20 mm (height) x 36 mm (diameter)

M1590HCT-LP-SM

Inmarsat Low Profile Antenna – Hole Mount

Part #: 100-00183-01

✓ Optimized for the Inmarsat Network ✓ IP66 and ROHS compliant ✓ Ground plane independent ✓ High gain & low axial ratio ✓ Through hole mount ✓ Low profile

Key electrical specifications:

Parameter	Specification
Frequency	1525-1560 MHz (GPS) 1625-1660MHz
Polarization	RHCP
Antenna Peak Gain	2 dBic
Axial Ratio	2.0:1

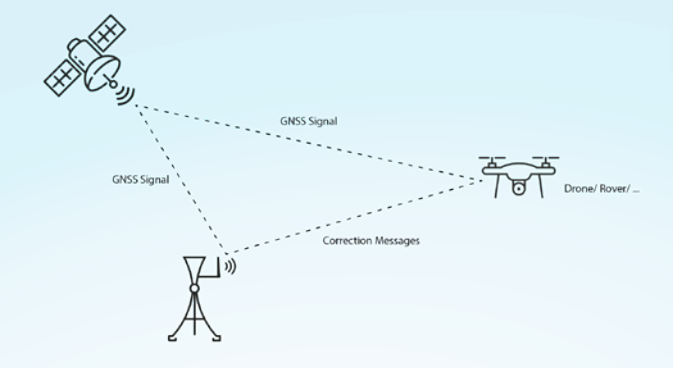
Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ TNC connector
Weight	125 grams
Dimensions	Ø 79.5 x 38mm

GNSS Positioning Technique

This document provides brief overview of GNSS positioning concepts and techniques. The next few chapters will explain how GNSS positioning works, what is real-time kinematics concept and what are the figures of merit that can describe GNSS antenna and receiver performance.

GNSS (Global Navigational Satellites System) is a constellation of satellites providing signals from space that transmit positioning and timing data to GNSS receivers. The receivers then use this data to determine location. Examples of GNSS include USA's NAVSTAR Global Positioning System (GPS), Europe's Galileo, Russia's Global'naya Navigatsionnaya Sputnikovaya Sistema (GLONASS) and China's BeiDou. The advantage of having access to multiple satellites is accuracy, redundancy, and availability at all times.



The performance of GNSS is assessed using four criteria:
Accuracy: the difference between a receiver's measured and real position, speed or time;
Integrity: a system's capacity to provide a threshold of confidence and, in the event of an anomaly in the positioning data, an alarm;
Continuity: a system's ability to function without interruption;
Availability: the percentage of time a signal fulfils the above accuracy, integrity, and continuity criteria.

Global Navigation Satellite Systems Positioning Concepts

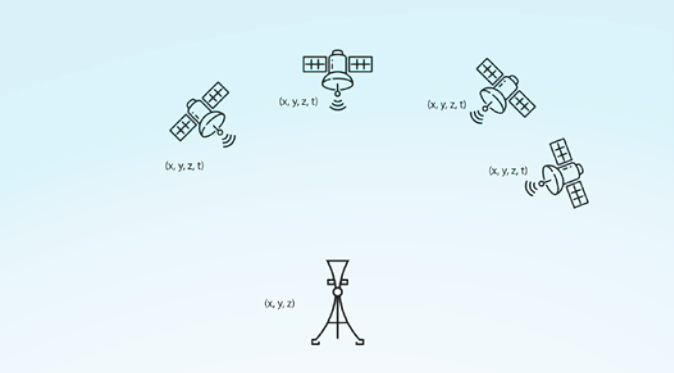
GNSS constellation consist of more than one hundred operational satellites in medium Earth orbit (MEO). Satellites transmit signals that contain information about their location and the current time. GNSS receivers on the ground receive these signals and use them to calculate the receiver's location and other information. The accuracy of GNSS depends on several factors, including the number of satellites in view, the receiver's antenna and signal processing capabilities, and any interference or obstacles that may affect the signals.

Satellites have atomic clocks that provide extremely accurate dating. The time information is placed in the codes broadcast by the satellite. The receiver then continuously determines the time at which the signal was broadcast. The signal also contains orbitography data so that the receiver can calculate the location of the satellites. This is navigation information.

The GNSS receiver uses the time difference between the time of reception and broadcasting of the signal to determine the distance between the receiver antenna and the satellite. The receiver that receives signals from at least four satellites can accurately determine any 3D location in the visibility of satellites. To do this, it will use the intersection of these satellite-receiver vectors.

GNSS Positioning Technique

Real-Time Kinematic Positioning



Real-time kinematic (RTK) is a method of enhancing the precision of position data derived from satellite-based positioning systems (global navigation satellite systems, GNSS). It is commonly used in applications such as surveying, construction, and agriculture, where high-precision position data is required.

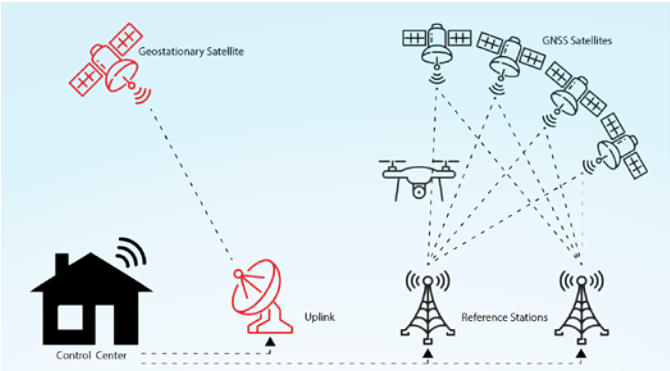
In RTK, a stationary reference receiver, also called "Base", is placed at a known location, and a second receiver, also called "Rover", is carried by the user or vehicle. The base receiver measures the precise position of the satellite signals, and the data is transmitted to the second receiver, which uses the information to calculate its own position with much greater precision than would be possible using the satellite signals alone. Described configuration can assure centimeter precision in location determination.

RTK data and position accuracy can be described with some statistics terms. First one is CEP (circular error probable). It represents the radius of a circle centered on the true position of an object, within which there is a 50% probability that the measured position of the object will fall. In other words, if a satellite-based positioning system has a CEP of 10 centimeters, this means that there is a 50% probability that the measured position of an object will be within 10 centimeters of its true position. Second one is distance root mean square (DRMS) - the radius of the circle in which 68% of the results are located. The last one is 2DRMS - twice the DRMS and it represents a circle in which 98% of the results are located.

Another important parameter is time to first fix (TTFF). It is a measure of the time it takes for a satellite-based positioning system to determine the initial position of a receiver. TTFF is an important performance metric for satellite-based positioning systems, as it represents the time that it takes for the system to be ready for use after it is turned on.

Real-Time Kinematic Positioning

Precise point positioning (PPP) is a method of determining the precise position of a receiver using GNSS (Global Navigation Satellite System) signals. Unlike other methods of GNSS positioning, which use a network of ground-based reference stations to provide corrections to the GNSS receivers, PPP uses only the GNSS signals and correction signals from geostationary satellites to determine the receiver's position with high accuracy. A PPP correction service consists of the following components: ground-based tracking stations, analysis software to calculate the orbit, clock and ionospheric corrections and a method of distributing the modifications to users. PPP method is very useful in remote or difficult-to-reach areas.



Iridium Solutions

MAXTENA

Iridium Solutions

Maxtena's line of Iridium antennas are fully **Iridium Network Certified** and designed to compliment a wide range of applications, including fleet, asset and personal tracking, handheld devices, satellite telephony, utility monitoring and more. Maxtena designs and manufactures advanced antenna solutions based on our patented Dynamic Aperture Technology™ (DAT). Our antennas empower our customers to develop unparalleled solutions for GNSS, Terrestrial and Satellite M2M and MSS applications.

Applications

- LBS & M2M applications
- Handheld devices
- Law enforcement
- Mining equipment
- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- Iridium (SBD) Short Burst Data

Iridium Modems

M9603N

Iridium 9603 Transceiver

Part #: 208-00002-02

✓ Smallest form factor of any commercial satellite transceiver available ✓ Only 11.4 grams ✓ Single board transceiver ✓ Simple AT Command interface ✓ No SIM required ✓ Automatic notification that mobile-terminated messages are queued ✓ No SIM required

Key electrical specifications:

Parameter	Specification
Frequency	1616 to 1626.5 MHz
Duplexing method	TDD (Time Domain Duplex)
Input/output impedance	50Ω

Key mechanical specifications:

Parameter	Specification
Weight	11.4g
Dimensions	31.5 mm x Width: 29.6 mm x 8.1 mm

M9602N

Iridium 9602 Transceiver

Part #: 208-00001-02

✓ Single board transceiver ✓ No SIM required ✓ Designed to be incorporated in an OEM Solution ✓ GPS RF Pass-through technology ✓ Simple AT command interface

Key electrical specifications:

Parameter	Specification
Frequency	1616 to 1626.5 MHz
Duplexing method	TDD (Time Domain Duplex)
Input/output impedance	50Ω

Key mechanical specifications:

Parameter	Specification
Weight	30 g
Dimensions	41 mm x Width: 45 mm x 13 mm

M9523N

Iridium 9523 Transceiver

Part #: 208-00003-01

✓ Ultra-compact form factor ✓ Single-board transceiver ✓ Voice and Circuit Switched Data capable ✓ Larger SBD buer size than the 9602 or 9603 ✓ Iridium Push-to-Talk options available ✓ Direct PCB integration ✓ Pole-to-pole global coverage ✓ FCC, Industry Canada, and ITU approval ✓ SMS ✓ LBS

Key electrical specifications:

Parameter	Specification
Frequency	1616 to 1626.5 MHz
Duplexing method	TDD (Time Domain Duplex)
Input/output impedance	50Ω

Key mechanical specifications:

Parameter	Specification
Weight	32 g
Dimensions	70.44 x 36.04 x 14.6 mm

Explore

the Iridium Edge® Pro,

GPS TRACKING SHORT BURST DATA (SBD)

Iridium Edge® Pro

Iridium Edge Pro oers a simplied way to innovate, customize, and deploy smarter solutions for remote asset management. Create customizable end-to-end monitoring solutions for vessels, vehicles, and remote equipment using Iridium's best in class two-way network and truly global coverage.

The Iridium Edge® Pro is a standalone device with Short Burst Data® (SBD) that o ers real-time GPS tracking capabilities, and a exible programming platform that allows developers to create and run their own custom-made applications. Example uses include sheries, vessel and eet management, and remote monitoring.

Benefits

Highly Mobile
The Iridium® satellite network provides communications and connectivity for mobile applications like oil and gas, transportation, agriculture and surface mining anywhere on the planet allowing tracking and monitoring of vehicles and assets operating in remote areas.

Reliable Coverage
Devices using the Iridium satellite network are enabled by a constellation of 66 Low-Earth Orbit (LEO) mobile satellites that provide service anywhere on the planet.

Low Latency
The Iridium satellites in Low-Earth Orbit (~800 km), enable signals to travel in 1/40 the time compared to geostationary satellites (36,000 km), resulting in low-latency, always-on connections ideal for Internet of Things (IoT) deployments.

Features

- Quick partner (VAR) development using Java
- Common services including geofencing, event logging and position reporting
- Easily paired with cellular solutions using programmable interfaces
- Standalone fi nished product for GPS tracking
- Programming over the air
- Eclipse based IDE and Virtual Device emulators
- Multiple interfaces: RS232, CANBus and BLE

Iridium Modems

IRIDIUM EDGE SOLAR

Iridium Edge Solar

Part #: 106-00002-01

✓ Bluetooth capability for wireless sensor integration and local device connectivity ✓ Over-the-Air Configuration Changes ✓ Interval and Scheduled Reporting Modes ✓ Start/Stop Reporting ✓ In Motion Reporting ✓ Fully Encapsulated, No External Connectors, Water Ingress Protected ✓ Accelerometer and Magnetometer ✓ LED Status Indicator

Key electrical specifications:

Parameter	Specification
Reliability	IPC9592a
Internal Non-rechargeable & Solar Chargeable Batteries	

Key mechanical specifications:

Parameter	Specification
Weight	470 grams
Dimensions	164.2 mm x 71.2 mm x 32.9 mm

IRIDIUM EDGE

Iridium Edge

Part #: 106-00002-01

✓ Connectivity beyond cellular limits for 100% global IOT coverage ✓ Hardware-ready device for simple, low risk integration ✓ Ready to install for quick time-to-market ✓ Robust power supply for industrial installations ✓ 180˚ line of site for compromised locations ✓ Iridium 9602 Transceiver ✓ Power Requirements: 9-32v input voltage ✓ Power Consumption (Average): Transmit Slot Max. 1.6W ✓ Power On Max. Current 0.5A ✓ Operational Max. Current 0.3A

Key electrical specifications:

Parameter	Specification
Iridium Devices	Iridium 9603 Short Burst Data modem Iridium Core 9523 Transceiver Iridium 9602 Transceiver

Key mechanical specifications:

Parameter	Specification
Weight	330 grams
Dimensions	130 x 80 x 30 mm

IRIDIUM EDGE PRO

GPS Tracking Short Burst Data (SBD)

Part #: 106-00001-01

✓ Quick partner (VAR) development using Java ✓ Common services including geofencing, event logging and position reporting ✓ Easily paired with cellular solutions using programmable interfaces ✓ Standalone finished product for GPS tracking ✓ Programming over the air ✓ Low-cost development kits available ✓ Eclipse based IDE and Virtual Device emulators ✓ Multiple interfaces: RS232, CANBus and BLE

Key electrical specifications:

Parameter	Specification
Frequency	1616 to 1626.5 MHz
Duplexing method	TDD (Time Domain Duplex)
Input/output impedance	50Ω

Key mechanical specifications:

Parameter	Specification
Weight	200 g
Dimensions	127 mm x 90 mm x 41 mm

Iridium Modems

	Iridium Edge	Iridium Edge Pro	Iridium Edge Solar
Form Factor	Standalone	Standalone with GPS, Java Programmable	Standalone with GPS, Configurable Profiles
Dimensions (L x W x H)	130 x 80 x 30 mm	127 x 90 x 41 mm	164 x 71 x 33 mm
Weight	330 g	200 g	470 g
Interfaces	AT+ Command, RS 232	4 I/O, CANbus, RS 232, RS 485	BLE
Power Requirements	9-32 V	7-32 V	Internal Non-rechargeable & Solar Chargeable Batteries
Power Consumption (Average)	Transmit Slot Max. 1.6W Power On Max. Current 0.5A Operational Max. Current 0.3A	Receive 0.6W GNSS +0.6W	Harvests Energy from the Sun
Operating Temperature	-40ºC to +55ºC	-40ºC to +85ºC	-40ºC to +85ºC
Environmental Specs	SAE J1455,* IP 67	SAE J1455,* IP 67	SAE J1455,* MIL-STD-910, IP 68
Typical Applications	Asset Tracking, Fleet Management, Environment & Safey Monitoring, Remote Automation & Control	Fisheries, Vessel & Fleet Management, Remote Monitoring	Oil & Gas, Transportation, Agriculture, Surface Mining, Asset & Vehicle Tracking
Development Kit	Yes	Yes	Yes
Services	SBD®	SBD®	SBD®
Average Latency	<20 Seconds Per 340 Bytes (MO)	<20 Seconds Per 340 Bytes (MO)	<20 Seconds Per 340 Bytes (MO)
Certifications*	US (FCC), EU (CE Mark)	US (FCC), EU (CE Mark)	US (FCC), EU (CE Mark)
Data Speed	2.4 Kbps	2.4 Kbps	2.4 Kbps

Iridium Developer Kits

M9523N-KIT

Iridium 9523N Developer Kit

Part #: 401-00005-01

✓M9523N Test Interface Card ✓ 2x 9523N Core Modules ✓2x SIM Cards ✓ Supplied Mounting Screws ✓ AC/DC Power Adapter ✓Kit contains an antenna

Key mechanical specifications:

Parameter	Specification
Dimensions	70.44 mm x 36.04 mm

M9602N-KIT

Iridium 9602N Developer Kit

Part #: 401-00003-01

✓9602N SBD Module ✓ AC Adapter (with international connectors) ✓Test Interface Card (the development board itself) ✓9602N Development CD – which contains a test tool and all the documentation one would need to get started ✓ Mounting Screws & PCB Spacers/Risers ✓ Kit contains an antenna

Key mechanical specifications:

Parameter	Specification
Dimensions	31.5 mm x 29.6 mm x 8.10 mm

M9603N-KIT

Iridium 9603N Developer Kit

Part #: 401-00004-01

✓9602N SBD Module ✓ AC Adapter (with international connectors) ✓Test Interface Card (the development board itself) ✓9602N Development CD – which contains a test tool and all the documentation one would need to get started ✓Mounting Screws & PCB Spacers/Risers ✓ Kit contains an antenna

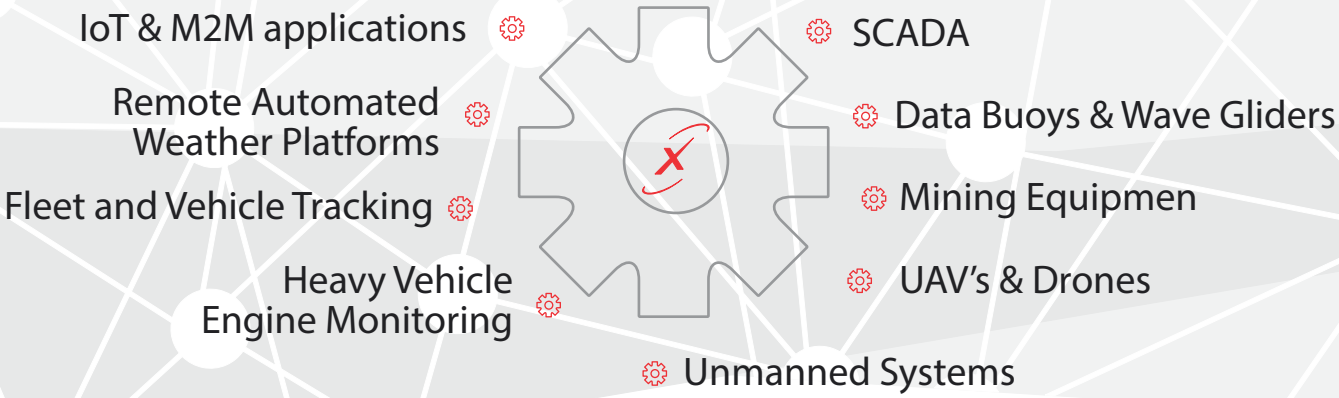
Key mechanical specifications:

Parameter	Specification
Dimensions	31.5 mm x 29.6 mm x 8.10 mm

Maxtena Iridium Connected Products

Allowing you to save development time and money when incorporating an Iridium connected solution into your product line. Maxtena's Iridium Satellite Modems & SBD Controllers can be used without having to embed an Iridium transceiver directly onto your board. Our products are fully certified for the Iridium satellite network and accommodating a wide range of Iridium airtime services (SBD/RUDICS/CSD) and sophisticated cloud-based AI powered backend. Maxtena can help you add satellite connectivity to your product line and expand your reach to any location on the globe.

Applications



Maxtena Iridium Connected Products

MAX2400-EX

Iridium 9523 carrier board with RS232 & enclosure

Part #: 100-00219-01

✓ Full 9-wire RS232 interface to Iridium® 9523 transceiver ✓ Wide supply voltage range (4.5– 32 VDC) ✓ Transient voltage protection ✓ Integrated SIM card holder ✓ Screw mountable aluminum enclosure ✓ SMA RF connector ✓ Easy integration into OEM products with a convenient DB15 interface

Key electrical specifications:

Parameter	Specification
Input Voltage	≤ 4.5 V ; ≥ 32 V
Nominal Current	70 mA typ.

Key mechanical specifications:

Parameter	Specification
Connector	SMA
Dimensions	4.8L x 2.6W x 1.3H inch

MAX9523-PCB

Iridium 9523 carrier board with RS232. PCB version only

Part #: 108-00085-02

✓ Full 9-wire RS232 interface to Iridium® 9523 transceiver ✓ Wide supply voltage range (4.5– 32 VDC) ✓ Transient voltage protection ✓ Integrated SIM card holder ✓ Screw mountable aluminum enclosure ✓ SMA RF connector ✓ Easy integration into OEM products with a convenient DB15 interface

Key electrical specifications:

Parameter	Specification
Input Voltage	≤ 4.5 V ; ≥ 32 V
Nominal Current	70 mA typ.

Key mechanical specifications:

Parameter	Specification
Connector	SMA
Dimensions	4.8L x 2.6W x 1.3H inch

MAX9602-ENC

IRIDIUM 9602 based SBD Controller/ daughter board with GPS

Part #: 100-00230-01

✓ Full RS232 interface to Iridium®9602N transceiver ✓ Full RS232 interface to Iridium®9602N transceiver ✓ Wide supply voltage range (4.5–32VDC) ✓ Transient voltage protection ✓ Screw mountable aluminum enclosure

Key mechanical specifications:

Parameter	Specification
Dimensions	3.9 x 2 x 1.2"

Maxtena Iridium Connected Products

MAX9602-PCB

IRIDIUM 9602 based SBD Controller/ daughter board with GPS, PCB Version

Part #: 108-00087-02

Full RS232 interface to Iridium®9602N transceiver Wide supply voltage range(4.5–32VDC) Transient voltage protection Small solution size(3.5Lx1.8W x1.6H inchs) LED indication of power and net work status Iridium and GPS pass through SMARF connectors User selectable ON/OFF controls User selectable relay driven or TTL option in external control configuration Easy integration into OEM products with a convenient DB15 interface

Key electrical specifications:

Parameter	Specification
Operating Voltage	4.5-32 VDC
Operating Current	5 mA standby 0.7 A peak @ 12 V

Key mechanical specifications:

Parameter	Specification
Weight	40 g
Dimensions	3.5 x 1.8 x 1.6 "

Key communication specifications:

Parameter	Specification
Transceiver	Iridium 9602N
3.3V serial only. Accepts Satelligent extended AT commands and Iridium AT commands	

MAX9602-ENC

IRIDIUM 9602 based SBD Controller/ daughter board with GPS

Part #: 100-00230-01

Full RS232 interface to Iridium®9602N transceiver Wide supply voltage range (4.5–32VDC) Transient voltage protection Screw mountable aluminum enclosure Small solution size (3.9Lx2W x1.2Hinch)

Key electrical specifications:

Parameter	Specification
Operating Voltage	4.5-32 VDC
Operating Current	5 mA standby 0.7 A peak @ 12 V

Key mechanical specifications:

Parameter	Specification
Weight	150 g
Dimensions	3.9 x 2 x 1.2 "

Key communication specifications:

Parameter	Specification
Transceiver	Iridium 9602N
3.3V serial only. Accepts Satelligent extended AT commands and Iridium AT commands	

Maxtena Iridium Connected Products

MAX9603-ENC

IRIDIUM 9603 based SBD Controller/ daughter board with GPS

Part #: 100-00220-01

✓ Controller for Iridium® 9603N SBD transceiver ✓ 48 channel SiRFstarIV™ chipset based GPS ✓ Serial interface for 3rd party equipment or PC control ✓ Wide supply voltage range (7– 28 VDC) ✓ Fused 5V switched power output for external devices ✓ Two 12 bit Analog to Digital (ADC) inputs ✓ Two Digital I/O's (configurable as panic input) ✓ Transient voltage protection ✓ Ultra-low standby power consumption (< 100 µA) ✓ OEM and standalone versions available ✓ Easy integration into OEM products with a convenient DB15 interface ✓ Application Programming Interface support through extended AT commands ✓ Extremely small solution size(2x1.4x0.75")

Key electrical specifications:

Parameter	Specification
Operating Voltage	7-28 VDC
Operating Current	100 µA mA standby 0.6 A peak @ 12 V

Key mechanical specifications:

Parameter	Specification
Weight	90 g
Dimensions	2 x 1.4 x 0.75"

Key communication specifications:

Parameter	Specification
Transceiver	Iridium 9603N
3.3V serial only. Accepts Satelligent extended AT commands and Iridium AT commands	

MAX9603-PCB

IRIDIUM 9603 based SBD Controller/ daughter board with GPS, PCB Version

Part #: 108-00086-02

✓ Controller for Iridium® 9603N SBD transceiver ✓ 48 channel SiRFstarIV™ chipset based GPS ✓ Serial interface for 3rd party equipment or PC control ✓ Wide supply voltage range (7– 28 VDC) ✓ Fused 5V switched power output for external devices ✓ Two 12 bit Analog to Digital (ADC) inputs ✓ Two Digital I/O's (configurable as panic input) ✓ Transient voltage protection ✓ Ultra-low standby power consumption (< 100 µA) ✓ OEM and standalone versions available ✓ Easy integration into OEM products with a convenient DB15 interface ✓ Application Programming Interface support through extended AT commands ✓ Extremely small solution size(2x1.4x0.5")

Key electrical specifications:

Parameter	Specification
Operating Voltage	7-28 VDC
Operating Current	100 µA mA standby 0.6 A peak @ 12 V

Key mechanical specifications:

Parameter	Specification
Weight	20 g
Dimensions	2 x 1.4 x 0.5 "

Key communication specifications:

Parameter	Specification
Transceiver	Iridium 9603N
3.3V serial only. Accepts Satelligent extended AT commands and Iridium AT commands	

SatFleet

Low profile, Iridium certified, active GPS Fleet antenna for Iridium Voice/Data and GPS

Part #: 100-00045-01

✓ Superior Iridium Voice/Data performance ✓ Iridium ground plane independent ✓ High performance helix Iridium antenna ✓ Rugged IP-67 housing ✓ Low profile with screw mount ✓ Superb low elevation performance ✓ Low weight

Key electrical specifications:

Parameter	Specification
Frequency	1621 MHz 1575.42 MHz
Antenna element peak gain	1.4dBic (typical) @ broadside 5.5 dBic
Axial Ratio	1.5 dB (typical) 1.5 dB (typical) / 2.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design
Dimensions	61 x 50 x 116 mm

SatFleet 3in1

Low profile, Iridium certified, active GPS Fleet antenna for Iridium Voice/Data and GPS

Part #: 100-00131-01

✓ Superior Iridium Voice/Data performance ✓ Iridium ground plane independent ✓ High performance helix Iridium antenna ✓ Rugged IP-67 housing ✓ Low profile with screw mount ✓ Superb low elevation performance ✓ Low weight

Key electrical specifications:

Parameter	Specification
Frequency	1621 MHz 1575.42 MHz 1602 MHz (Glonass)
Antenna element peak gain	1.6 dBic (typical) @ broadside 5.5 dBic 5.5 dBic
Axial Ratio	1.7 dB (typical) 1.5 dB (typical) / 2.5 dB (max) 1.5 dB (typical) / 2.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design
Dimensions	61 x 50 x 116 mm

M1621HCT-P-SMA

High Performance Iridium Passive Antenna

Part #: 100-00003-02

✓ Very low axial ratio ✓ IP-67 mounted ✓ Ultra light weight - 11 grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	2.8 dBic (Iridium)
Axial Ratio	0.2 dB (typical)/ 0.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design/ SMA male
Dimensions	48 mm (height) x 18.5 mm (diameter)

Discover

Our best- seller

M1621HCT-P-EXT, Iridium Certified Passive External Magnet Mount Antenna

M1621HCT-P-EXT

The M1621HCT-EXT is a high-performance Iridium certified passive external magnet mount antenna designed for wireless applications. The antenna is built on proprietary Maxtena Helicore® technology.
This technology provides exceptional pattern control, polarization purity and high efficiency in a very compact form factor.
The M1621HCT-EXT is an external magnet mount antenna, featuring a 1,500 mm LRM100 coaxial cable with integrated connector. The very small size and light weight make this helical Iridium antenna unique in the market and perfect for various commercial and industrial applications.
This antenna is the ideal solution for the most extreme and demanding applications where reliable satellite reception and high accuracy are required. It can be used to boost the performance of the Iridium handsets among other uses.

For the embedded version, Maxtena provides support for installation and integration of the embedded antenna to offer an exceptional antenna performance. Maxtena can embed the antenna in any housing, then tune the antenna to match their housing's materials, electronics, and space.

Features

- Optimized for the Iridium network
- Very low axial ratio
- TNC, SMA, SMB, MCX connector
- Ground plane independent
- Magnet mount
- Ultra-light weight - 52 grams

Suggested Applications include:

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- PDAs and laptops
- Oil & gas industries
- Navigation devices
- Law enforcement
- LBS & M2M applications
- Iridium (SBD) Short Burst Data

Iridium Antennas

M1621HCT-EXT1

Iridium Certified Passive External Magnet Mount Antenna

Part #: 100-00044-01

Optimized for the Iridium network Very low axial ratio TNC, SMA, SMB, MCX connector Ground plane independent Magnet mount Ultra-light weight - 52 grams

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	1 dBic (typical)
Axial Ratio	0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount /TNC, SMA, SMB, MCX connectors
Dimensions	52.20 mm (height) x 36 mm (diameter

M1610HCT-GN

GPS GLONASS Iridium Passive Antenna

Part #: 100-00149-01

Very low axial ratio IP-67 mounted and unmounted Ultra-light weight-45grams Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (Glonass) 1621 MHz (Iridium)
Antenna element peak gain	3.8 dBic (GPS) -1.7 dBic (Glonass) 2.0 dBic (Iridium)
Axial Ratio	0.2 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA male
Dimensions	135 mm (height) x 18.5 mm (diameter)

M1600HCT-P-SMA

High Performance Iridium/GPS/GLONASS Passive Antenna

Part #: 100-00050-01

Very low axial ratio IP-67 mounted and unmounted Ultra-light weigh- 11grams Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium) 1575 MHz (GPS) 1602 MHz (GLONASS)
Antenna element peak gain	2.8 dBic (Iridium) -3 dBic (GPS) 0 dBic (GLONASS
Axial Ratio	0.5 dB (typical) / 1 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	48 mm (height) x 18.5 mm (diameter)

M1600HCT-P-UFL

High Performance Iridium Passive Embedded Antenna

Part #: 100-00064-01

✓ Very low axial ratio ✓ Iridium bands ✓ Ultra light weight - 3 grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz (Iridium)
Antenna element peak gain	2.8 dBic (Iridium)
Axial Ratio	0.2 dB (typical) / 0.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	61 x 50 x 116 mm

M1610HCT-GN

GPS GLONASS Iridium Passive Antenna

Part #: 100-00149-01

✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra-light weight-45grams ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (Glonass) 1621 MHz (Iridium)
Antenna element peak gain	3.8 dBic (GPS) -1.7 dBic (Glonass) 2.0 dBic (Iridium)
Axial Ratio	0.2 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA male
Dimensions	135 mm (height) x 18.5 mm (diameter)

MEA-1621-SM

External Iridium Passive Antenna – Screw Mount

Part #: 189-00060-01

✓ Frequency coverage: 1616-1627 MHz ✓ Easy mounting: Screw Mount ✓ Optimized for Iridium network ✓ High Performance ✓ Ground Plane Independent ✓ Anti-Rotation Mechanism ✓ Customizable Cable and Connector ✓ ROHS Certified ✓ Small size: Dimensions 80 × 74 × 25.6 mm ✓ Rugged housing ✓ IP69 /IP67

Key electrical specifications:

Parameter	Specification
Frequency	1616-1627 MHz
Antenna element peak gain	4.5 dB
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	80 x 74 x 43 mm

Iridium Antennas

MEA-1621-GGG

External Iridium Passive Antenna – Screw Mount

Part #: 100-00098-01

Optimized for GPS/GLONASS/IRIDIUM/ Cellular networks Easy mounting 1m cable length RG-174, CFD-200 cables Rugged housing Customer specification connectors IPX7 waterproof housing

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz / 1602 MHz 824-960 MHz / 1710-2170 MHz 1621 MHz
Antenna element peak gain	2dBiTyp. @1575MHz / 2.5dBi Typ. @1602MHz -0.56~2.69dBi@824~960MHz 1.69~5.2dBi@1710~2170MHz 3.5dBic Min. @1621MHz
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	Diameter 145 x (H) 32.8 mm

MEA-1600-SM

External Iridium/GNSS Passive Antenna – Screw Mount

Part #: 189-00059-01

2in1 antenna: GPS/GLONASS/Galileo and Iridium High performance Low Profile Cable 1: GPS/GLONASS /Galileo - 1575-1606 MHz Cable 2: Iridium - 1616-1627 MHz Easy mounting: Screw Mount Iridium certified antenna Anti-Rotation Mounting Customizable Cable and Connector Low profile 80 × 74 × 25.6 mm IP69

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz / 1602 MHz
Antenna element peak gain	28 dB @ 2.7 V
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	80 × 74 × 25.6 mm

MEA-LGI-SMA

5GNR & Iridium GNSS Antenna – Screw Mount

Part #: 189-00065-01

3in1 antenna: 5GNR, Iridium and GNSS Ultra-Wide band antenna High performance Easy mounting: Screw Mount Anti-Rotation Mounting Optimized for Iridium network Ground Plane Independent Customizable Cable and Connector Low profile 80 × 74 × 25.6 mm IP69

Key electrical specifications:

Parameter	Specification	
Frequency	617-960 MHz 3300-5000 MHz 1616 - 1627 MHz	1427-2690 MHz 5150-5925 MHz 1559 - 1608 MHz
Antenna element peak gain	2.3 dBi 2.6 dBi 5.2 dBic	5.1 dBi 2.7dBi 28 dB @ 2.7 V
Polarization	Linear	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	80 × 74 × 25.6 mm

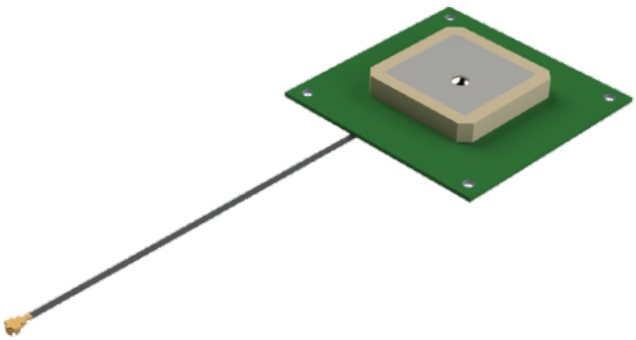
Discover

Our exclusive Iridium Passive Antenna

MPA-D254-1621

Our patch antenna offerings are perfect for projects with a smaller scope and budget for which high-performance and lower weight is not a primary factor for consideration for the antenna. They are ideal for less demanding applications where extreme performance and battery life can be sacrificed at the expense of device cost.

The antenna MPA-D254-1621 product designed for Iridium-based embedded applications, and is used in GPS handheld units, mobile devices, and tracking devices. It features higher upper hemisphere efficiency and a lower axial ratio as compared to regular patch antennas. The antenna comes standard with a 100 mm cable and U. FL connector, custom alternatives can be requested.



Features

- Iridium frequency band
- U. FL connector or other
- Compact size
- Custom tuning

Suggested Applications include:

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Iridium (SBD) Short Burst Data
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices

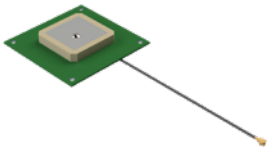
Iridium Antennas

MPA-D254-1621

Iridium Passive Antenna – 25mm

Part #: 100-00024-02

✓Iridium frequency band ✓U. FL connector or other ✓Compact size ✓Custom tuning



Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz
Antenna element peak gain	2.5 dBic
Axial Ratio	4 dB (typical)

Key mechanical specifications:

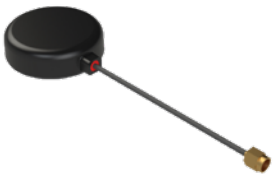
Parameter	Specification
Mounting option / Connector	U. FL connector
Dimensions	25 mm x 25 mm x 4 mm

MEA-1600-AM

IRIDIUM/GPS Magnetic/Adhesive Mount Antenna

Part #: 100-00237-01

✓Easy mounting: magnetic/adhesive mount ✓Low profile ✓Customizable cable and connector ✓IP67, IP69



Key electrical specifications:

Parameter	Specification	
Frequency	1575.42 MHz	1616-1627 MHz
Peak Gain	2.5 dBi	2.6 dBi
Radiation Pattern	Hemispherical	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic/Adhesive Mount/ SMA Male
Dimensions	Ø 54 x 14.7 mm

MEA-1621-MT-MA

Iridium High Performance Screw Mount Antenna

Part #: 100-00227-01

✓Optimized for Iridium Network ✓High Performance ✓High efficiency & 4.5 dBic Iridium Peak Gain ✓Easy Mounting: Screw Mount ✓Ground Plane Independent ✓Rugged design ✓Customizable Cable and Connector ✓IP67

Key electrical specifications:

Parameter	Specification
Frequency	1616-1627 MHz
Peak Gain	4.5 dBi
Radiation Pattern	Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ SMA Male
Dimensions	Ø 74 x 34.7 mm

MEA-1621-MT-SM

Iridium High Performance Screw Mount Antenna

Part #: 100-00226-01

✓ Optimized for Iridium Network ✓ High Performance ✓ Easy Mounting: Screw Mount ✓ Ground Plane Independent ✓ Rugged design ✓ Customizable Cable and Connector ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	1616-1627 MHz
Peak Gain	4.5 dBi
Radiation Pattern	Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ TNC Female Bulkhead
Dimensions	116 x 110 x 74 mm

MEA-1621-PM-TNC

Iridium High Performance Marine Pole Mount Antenna

Part #: 100-00225-01

✓ Optimized for Iridium Network ✓ High Performance ✓ High efficiency & 4.5 dBic Iridium Peak Gain ✓ Easy Mounting: Pole Mount ✓ Ground Plane Independent ✓ Rugged design ✓ Integrated TNC Female ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	1616-1627 MHz
Peak Gain	4.5 dBi
Radiation Pattern	Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pole Mount/TNC Female
Dimensions	Ø 74 x 116 mm

MEA-1600-EXP

GNSS AND Iridium adhesive Mount

Part #: 189-00026-01

✓ Optimized for GPS/GLONASS/IRIDIUM networks ✓ Adhesive Mount ✓ High Gain & Efficiency ✓ Low profile ✓ High Performance ✓ Customizable Cable and Connector

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	1575.42 MHz / 1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
Cable2	Frequency	1616-1627 MHz
	Peak Gain	4.5 dBic
	Radiation Pattern	Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount/ SMA Male
Dimensions	80 x 76 x 16 mm

MEA-1621-CM

Iridium connector Mount antenna

Part #: 100-00266-01

Optimized for Iridium Network · High Performance · Connector Mount · Hinged Connector · Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1616-1627 MHz
Peak Gain	2.5 dBi
Radiation Pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	135 × 19 × 10 mm

Microstrip Patch Antennas

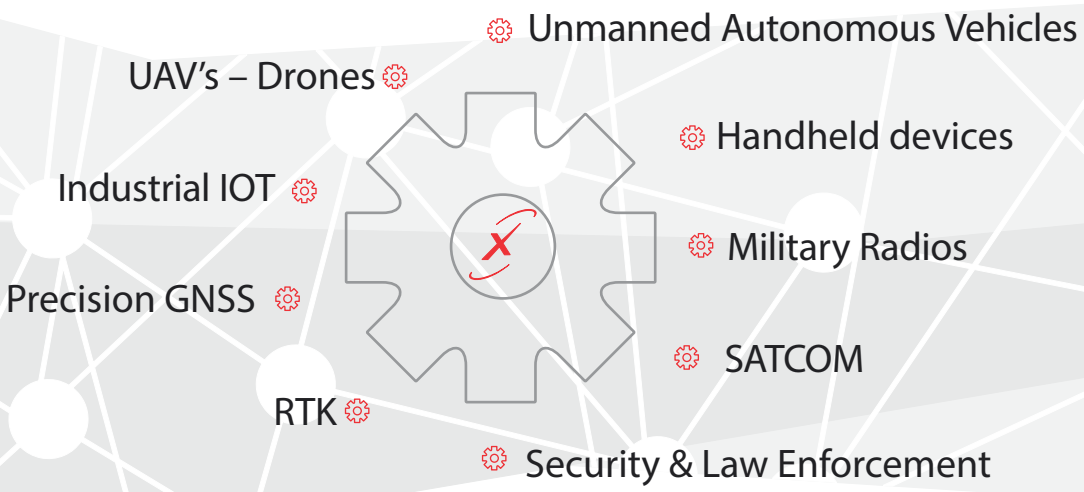
MAXTENA

Microstrip Patch Antennas

We offer a large portfolio of both active and passive advanced conformal wave microstrip antennas. The antennas are available in several different sizes and configurations depending on customer requirements. This included externally mounted and or embedded antenna solutions.

The active antennas can be customized with different filtering, LNA, cable lengths and connectors upon request. All of our microstrip antennas offer high performance with a very low profile. The antennas are ideal for various professional IOT applications. The compact size and lightweight features of the microstrip antennas make them perfect for various commercial and industrial uses. By utilizing various RF and material advances, Maxtena is the leader in conformal antenna solutions used for IOT, Automotive and Autonomous applications.

Applications



Explore

Our best seller

L1 PASSIVE GPS MICROSTRIP ANTENNA

MPA-254

The MPA-254 is a 25 mm ceramic GPS passive patch antenna based on Maxtena technology.
Our patch antenna offerings are perfect for projects with a smaller scope and budget for which high-performance and lower weight is not a primary factor for consideration for the antenna. This antenna is designed for embedded applications such as GPS handheld units, mobile devices, and tracking devices. It features higher upper hemisphere efficiency and a lower axial ratio as compared to regular patch antennas.
The MPA-254 ceramic patch antenna is a low profile (25x25x4mm), designed for combined GPS applications. The MPA-254 is designed to provide excellent performance in the 1575.42 range frequency.
This 25 mm square embedded ceramic patch offers a typical peak gain of 5.5 dBi for frequency covered. The interface connector is mounted through pin solution, and double-sided adhesive.
Maxtena offers custom tuning service based on customer request depending on the customer device and ground plane mounting.

Features

- GPS L1 frequency
- Adhesive mounting
- Pin-Connector
- Compact size
- Custom tuning 25 mm x
- 25 mm x 4 mm
- Realized gain: 5.5 dBic

Suggested Applications include:

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Iridium (SBD) Short Burst Data
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices

MPA-104-C

GPS Passive Antenna – 10mm

Part #: 189-00080-01

GPS L1 frequency Adhesive mounting Pin connector Compact size Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1583-1597 MHz
Gain at Zenith	-3.5 dBic typ.
Axial Ratio	1.5 dB (typical) / 2.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	10 mm x 10 mm x 4.76 mm

MPA-124-C

GPS Passive Antenna – 12mm

Part #: 189-00079-01

GPS L1 frequency Adhesive mounting Pin connector Compact size Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Gain at Zenith	-3.0 dBic typ
Axial Ratio	1.5 dB (typical) / 2.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	12 mm x 12 mm x 4.2 mm

MPA-134-GPS

GPS Passive Antenna – 12mm

Part #: 189-00056-01

GLONASS frequency Easy mounting Pin-Connector Compact size Advanced Ceramic Material Ground Plane Dependent Dimensions 13 x 13 x 4 mm

Key electrical specifications:

Parameter	Specification
Frequency	1595 - 1610 MHz
Gain at Zenith	-1.5 dBic typ.
Axial Ratio	5 dBi

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	13mm x 13mm x 4mm

GNSS Passive Patch

MPA-152-C

GPS Passive Antenna – 15mm x 2mm

Part #: 100-00084-01

GPS L1 frequency Adhesive mounting Pin connector Compact size Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Gain at Zenith	-2.0 dBic typ.
Axial Ratio	3 dB typ.

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	15 mm x 15 mm x 2.2 mm

MPA-154-C

GPS Passive Antenna – 15mm

Part #: 189-00081-01

GPS L1 frequency Adhesive mounting Pin connector Compact size Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Gain at Zenith	-1.0 dBic typ
Axial Ratio	3 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	15 mm x 15 mm x 4.2 mm

MPA-182-C

GPS Passive Antenna – 18mm x 2mm

Part #: 100-00085-01

GPS L1 frequency Adhesive mounting Pin connector Compact size Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1595 - 1610 MHz
Gain at Zenith	-1.5 dBic typ.
Axial Ratio	5 dBi

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	25 mm x 25 mm x 2.2 mm

GNSS Passive Patch

MPA-184-C

GPS Passive Antenna – 18mm

Part #: 189-00082-01

GPS L1 frequency Adhesive mounting Pin connector Compact size Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1573 - 1585 MHz
Gain at Zenith	+2.5 dBic typ
Axial Ratio	3 dB typ.

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	18 mm x 18 mm x 4.26 mm

MPA-252

GPS Passive Patch Antenna – 25mm x 2mm

Part #: 189-00004-01

GPS L1 frequency Adhesive mounting Pin connector Compact size Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Realized gain	4 dBic
Axial Ratio	1.5 dB (typical) / 2.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	25 mm x 25 mm x 2 mm

MPA-254

GPS Passive Antenna – 25mm

Part #: 189-00003-01

GPS L1 frequency Adhesive mounting Pin connector Compact size Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Gain at Zenith	5.5 dBic
Axial Ratio	1.5 dB (typical) / 2.5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	25 mm x 25 mm x 4 mm

GNSS Passive Patch

MPA-258-L1-L5

L1 L5 GPS Embedded Antenna – 25mm

Part #: 189-00057-01

GPS L1 L5 frequency · Dual stacked patch · Thru-Hole Mount · Compact size · Ceramic Material · Advanced Ceramic Materials · High Performance

Key electrical specifications:

Parameter	Specification
Frequency	(L1) 1575.42 ± 1.023 MHz (L5) 1176.45 ± 12 MHz
Gain at Zenith	1.8 dB i typ. 0.5 dB i typ.
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Thru-Hole Mount
Dimensions	25 mm x 25 mm x 8 mm

MPA-356-1516

Passive GPS GLONASS Beidou Antenna – 35mm x 6mm

Part #: 189-00049-01

GPS, GLONASS, Beidou frequency · Adhesive mounting · Pin connector · Compact size · Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	GPS: 1575.42 MHz ± 1.023 MHz GLONASS: 1602 MHz ± 5 MHz Beidou: 1561.098 MHz ± 2.046 MHz
Realized gain	GPS: +3.7 dBi typ. GLONASS: +4.9 dBi typ. Beidou: +5.2 dBi typ.
Polarization	RHCP

Key mechanical specifications:

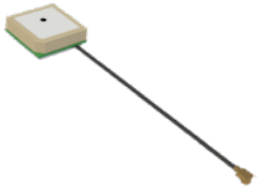
Parameter	Specification
Mounting option / Connector	Pin connector
18 mm x 18 mm x 4 mm	35 mm x 35 mm x 6 mm

MPA-406-1227

Passive GPS L2 Antenna – 40.5mm x 6.5mm

Part #: 189-00047-01

GPS L2 frequency · Adhesive mounting · Pin connector · Compact size · Custom tuning



Key electrical specifications:

Parameter	Specification
Frequency	1227.6 ± 10 MHz
Gain at Zenith	-3.8 dBi typ
Axial Ratio	3 typ.

Key mechanical specifications:

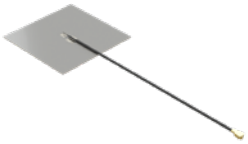
Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	40.5mm x 40.5mm x 6.5mm

MEA-1176-AM

GNSS – L1/L2/L5/L6 Adhesive mount antenna

Part #: 100-00199-01

Low profile: 45.4 × 45.4 × 0.2 mm Easy mounting: Self-Adhesive Multi-Band-Constellation Flexible Material High Performance Customizable Cable and Connector



Key electrical specifications:

Parameter	Specification
Frequency	1561.09, 1575.42, 1602 MHz (L1) 1227.6, 1246 MHz (L2) 1176.45, 1207.14 MHz (L5) 1268.52, 1278.75 MHz (L6)
Antenna element peak gain	4.9 dBic (L1) 3.1 dBic (L2) 3.2 dBic (L5) 2.9 dBic (L6)
Radiation pattern	Hemispherical

Key mechanical specifications:

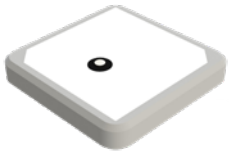
Parameter	Specification
Mounting option / Connector	Adhesive /U.FL Standard (Other Connectors Available)
Dimensions	45.4 × 45.4 × 0.2 mm

MPA-356-1575

GPS MICROSTRIP ANTENNA

Part #: 189-00049-02

Adhesive mounting Pin connector Compact size Custom tuning



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz ± 1.023 MHz
Gain at Zenith	+3.7 dBi typ.
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector/ Adhesive mount
Dimensions	35 x 35 x 6mm

MIA-GPS-10-C

GPS Active Antenna – 10mm

Part #: 189-00072-01

GPS L1 frequency · Active LNA circuitry · Compact size · Custom tuning · Custom connector / cable size

Key electrical specifications:

Parameter	Specification
Frequency	1.575GHz 1575.42 MHz
Gain at Zenith	-3 dBic (typ.)
Axial Ratio	≤ 4.0dB

Key mechanical specifications:

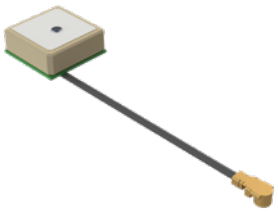
Parameter	Specification
Mounting option / Connector	I-PEX
Dimensions	10 mm x 10 mm x 5.9 mm

MIA-GPS-12-C

GPS Active Antenna – 12mm

Part #: 189-00073-01

GPS L1 frequency · Active LNA circuitry · Compact size · Custom tuning · Custom connector / cable size



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Gain at Zenith	-4.5 dBic typ.
Axial Ratio	≤4.0dB

Key mechanical specifications:

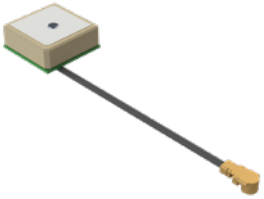
Parameter	Specification
Mounting option / Connector	I-PEX
Dimensions	12 mm x 12 mm x 6 mm

MIA-GPS-12-HC

High Current GPS Active Antenna – 12mm

Part #: 189-00039-01

GPS L1 frequency · Active LNA circuitry · Compact size · Custom tuning · Custom connector / cable size



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Gain at Zenith	-4.5 dBic typ.
Axial Ratio	≤4.0dB

Key mechanical specifications:

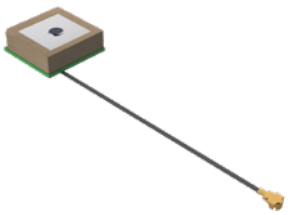
Parameter	Specification
Mounting option / Connector	I-PEX
Dimensions	12 mm x 12 mm x 4 mm

MIA-GPS-15-C

GPS Active Antenna – 15mm

Part #: 189-00070-01

GPS L1 frequency Active LNA circuitry Compact size Custom tuning Custom connector/Cable size Excellent out-of-band signal rejection Ideal antenna solution for RTK systems



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Gain at Zenith	5dBic
Axial Ratio	≤ 5dB

Key mechanical specifications:

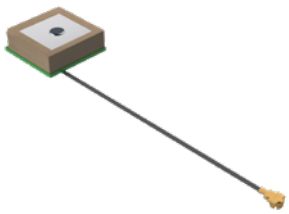
Parameter	Specification
Mounting option / Connector	I-PEX
Dimensions	15x15x4 mm

MIA-GPS-15-HC

GPS Active Antenna – 15mm

Part #: 189-00040-01

GPS L1 frequency Active LNA circuitry Compact size Custom tuning Custom connector/Cable size



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz ± 10 MHz (L1)
Gain (LNA)	26 dB
Axial Ratio	1.5 dB (typical) / 2.5 dB (max)

Key mechanical specifications:

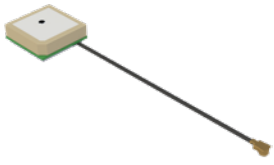
Parameter	Specification
Mounting option / Connector	U.FL connector
Dimensions	16.38 mm x 16.38 mm x 4.89 mm

MIA-GPS-18-C

GPS Active Antenna – 18mm

Part #: 189-00074-01

GPS L1 frequency Active LNA circuitry Compact size Custom tuning Custom connector/Cable size



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Gain	0 dBic typ. @ zenith ≥23dB, 25dB (typ.)
Axial Ratio	≤4 dB

Key mechanical specifications:

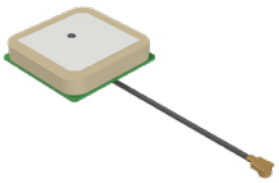
Parameter	Specification
Mounting option / Connector	I- PEX (F)
Dimensions	18mm x 18mm x 6.5 mm

MIA-GPS-25-C

GPS Active Antenna – 25mm

Part #: 189-00075-01

GPS L1 frequency · Active LNA circuitry · Compact size · Custom tuning · Custom connector/Cable size



Key electrical specifications:

Parameter	Specification	
Frequency	1575.42 MHz	
Antenna element peak gain	+ 5.0 dBic @ Zenith	30±3dB
Axial Ratio	≤ 3.0dB	

Key mechanical specifications:

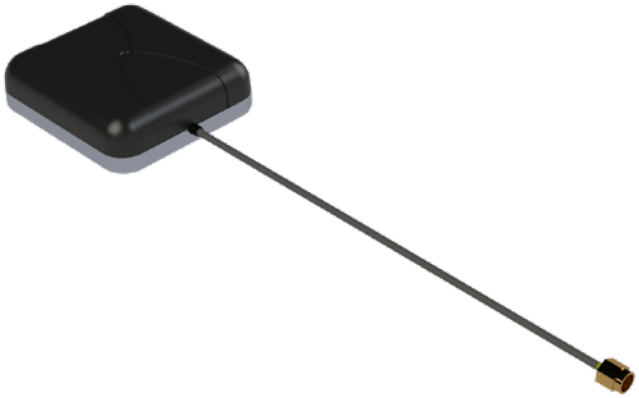
Parameter	Specification
Mounting option / Connector	I-PEX
Dimensions	25.1 mm x 25.1 mm x 7.4 mm

Discover

M9708CWT, our new

L1 L2 L5 Multi-Frequency Active Antenna

M9708CWT



Maxtena Releases the M9708CWT a Rugged Low Prole Multi-Frequency GNSS Antenna for SATCOM Applications.

The new active conformal wave antenna is unrivaled in performance and capabilities, able to operate across the L1/L2 GPS, GLONASS, Galileo and Beidou bands with superior precision.

The M9708CWT antenna is designed using Maxtena's proprietary Optimized Microstrip Technology, a technology that uses an electromagnetically co-optimized antenna and ground plane combination to enhance the performance of an antenna system.

The M9708CWT antenna is a high accuracy, multi-frequency active conformal wave GNSS antenna. The revolutionary design features concurrent GNSS reception on L1: GPS, GLONASS, Galileo, Beidou and L2: GPS L2C, Galileo E5B, GLONASS L3OC, and L2 OF in a rugged, compact, and ultra-lightweight form factor. The antenna is a perfect match for GNSS applications where size, performance, and cost drive antenna selection.The M9706CWT is built on Maxtena' s proprietary Optimized Microstrip Technology, which features 40% better efficiency and 3 dB improved axial ratio purity compared to competitor patch technology. Maxtena's M9708CWT has unique features that make it the best option for high-accuracy GNSS applications. It oers a low axial ratio not only at the zenith, but also in other elevation angles ensuring multipath error is mitigated. With the M9708 CWT full hemispherical coverage is achieved by an exceptionally large 3 dB beamwidth, ensuring the full view of sky and satellites at lower elevation angles.

Maxtena's CEO Stani Licul said, *"Maxtena has developed a very exible platform that can address many existing challenges in the GNSS market segment. Our M9708CWT uses advanced materials to achieve maximum bandwidth and RF with super low group delay characteristics. The advanced materials used can be conformal to dierent surfaces thus providing a very attractive solution for the automotive, IOT and autonomous markets. The M9708CWT provides the most optimal balance in terms of efficiency, size, and power."*

The M9708CWT will be available either as an o-the-shelf antenna housed in rugged automotive grade PCB plastic with automatic grade electronics or as an embedded antenna option which is mounted on the inside of a customer's designed enclosure.

Features

- Low profile design
- Rugged IP67 rating
- Small form factor
- GIS, RTK and other high accuracy GNSS applications
- Minimal phase center variation over azimuth and elevation
- Negligible group delay variation
- Automotive grade housing

Suggested Applications include

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Oil & gas industries
- Mining equipment
- LBS & M2M applications

Multi-Frequency Active Microstrip Antenna

External

MEA-1227-SM

GNSS/L1L2 Screw Mount

Part #: 189-00062-01

Pre-Filter Low Noise Figure Low Power Consumption Customizable Cable and Connector Dimension 80 x 74 x 25.6 mm Anti-Rotation Mechanism IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	1227.6 MHz (L2) 1561-1606 MHz (L1)
Antenna element peak gain	3.4 dBi (L2) 5.3 dBi (L1)
Axial Ratio	≤ 3dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount /SMA Male
Dimensions	80 x 74 x 25.6 mm

MEA-1227-MM

GNSS/L1L2 Magnet Mount

Part #: 100-00202-01

Superb out of band rejection Outstanding filtering High Precision Easy mounting: Magnetic Mount Low Profile - Ø 54 × 21.5 mm Ground Plane Independent Customizable Cable and Connector IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	1227.6 MHz (L2) 1561-1606 MHz (L1)
Antenna element peak gain	4.9 dBi (L2) 4.4 dBi (L1)
Axial Ratio	≤ 3dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount /SMA Male
Dimensions	Ø 54 × 21.5 mm

M1559CWT

L1 GPS GLONASS Active Multi-Frequency Antenna – External

Part #: 100-00118-01

Concurrent GNSS reception on L1: GPS, GLONASS, Galileo, Beidou Low profile design Rugged IP67 rating Small form factor Low power consumption Minimal phase center variation over azimuth and elevation Negligible group delay variation Automotive grade

Key electrical specifications:

Parameter	Specification
Frequency	1559-1610 MHz (L1, E1, B1, B1-2, G1)
Realized gain	3.3 dB
Axial Ratio	Max 2.7 dB at the Zenith

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA, SMB, MCX (customer choice)
Dimensions	75mm x 70mm x 23 mm

Multi-Frequency Active Microstrip Antenna

External

M9706CWT

L1/L2 GPS GLONASS Active Multi-Frequency Antenna – External

Part #: 100-00090-01

✓Low profile design ✓ Concurrent GNSS reception on L1: GPS , GLONASS, Galileo, Beidou and L2: GPS L2C, Galileo E5B, and GLONASS L3OC ✓ Rugged IP67 rating ✓Small form factor ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Minimal phase center variation over azimuth and elevation ✓ Negligible group delay variation ✓Automotive grade housing

Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1)
Realized gain	2.6 dB 3.3 dB
Axial Ratio	Max 1.5 dB at the Zenith Max 2.7 dB at the Zenith

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA, SMB or MCX (customer's choice)
Dimensions	75mm x 70mm x 23 mm

M9708CWT

L1/L2/L5 GPS GLONASS Active Multi-Frequency Antenna – External

Part #: 100-00138-01

✓Low profile design ✓ Concurrent GNSS reception on L1: GPS , GLONASS, Galileo, Beidou and L2: GPS L2C, Galileo E5B, and GLONASS L3OC ✓ Rugged IP67 rating ✓Small form factor ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Minimal phase center variation over azimuth and elevation ✓ Negligible group delay variation ✓Automotive grade housing

Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1) 1164-1189 MHz (L5, E5A)
Realized gain	2.6 dB 3.3 dB -2dB
Axial Ratio	Max 1.5 dB at the Zenith Max 2.7 dB at the Zenith Max 3 dB at the Zenith

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA, SMB or MCX connector
Dimensions	75mm x 70mm x 23 mm

M1593CWT

L1/L2/L5 GPS GLONASS + L-Band- Active Multi-Frequency Antenna – External

Part #: 100-00191-01

✓ Small form factor ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low Power Consumption ✓ Minimal phase center variation over azimuth and elevation ✓ Negligible group delay variation ✓ Automotive grade housing

Key electrical specifications:

Parameter	Specification
Frequency	197-1249 MHz 1559-1606 MHz 1539 - 1559 MHz
Realized gain	2.6 dB @1197-1249 MHz 3.3 dB @1559-1606 MHz 1.5 dB @1539 - 1559 MHz
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic base, fixed installation option/ SMA, SMB, MCX
Dimensions	75mm x 70mm x 23 mm

Multi-Frequency Active Microstrip Antenna

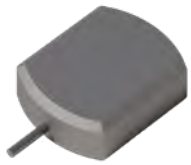
External

MEA-GPS-GG

GPS GLONASS Active External Antenna

Part #: 189-00015-01

GPS/GLONASS coverage Active LNA circuitry Waterproof housing Compact size Custom tuning



Key electrical specifications:

Parameter	Specification
Frequency	1590 MHz
Total system peak gain	30 dB @ 2.5 V / 32 dB @ 5 V
Axial Ratio	1 dB (min)

Key mechanical specifications:

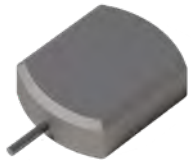
Parameter	Specification
Mounting option / Connector	SMA, TNC or other
Dimensions	48 mm x 39 mm x 14 mm

MEA-GPS-S

GPS Active External Antenna

Part #: 189-00016-01

GPS L1 frequency Active LNA circuitry Waterproof housing Compact size Custom tuning



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Total system peak gain	28 dB @ 2.5 V / 30 dB @ 5 V
Axial Ratio	2.5 dB (min)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA, TNC or other
Dimensions	48 mm x 39 mm x 14 mm

MEA-GPS-SM

GPS Active External Antenna

Part #: 189-00017-01

GPS L1 frequency Active LNA circuitry Waterproof housing Compact size Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz
Total system peak gain	26 dB @ 2.5 V / 28 dB @ 5 V
Axial Ratio	2 dB (min)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA, TNC or other
Dimensions	Ø 46.5 x 29.93 mm

Multi-Frequency Active Microstrip Antenna

External

MEA-5IG-MA

5GNR, Iridium and GNSS Magnetic/Adhesive Mount

Part #: 100-00206-01

Easy mounting: Magnetic/Adhesive Mount Iridium Certified Low Profile High Performance Pre-Filtered GNSS Ground Plane Independent Customizable Cable and Connector Dimensions 89 × 76 × 27/30 mm IP67, IP69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
	Antenna element peak	2.3 dBi / 5.1 dBi / 2.6 dBi / 2.7 dBi
Cable2	Frequency	1616-1627 MHz
	Antenna element peak	5.2 dBi
Cable3	Frequency	1575.42 MHz /1602 MHz
	Antenna element peak	28 dB @ 2.7 / 28 dB @ 2.7
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic/Adhesive Mount/ SMA Male
Dimensions	89 × 76 × 27/30 mm

MEA-LWIG-SM

5GNR, 2.4/5.0/6.0 GHz ISM, Iridium & GNSS Antenna – Screw Mount

Part #:100-00164-01

4in1 antenna (5GNR, 2.4/5.0/6.0 GHz ISM, Iridium and GPS/GLONASS/QZSS/Galileo) Screw Mount Anti-Rotation Mechanism Customizable Cable and Connector Dimensions Ø 146 x 31.5 mm IK09, IP67, IP69K

Key electrical specifications:

	Parameter	Specification
Cable 1.	Frequency	617-960 MHz / 1427-2690 MHz 3300-5000 MHz / 5150-5925 MHz
	Peak gain	-1.7 dBi/-1.7 dBi /-1.3 dBi/ 0.6 dBi
	Efficiency	19.7% / 17.5% / 13.3% / 15.9 %
	VSWR	3.3:1/ 2.3:1 / 2.1:1 / 1.7:1
Cable 2.	Frequency	2410-2490 MHz / 4920-5925 MHz / 5925-7125 MHz
	Peak gain	1.2 dBi / 0.0 dBi / 5.2 dBi
	Efficiency	30.5% / 13.8% / 52.1%
	VSWR	1.4:1 / 1.6:1 / 2.5:1
Cable 3.	Frequency	1616-1627 MHz
	Peak gain	4.5 dBic
	Efficiency	76%
	VSWR	1.2:1
Cable 4.	Frequency	1575.42 MHz /1598-1606 MHz
	Active gain	28 dB @ 2.7 V
	Noise figure	1.8 dB @ 2.7 V
	Power consumption	24.3 mW@2.7 V

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 146 x 31.5 mm

Multi-Frequency Active Microstrip Antenna

External

MEA-GGB-CM

GNSS Connector Mount Antenna

Part #: 100-00245-01

✓ GPS/GLONASS/BeiDou/QZSS/Galileo frequency coverage ✓ Easy mounting ✓ Connector mount low profile ✓ High efficiency

Key electrical specifications:

Parameter	Specification
Frequency	1561.098 MHz 1575.42 MHz 1598-1606 MHz
Peak Gain	2.9 dBi @1561.098 MHz 2.8 dBi @1575.42 MHz 2.9 dBi @1598-1606 MHz
Radiation Pattern	Omin-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA
Dimensions	Ø 10 x 71 mm

MEA-169-ISM-GG

169 MHZ ISM-ERMES & GPS/GLONASS Screw Mount

Part #: 100-00242-01

✓Easy mounting: Magnetic/Adhesive Mount ✓Iridium Certified ✓Low Profile ✓High Performance ✓Pre-Filtered GNSS ✓Ground Plane Independent ✓Customizable Cable and Connector ✓ Dimensions 89 × 76 × 27/30 mm ✓ IP67, IP69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	169.4-169.8 MHz
	Antenna element peak	0 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
	Active Gain	26 dB @ 3 V / 27 dB @ 5 V
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 60 x 97 mm

MEA-1600-AM

Iridium/GPS Magnetic/Adhesive Mount Antenna

Part #: 100-00237-01

✓GPS/QZSS/Galileo and Iridium ✓Magnetic/Adhesive Mount ✓Low profile ✓Customizable Cable and Connector ✓Low profile ✓IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz/ 1616-1627 MHz
Peak Gain	2.5 dBi / 2.6 dBi
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic/Adhesive Mount
Dimensions	Ø 54 x 14.7 mm

Multi-Frequency Active Microstrip Antenna

External

MEA-LGI-SM

CELLULAR/LTE, ISM and GNSS Screw Mount

Part #: 189-00058-01

✓Ultra-Wide Band Antenna ✓High Performance ✓ Screw Mount ✓Anti-Rotation Mounting ✓Ground plane independent ✓Customizable ✓Cable and Connector ✓Low profile 80 × 74 × 25.6 mm ✓IP69,IP67

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz / 1710-2170 MHz 2500-2700 MHz
	Peak Gain	2.7 dBi / 5.1 dBi / 5.3 dBi
Cable2	Frequency	2410-2490 MHz / 4920-5925 MHz
	Peak Gain	3.4 dBi / 3.2 dBi
Cable3	Frequency	1575.42 MHz /1602 MHz
	Active Gain	28 dB @ 2.7 / 28 dB @ 2.7
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ SMA Male
Dimensions	89 × 76 × 25.6 mm

MEA-1600-EXP

GNSS AND Iridium adhesive Mount

Part #: 189-00026-01

✓Optimized for GPS/GLONASS/IRIDIUM networks ✓ Adhesive Mount ✓High Gain & Efficiency ✓ Low profile ✓High Performance ✓Customizable Cable and Connector

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	1575.42 MHz / 1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
Cable2	Frequency	1616-1627 MHz
	Peak Gain	4.5 dBic
Radiation Pattern		Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount/ SMA Male
Dimensions	80 x 76 x 16 mm

MEA-LTE-GNSS-UHF

CELLULAR/LTE, , TETRA/UHF and GNSS Screw Mount

Part #: 100-00248-01

✓Easy mounting: Screw Mount ✓Anti-Rotation Mechanism ✓Heavy Duty antenna ✓ High Gain ✓Customizable Cable and Connector ✓IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Peak Gain	1.9 dBi 3.0 dBi 2.9 dBi
Cable2	Frequency	380 - 470 MHz
	Peak Gain	2.1dBi
Cable3	Frequency	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 96 x 130 mm

Multi-Frequency Active Microstrip Antenna

External

MEA-5GGG-SM

5GNR and GPS/GLONASS Screw Mount

Part #: 100-00204-01

✓5GNR & GPS/GLONASS/QZSS/Galileofrequency coverage ✓Easy Mounting: Screw Mount ✓Anti-Rotation Mechanism ✓Low Profile ✓Ground Plane Independent ✓Customizable Cable and Connector ✓Dimensions 80 × 74 × 25.6 mm ✓IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz 1575.42 MHz 1602 MHz
Antenna element peak gain	2.3 dBi@698-960 MHz 2.6 dBi @3300-5000 MHz 28dB @ 2.7 V @1575.42 MHz 5.1 dBi@1427-2690 MHz 2.7 dBi @5150-5925 MHz 28dB @ 2.7 V @1602 MHz
Radiation pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount /SMA-Male
Dimensions	80 × 74 × 25.6 mm

MEA-5in1-SMA

5GNR MIMO, 2.4/5.0/6.0 GHZ ISM and GNSS - Screw mount antenna

Part #: 100-00243-01

✓5GNR,2.4/5.0/6.0 GHz ISM & GPS/GLONASS/QZSS/Galileo frequency coverage ✓Easy mounting: screw mount ✓Heavy duty antenna ✓High performance ✓Ground plane independent ✓Anti-rotation mounting ✓Customizable cable and connector ✓IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.8 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.6 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

Multi-Frequency Active Microstrip Antenna

External

MEA-5G-MIMO-GGG

5GNR, MIMO and GNSS GPS/GLONASS Screw Mount

Part #: 100-00250-01

Easy mounting: Screw Mount Heavy Duty antenna High Performance Ground Plane Independent Anti-Rotation Mounting Customizable Cable and Connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
	Peak Gain	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
	Peak Gain	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	1575.42 MHz /1598-1610 MHz
	Active Gain	23 dB @ 3V / 24 dB @ 5V
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	*Specification*
Mounting option / Connector	Screw Mount/ SMA Male
Dimensions	Ø 96 X 130 mm

MEA-868-IGG

868 MHZ ISM/GPS/GLONASS Screw Mount

Part #: 100-00251-01

Easy mounting: Screw Mount Anti-Rotation Mechanism Low Profile High Gain Customizable Cable and Connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	**Specification**
Cable1	Frequency	863-870 MHz
	Peak Gain	3.2 dBi
	Polarization	Linear
Cable2	Frequency Range	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
	Polarization	RHCP

Key mechanical specifications:

Parameter	**Specification**
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 77.3 x 15 mm

MEA-TETRA-UHF-GNSS

TETRA/UHF and GNSS Screw Mount

Part #: 100-00247-01

Easy mounting: Screw Mount Anti-Rotation Mechanism Heavy Duty antenna High Gain Customizable Cable and Connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	**Specification**
Cable1	Frequency	380-470 MHz
	Peak Gain	2.5 dBi
	Polarization	Linear
Cable2	Frequency Range	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
	Radiation Pattern	Hemispherical

Key mechanical specifications:

Parameter	**Specification**
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 96 x 130 mm

Multi-Frequency Active Microstrip Antenna

External

MEA-5GGG-SM

5GNR and GPS/GLONASS Screw Mount

Part #: 100-00204-01

5GNR & GPS/GLONASS/QZSS/Galileo frequency coverage Easy Mounting: Screw Mount Anti-Rotation Mechanism Low Profile Ground Plane Independent Customizable Cable and Connector Dimensions 80 × 74 × 25.6 mm IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz 1575.42 MHz 1602 MHz
Antenna element peak gain	2.3 dBi@698-960 MHz 5.1 dBi@1427-2690 MHz 2.6 dBi @3300-5000 MHz 2.7 dBi @5150-5925 MHz 28dB @ 2.7 V @1575.42 MHz 28dB @ 2.7 V @1602 MHz
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

MEA-433-IGG

433 MHz ISM/GPS/GLONASS Screw Mount

Part #: 100-00239-01

ISM and GPS/GLONASS Easy mounting: Screw Mount Customizable Cable and Connector IP67, IP69K Low weight 166g

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	433-435 MHz
Cable1	Antenna element peak	-0.4 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
Cable2	Active Gain	26 @ 3V / 27dB @ 5V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 63 x 186.5 mm

MEA-5G-1575-1606

5GNR GPS/GLONASS Screw Mount

Part #: 100-00238-01

5GNR & GPS/GLONASS/QZSS/Galileo Easy mounting: screw mount Ground plane independent Customizable cable and connector IP67 & IP69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
Cable1	Antenna element peak	2.9 dBi / 2.1 dBi/ 0.5 dBi /1.0 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
Cable2	Active Gain	28 dB @ 2.7 V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 54 x 50 mm

Multi-Frequency Active Microstrip Antenna

External

MEA-GNSS-CM-FAKRA

GNSS Connector Mount Antenna

Part #: 100-00241-01

GPS/GLONASS/BeiDou/QZSS/Galileo Connector Mount Low profile High efficiency Hinged Connector Fakra-C-Blue connector Weight 99g

Key electrical specifications:

Parameter	Specification
Frequency	1561.098 MHz / 1575.42 MHz 1598-1606 MHz
Peak Gain	3.5 dBi / 3.3 dBi / 3.9 dBi
Radiation Pattern	Omin-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	81 x 14 x 10 mm

MEA-5GGG-SMA-SM

5GNR and GPS/GLONASS Screw Mount

Part #: 100-00244-01

5GNR, GPS/GLONASS High performance Customizable cable and connector IP67, IP69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.1 dBi / 3.6 dBi /1.9 dBi /1.2 dBi
Cable2	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	26dB@3V; 27dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount
Dimensions	Ø 60 x 81 mm

Multi-Frequency Active Microstrip Antenna

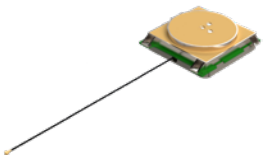
Embedded

M9706CWT-UFL

L1/L2 GPS GLONASS Active Multi-Frequency Antenna – Embedded

Part #: 108-00060-02

✓ Concurrent GNSS reception on L1: GPS, GLONASS, Galileo, Beidou and ✓ L2: GPS L2C, Galileo E5B, GLONASS L30C, and L2 OF ✓ Low profile design ✓ Conformal materials ✓ Full active design with superb filtering ✓ Small form factor ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Minimal phase center variation over azimuth and elevation ✓ Negligible group delay variation



Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1)
Realized gain	2.6 dB 3.3 dB
Axial Ratio	Max 1.5 dB at the Zenith Max 2.7 dB at the Zenith

Key mechanical specifications:

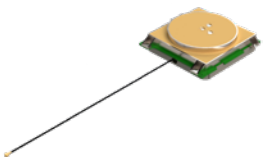
Parameter	Specification
Mounting option / Connector	Embedded/ U.FL connector
Dimensions	65mm x 65mm x 17 mm

M9708CWT-UFL

L1/L2/L5 GPS GLONASS Active Multi-Frequency Antenna – Embedded

Part #: 108-00067-01

✓ Low profile design ✓ Concurrent GNSS reception on L1: GPS GLONASS, Galileo, Beidou and L2: GPS L2C, Galileo E5B, and GLONASS L3OC ✓ Small form factor ✓ GIS, RTK and other high accuracy GNSS Applications ✓ Low power consumption ✓ Minimal phase center variation over azimuth and elevation ✓ Negligible group delay variation ✓ Custom tuned to applications enclosure



Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1) 1164-1189 MHz (L5, E5A)
Realized gain	2.6 dB 3.3 dB -2dB
Axial Ratio	Max 1.5 dB at the Zenith Max 2.7 dB at the Zenith Max 3 dB at the Zenith

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded/ U.FL connector
Dimensions	65mm x 65mm x 17 mm

Multi-Frequency Active Microstrip Antenna

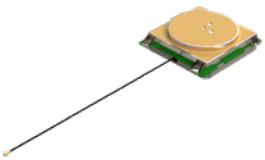
Embedded

M1593CWT-UFL

L1/L2/L5 GPS GLONASS + L-Band- Active Multi-Frequency Antenna – Embedded

Part #: 108-00083-01

✓ Small form factor ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low Power Consumption ✓ Minimal phase center variation over azimuth and elevation ✓ Negligible group delay variation ✓ Automotive grade housing



Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz 1559-1606 MHz 1539 - 1559 MHz
Realized gain	2.6 dB 3.3 dB 1.5 dB
Noise figure	≤ 2 dB

Key mechanical specifications:

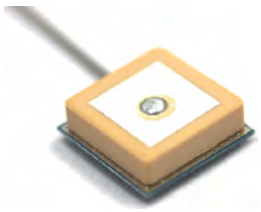
Parameter	Specification
Mounting option / Connector	Embedded/ U.FL
Dimensions	65mm x 65mm x 17 mm

MIA-GNSS-1500-C

Active Multi-Frequency Antenna – Embedded

Part #: 189-00076-01

✓ GPS, GLONASS, Beidou frequencies ✓ Active LNA circuitry ✓ Compact size ✓ Custom tuning ✓ Custom connector / cable size



Key electrical specifications:

Parameter	Specification
Frequency	1561.098± 2.046 MHz 1575.42 MHz 1602MHz
Gain @zenith	-5.5dBi typ. -4.5dBi typ -2.5dBi typ.
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	15 x 15 x 6.6 mm

Iridium Passive Microstrip Antenna

MEA-1600-SM

External Iridium/GNSS Passive Antenna – Screw Mount

Part #: 189-00059-01

✓2in1 antenna: GPS/GLONASS ✓Galileo and Iridium ✓High performance ✓Low Profile ✓Cable1: GPS/GLONASS /Galileo -1575-1606 MHz ✓Cable 2: Iridium - 1616-1627 MHz ✓Easy mounting: Screw Mount ✓Iridium certied antenna ✓Anti-Rotation Mounting ✓Customizable Cable and Connector ✓Low prole 80 × 74 × 25.6 mm l ✓P69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	1575.42 MHz / 1598-1606 MHz
	Active gain	28 dB@ 2.7 V
	Polarization	RHCP
Cable2	Frequency Range	1616 – 1627 MHz
	Peak gain	5.2 dBic
	Average Gain	-1.8 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA male
Dimensions	80mm x 74mm x 25.6 mm

MEA-1621

External Iridium Certified Passive Antenna – Magnet Mount

Part #: 189-00024-01

✓ Optimized for Iridium Network ✓ Very low axial ratio ✓ Excellent performance at low orbit ✓ Easy mounting ✓150cm cable length ✓ LM4100 cable ✓ Rugged housing

Key electrical specifications:

Parameter	Specification
Frequency	Iridium 1616-1626 MHz
Peak Gain	4.5 dBic
Average Gain	-1.1 dB
Axial Ratio	3 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA–Male (other connectors available)
Dimensions	80 x 76 x 16 mm

MEA-1621-AM

Iridium Certied Antenna – Adhesive Mount

Part #: 189-00067-01

✓Optimized for Iridium Network ✓Very low axial ratio ✓ Excellent performance at low orbit ✓ Easy mounting ✓ Rugged housing

Key electrical specifications:

Parameter	Specification
Frequency	1616-1627 MHz
Peak Gain	4.5 dBic
Average Gain	-1.1 dB
Axial Ratio	3 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA–Male
Dimensions	80 x 76 x 16 mm

Iridium Passive Microstrip Antenna

MEA-1621-GGG

External Iridium Passive Antenna – Screw Mount

Part #: 100-00098-01

✓ Optimized for GPS/GLONASS/IRIDIUM/ Cellular networks ✓ Easy mounting ✓ 1m cable length RG-174, CFD-200 cables ✓ Rugged housing ✓ Customer specification connectors ✓ IPX7 waterproof housing

Key electrical specifications:

	Parameter	Specification
GPS/GLONASS	Frequency Range	1575.42 / 1602 MHz
	Active gain	3 dBi Typ.@1575 MHz / 2.5 dBi Typ. @1602 MHz
	Polarization	Linear
LNA	Frequency Range	1575.42 / 1602 MHz
	Peak gain	28 dB Typ. / 25 dB Min
	VSWR	2.0 : 1 Max
Cellular	Frequency Range	824-960 / 1710-2170 MHz
	Active gain	0.56-2.69 dBi @ 824-960 MHz 1.69-5.2 dBi @1710-2170 MHz
	Impedance	50 Ω
Iridium	Frequency Range	1621 MHz
	Peak gain	3.5 dBic Min. @ 1621 MHz
	Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA–Male (other connectors available)
Dimensions	80mm x 74mm x 43 mm

MEA-1621-SM

External Iridium Passive Antenna – Screw Mount

Part #: 189-00060-01

✓ Frequency coverage: 1616-1627 MHz ✓ Easy mounting: Screw Mount ✓ Optimized for Iridium network ✓ High Performance ✓ Ground Plane Independent ✓ Anti-Rotation Mechanism ✓ Customizable Cable and Connector ✓ ROHS Certified ✓ Small size: Dimensions 80 × 74 × 25.6 mm ✓ Rugged housing ✓ IP69, IP67

Key electrical specifications:

Parameter	Specification
Frequency	1616-1627 MHz
Peak Gain	4.5 dBic
Average Gain	1.2 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA–Male (other connectors available)
Dimensions	80mm x 74mm x 43 mm

Iridium Passive Microstrip Antenna

MPA-406-1612

Passive GPS Iridium Antenna – 40mm x 6.5mm

Part #: 189-00050-01

✓ Ultra High Performance ✓ Iridium & GPS Band Coverage ✓ Embedded Applications ✓ Pin Connector ✓ Custom Tuning and Matching

Key electrical specifications:

Parameter	Specification
Frequency	1565 MHz - 1640 MHz
Antenna element peak gain	+2.0 dBi (typical)
Axial Ratio	3 dB max

Key mechanical specifications:

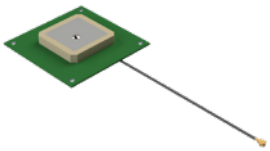
Parameter	Specification
Mounting option / Connector	Pin connector
Dimensions	40mm x 40 mm x 6.5mm

MPA-D254-1621

Iridium Passive Antenna – 25mm

Part #: 100-00024-02

✓ Iridium frequency band ✓ U. FL connector or other ✓ Compact size ✓ Custom tuning



Key electrical specifications:

Parameter	Specification
Frequency	1616-1626 MHz
Antenna element peak gain	2.5 dBic
Axial Ratio	4 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	U. FL connector
Dimensions	25 mm x 25 mm x 4 mm

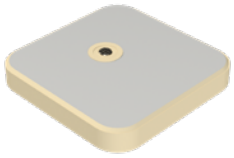
Globalstar Passive Microstrip Antenna

MPA-1618-C

Globalstar Passive Antenna – 25mm

Part #: 189-00078-01

✓ Globalstar Simplex ✓ Adhesive mounting ✓ Pin connector ✓ Compact size ✓ Custom tuning



Key electrical specifications:

Parameter	Specification
Frequency	1615-1645 MHz
Realized Gain	5 dBic
Axial Ratio	2.5 dB (typical) / 5 dB (max)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded / Pin connector
Dimensions	25.1 x 25.1 x 4.2 mm

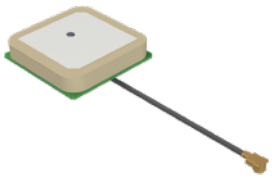
GPS/GLONASS Microstrip Antennas

MIA-1516-C

GPS/GLONASS Active Antenna – 25mm

Part #: 189-00077-01

✓GPS & GLONASS coverage ✓Active LNA circuitry ✓Custom cable-connector options ✓Compact size ✓Custom tuning



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 ± 1.023 MHz 1602 ± 8 MHz
Gain	-1 dBi typ. +2 dBi typ.
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded
Dimensions	25.1 x 25.1 x 7.4

MPA-134-GPS

Passive GPS GLONASS Antenna – 13mm x 4mm

Part #: 189-00056-01

✓GLONASS frequency ✓Easy mounting ✓Pin-Connector ✓Compact size ✓Advanced Ceramic Material ✓Ground Plane Dependent ✓Dimensions 13 x 13 x 4 mm

Key electrical specifications:

Parameter	Specification
Frequency	1595 - 1610 MHz
Gain at Zenith	-1.5 dBic typ
Axial Ratio	5 dBi

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin - Connector
Dimensions	13 x 13 x 4mm

MPA-1516

GPS GLONASS Passive Antenna – 25mm

Part #: 189-00044-01

✓GPS & GLONASS coverage ✓Custom cable-connector options ✓Compact size ✓Custom tuning

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz (GPS) 1602 MHz (GLONASS)
Total system peak gain	5 dBic
Axial Ratio	3 dB

Key mechanical specifications:

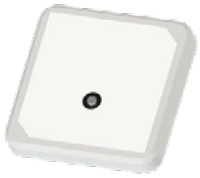
Parameter	Specification
Mounting option / Connector	Pin solution
Dimensions	25 mm x 25 mm x 4 mm

MPA-356-1516

Passive GPS GLONASS Beidou Antenna – 35mm x 6mm

Part #: 189-00049-01

GPS, GLONASS, Beidou frequency · Adhesive mounting · Pin connector · Compact size · Custom tuning



Key electrical specifications:

Parameter	Specification
Frequency	GPS: 1575.42 MHz ± 1.023 MHz GLONASS: 1602 MHz ± 5 MHz Beidou: 1561.098 MHz ± 2.046 MHz
Realized gain	GPS: +3.7 dBi typ. GLONASS: +4.9 dBi typ. Beidou: +5.2 dBi typ.
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pin connector
18 mm x 18 mm x 4 mm	35 mm x 35 mm x 6 mm

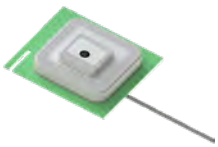
WIFI Embedded Microstrip Antennas

MPA-254-WIFI

WIFI Embedded Antenna – 25mm x 4 mm

Part #: 189-00055-01

2.4GHz & 5.8 GHz Wi-Fi frequency Integrated Ground plane with cable Easy mounting Surface Mount Compact size Advanced Ceramic Material Terminator using IPEX connector



Key electrical specifications:

Parameter	Specification
Frequency	2400-2500 MHz 5700-5870MH
Gain at Zenith	1.0 dBi typ.
Polarization	Linear

Key mechanical specifications:

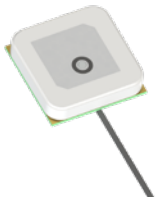
Parameter	Specification
Mounting option / Connector	I-PEX (U.FL)
Dimensions	25 mm x 25 mm x 4 mm

MPA-258-WIFI

WIFI Embedded Antenna – 25mm x 4.5mm

Part #: 189-00051-01

2.4GHz Wi-Fi frequency Integrated Ground plane with cable Easy mounting Surface Mount Compact size Advanced Ceramic Material Ground Plane Dependent Terminator using IPEX connector Dimensions 25 x 25 x 4.5 mm



Key electrical specifications:

Parameter	Specification
Frequency	2450 ± 50 MHz
Gain at Zenith	> 0.5 dBi
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	I-PEX (MHF)
Dimensions	25 x 25 x 4.5 mm

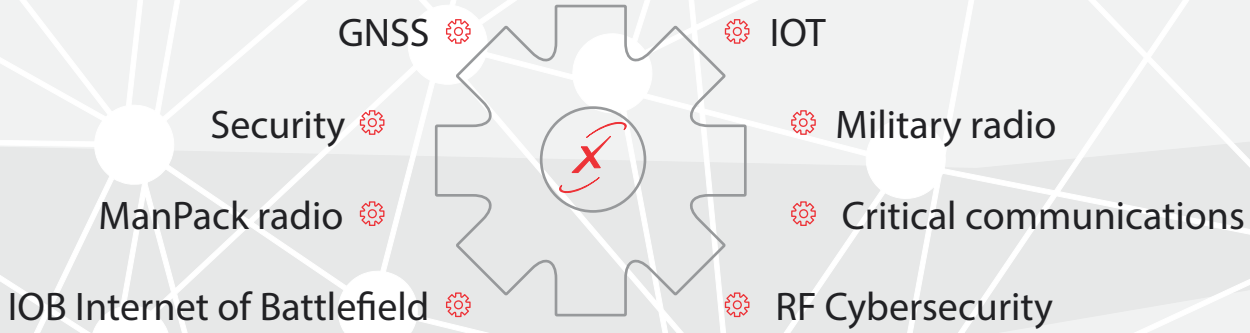
Defense Antennas

MAXTENA

Defense Antennas

Maxtena's ruggedized advanced antennas and wireless solutions are integrated into a variety of platforms including vehicle tracking equipment, UAVs, military tactical radios and manpacks. Our products are designed and qualified to support applications on the ground, in the air, and at sea. We offer a unique set of patented helix antennas for satellite communications. The antennas are available in different sizes and form factors. We produce both external antennas that come in a range of rugged housings, as well as embedded antennas. Our embedded antennas are custom built to fit perfectly in your device's own housing.

Applications



M30VHF-TNC

High performance VHF Antenna

Part #: 100-00315-01

30 MHz to 90 MHz Lightweight design Omni-directional antenna Excellent bandwidth Whip flexible Rugged Design MIL-STD-810 Linear polarization Power handling 8W VSWR <=3.2:1

Key electrical specifications:

Parameter	Specification
Frequency	30 – 90 MHz
Peak gain	-1 dBi
VSWR	≤ 3.2:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector mount/TNC
Dimensions	Ø2 x 132 cm

M1250UHF-TNC

High performance Monopole Antenna

Part #: 100-00288-01

1250 MHz to 2600 MHz VSWR < 3 Power handling: 8 Watt Lightweight design Omni-directional antenna Excellent bandwidth Whip flexible Rugged Design Low VSWR MIL-STD-810

Key electrical specifications:

Parameter	Specification
Frequency	1250 - 2600 MHz
Peak gain	3.5 dBi
VSWR	≤ 3:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector mount/TNC male
Dimensions	Ø18.5 x 406 mm

MMA-225-512-TNC

VHF ANTENNA

Part #: 100-00134-02

225-450 MHz bands Lightweight design Omni-directional antenna Excellent bandwidth Whip flexible Rugged Design Low VSWR MIL-STD-810G

Key electrical specifications:

Parameter	Specification
Frequency	225 - 450 MHz
VSWR	2:1 (typ.)
Radiation	Omnidirectional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / TNC male
Dimensions	Ø14.5 x 269±10 mm

M1575HCT-EB3

High-Performance Active GPS Antenna

Part #: 100-00061-02

✓GPS L1 band ✓High performance dual stage LNA ✓Exceptional pattern control ✓Rugged Design ✓High efficiency ✓IP67 ✓High quality reception of GPS signals

Key electrical specifications:

Parameter	Specification
Frequency	1575 MHz
Peak gain	-0.5 dBi
VSWR	≤ 1.5:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount
Dimensions	69.69 x 30.11 mm

M10HCT-A-SMA

L1 – L2 – L5 Active GNSS Antenna

Part #: 100-00282-02

✓L1/L2/L5 Full GNSS Bands ✓Low Axial Ratio ✓Low noise figure ✓Ground plane independent ✓Low power consumption ✓Low phase center variation over azimuth and elevation and among different samples ✓Rugged ✓MIL-STD-810G

Key electrical specifications:

Parameter	Specification
Frequency	1164-1300 MHz /1539-1610 MHz
Peak gain	3.3 dBi / 3.4 dBi
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount / SMA
Dimensions	Ø80 x 40 mm

M10HCT-A-TNC

L1 – L2 – L5 Active GNSS Antenna

Part #: 100-00282-01

✓Full GPS, Galileo, Glonass, BeiDou bands coverage including L-Band correction services coverage ✓Low Axial Ratio ✓Low Noise Figure ✓Ground plane independent ✓Low power consumption ✓Low phase center variation over azimuth and elevation and among different samples ✓Rugged IP67 rating ✓RoHs compliant ✓Automotive grade electronics

Key electrical specifications:

Parameter	Specification
Frequency	1164-1300 MHz /1539-1610 MHz
Peak gain	3.3 dBi / 3.4 dBi
Polarization	RHCP

Key mechanical specifications:

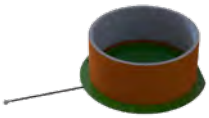
Parameter	Specification
Mounting option / Connector	Connector Mount / TNC
Dimensions	Ø80 x 40 mm

M10HCT-A-EMB

L1 – L2 – L5 Active GNSS Antenna

Part #: 180-00090-02

✓ Full GPS, Galileo, Glonass, BeiDou bands coverage including L-Band correction services coverage ✓ Low Axial Ratio ✓ Low Noise Figure ✓ Ground plane independent ✓ Low power consumption ✓ Low phase center variation over azimuth and elevation and among different samples ✓ Rugged IP67 rating ✓ RoHs compliant ✓ Automotive grade electronics



Key electrical specifications:

Parameter	Specification
Frequency	1164-1300 MHz /1539-1610 MHz
Peak gain	3.3 dBi / 3.4 dBi
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / U.FL
Dimensions	Ø71 x 31 mm

MAXWAVE

MAXWAVE™ 4×4 MIMO TRAIN ANTENNA

Part #: 100-00074-01

✓ 4 antenna elements operating simultaneously from 698 MHz to 6000 MHz ✓ Optional active GPS/GLONASS antenna with integrated surge arrestor ✓ DC grounded antenna elements for protection against lightning and high voltage power supply lines ✓ Versatile Design: Maintains performance when mounted on non-metallic surfaces ✓ Railway standard compliant to EN50155 and fire retardant according to EN 45545:2013

Key electrical specifications:

Parameter	Specification
Frequency	4 × 698 – 6000 MHz
Pattern	Omnidirectional
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

M1575HCT-15A-SMA

High Performance Active GPS Antenna

Part #: 100-00028-07

✓ GPS band ✓ Very low axial ratio ✓ IP-67 mounted and unmounted ✓ Ultra-light weight ✓ Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz (GPS)
Antenna element peak gain	28 dBic (typical) @ 3.3 V
Axial Ratio	1dB (max) @ zenith

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA
Dimensions	38 mm (height) x 18.5 mm (diameter)

M1621HCT-GN

High performance Iridium Antenna

Part #: 100-00147-0

Very low axial ratio IP-67 mounted and unmounted Ultra-light weight-45grams Ground plane independent

Key electrical specifications:

Parameter	Specification
Frequency	1621 MHz (Iridium)
Antenna element peak gain	2.0 dBic (Iridium)
Axial Ratio	0.25 dB (typical)

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA male
Dimensions	135 mm (height) x 18.5 mm (diameter)

M1227HCT-TNC-G

L1/L2 GPS GLONASS ACTIVE ANTENNA/TNC

Part #: 100-00133-02

Very low axial ratio IP-67 mounted Ultra lightweight - 45 grams Ground plane independent

Key electrical Specifications:

Parameter	Specification
Frequency	1559-1607 MHz (L1, E1, B1, B1-2, G1)
Antenna element peak gain	0.5 dB
Axial Ratio	Max 0.9 dB @ the Zenith
Conducted Gain	3 0 dB ±3 dB

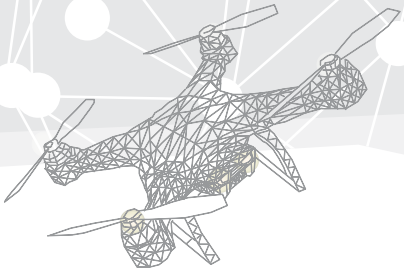
Key mechanical Specifications:

Parameter	Specification
Mounting option / Connector	TNC Connector
Dimensions	34.60 mm (height) x 28.50 mm (diameter)

5G Antennas

MAXTENA

5G Antennas



We offer high performing 5G antennas that provide coverage for all lower and mid 5G bands along with custom solutions for mm wave frequencies. By offering the most comprehensive portfolio of external antennas with different mounting options, omnidirectional radiation patterns for easy integration in wireless communication devices, we are the leaders of 5G antenna solutions. Our 5G antennas are great for telematics systems, remote surveillance, asset tracking and any IOT system applications. All of our 5G antenna solutions are fully customizable and optimized for the customers system.

Applications

Explore

Our New Release **MEA-5in1-SMA**

5GNR MIMO, 2.4/5.0/6.0 GHZ ISM AND GNSS

MEA-5in1-SMA

The MEA-5in1-SMA Screw Mount Antenna is a 5-in-1 low profile antenna solution, with a very high-performance ideal for maintaining constant network connectivity. The MEA-5in1-SMA covers all 5GNR, ISM, MIMO and GPS/GLONASS/QZSS/ Galileo standard frequencies. This is an ideal antenna for telematics systems, remote surveillance, asset tracking and any IOT system applications. The high performance and low profile make this antenna ideal for the most challenging installations.

This screw mount antenna is easy to install with maximum durability offering IP67 rated housing and anti-rotation mounting. The MEA-5in1-SMA has five cables with a SMA-Male standard connectors, 2m standard cable length and is fully customizable by offering additional connector types, cable lengths and cable types.

Features

- 5GNR,2.4/5.0/6.0 GHz ISM, and GPS/ GLONASS/QZSS/Galileo
- Easy mounting: Screw Mount
- Heavy duty antenna
- High performance
- Ground plane independent
- Anti-Rotation Mounting
- Customizable Cable and Connector
- IP67, IP69 , IK09

Suggested Applications include

- IoT applications
- Telematics
- Navigation
- Satellite communications
- LTE applications

MEA-698-3800-SM

Low Profile 5G LTE Antenna

Part #: 100-00132-01

✓Low profile antenna ✓Covers large frequencies 698-3800 MHz ✓ROHS Compliant ✓High gain for the antenna size ✓PC + ABC housing ✓Exceptional performance over the main 4G/5G bands

Key electrical specifications:

Parameter	Specification
Frequency	698-3800 MHz
Antenna element peak gain	5.5 dBi
Return Loss	-10 dBi

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	59 x 71mm

MEA-LGI-SMA

5GNR & Iridium GNSS Antenna – Screw Mount

Part #: 189-00065-01

✓ 3in1 antenna: 5GNR, Iridium and GNSS ✓Ultra-Wide band antenna ✓ High performance ✓ Easy mounting: Screw Mount ✓ Anti-Rotation Mounting ✓ Optimized for Iridium network ✓Ground Plane Independent ✓Customizable Cable and Connector ✓ Low profile 80 × 74 × 25.6 mm ✓ IP69

Key electrical specifications:

Parameter	Specification	
Frequency	617-960 MHz 3300-5000 MHz 1616 - 1627 MHz	1427-2690 MHz 5150-5925 MHz 1559 - 1608 MHz
Antenna element peak gain	2.3 dBi 2.6 dBi 5.2 dBic	5.1 dBi 2.7dBi 28 dB @ 2.7 V
Polarization	Linear	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	80 × 74 × 25.6 mm

MEA-5GGG-SMA-SM

5GNR and GPS/GLONASS Screw Mount

Part #: 100-00244-01

✓5GNR, GPS/GLONASS ✓ High performance ✓Customizable cable and connector ✓ IP67, IP69

Key electrical specifications:

	Parameter	Specification	
Cable1	Frequency	617-960 MHz 3300-5000 MHz	1427-2690 MHz 5150-5925 MHz
Cable1	Antenna element peak	1.1 dBi / 3.6 dBi /1.9 dBi /1.2 dBi	
Cable2	Frequency	1575.42 MHz	1598-1610 MHz
Cable2	Active Gain	26dB@3V; 27dB@5V	
Radiation pattern		Omni-Directional / Hemispherical	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount
Dimensions	Ø 60 x 81 mm

MEA-LWIG-SM

5GNR, 2.4/5.0/6.0 GHz ISM, Iridium & GNSS Antenna – Screw Mount

Part #:100-00164-01

✓ 4in1 antenna (5GNR, 2.4/5.0/6.0 GHz ISM, Iridium and GPS/GLONASS/QZSS/Galileo) ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Customizable Cable and Connector ✓ Dimensions Ø 146 x 31.5 mm ✓ IK09, IP67, IP69K

Key electrical specifications:

	Parameter	Specification
Cable 1.	Frequency	617-960 MHz / 1427-2690 MHz 3300-5000 MHz / 5150-5925 MHz
	Peak gain	-1.7 dBi/-1.7 dBi /-1.3 dBi/ 0.6 dBi
	Efficiency	19.7% / 17.5% / 13.3% / 15.9 %
	VSWR	3.3:1/ 2.3:1 / 2.1:1 / 1.7:1
Cable 2.	Frequency	2410-2490 MHz / 4920-5925 MHz / 5925-7125 MHz
	Peak gain	1.2 dBi / 0.0 dBi / 5.2 dBi
	Efficiency	30.5% / 13.8% / 52.1%
	VSWR	1.4:1 / 1.6:1 / 2.5:1
Cable 3.	Frequency	1616-1627 MHz
	Peak gain	4.5 dBic
	Efficiency	76%
	VSWR	1.2:1
Cable 4.	Frequency	1575.42 MHz /1598-1606 MHz
	Active gain	28 dB @ 2.7 V
	Noise figure	1.8 dB @ 2.7 V
	Power consumption	24.3 mW@2.7 V

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 146 x 31.5 mm

MEA-LWIG-SM

5GNR, 2.4/5.0/6.0 GHz ISM, Iridium & GNSS Antenna – Screw Mount

Part #:100-00164-01

✓ GNSS L1/L55 ✓ High Precision Navigation ✓ Screw Mount ✓ Low Profile ✓ Low Noise Figure ✓ Low Power Consumption ✓ Anti-Rotation Mechanism ✓ Customizable Cable and Connector ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	1176.45 MHz / 1561,1575, 1602 MHz
Axial Ratio	≤ 3dB
Polarization	RHCP
Bandwidth	≤ 1176 MHz / 1561-1606 MHz

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	80 x 74 x 25.6 mm

MEA-5GGG-SM

5GNR and GPS/GLONASS Screw Mount

Part #: 100-00204-01

✓5GNR & GPS/GLONASS/QZSS/Galileo frequency coverage ✓Easy Mounting: Screw Mount ✓Anti-Rotation Mechanism ✓Low Profile ✓Ground Plane Independent ✓Customizable Cable and Connector ✓Dimensions 80 × 74 × 25.6 mm ✓IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz 1575.42 MHz 1602 MHz
Antenna element peak gain	2.3 dBi@698-960 MHz 5.1 dBi@1427-2690 MHz 2.6 dBi @3300-5000 MHz 2.7 dBi @5150-5925 MHz 28dB @ 2.7 V @1575.42 MHz 28dB @ 2.7 V @1602 MHz
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

MEA-5GNR-SM

5GNR Screw Mount

Part #: 100-00217-01

✓Easy mounting: Screw Mount ✓ High Performance ✓Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions Ø 60 x 81 mm ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
Antenna element peak gain	3.3dBi@617-960MHz 2.0dBi@1427-2690MHz 0.5dBi@3300-5000MHz 0.6dBi@5150-5925MHz
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 60 × 81 mm

MEA-5GNR-LP-SM

5GNR Screw Mount

Part #: 100-00222-01

✓Easy mounting: Screw Mount ✓ Ground Plane Independent ✓Customizable Cable and Connector ✓ Low profile: Ø 50 x 50.8 mm ✓IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
Antenna element peak gain	2.9dBi@617-960MHz 2.1dBi@1427-2690MHz 0.5dBi@3300-5000MHz -1.0dBi@5150-5925MHz
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 50 x 50.8

MEA-5G-MIMO-GGG

5GNR, MIMO and GNSS GPS/GLONASS Screw Mount

Part #: 100-00250-01

✓ Easy mounting: Screw Mount ✓ Heavy Duty antenna ✓ High Performance ✓ Ground Plane Independent ✓ Anti-Rotation Mounting ✓ Customizable Cable and Connector ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
	Peak Gain	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
	Peak Gain	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	1575.42 MHz /1598-1610 MHz
	Active Gain	23 dB @ 3V / 24 dB @ 5V
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	*Specification*
Mounting option / Connector	Screw Mount/ SMA Male
Dimensions	Ø 96 X 130 mm

MEA-5GG-SM

5GNR and GNSS Screw Mount

Part #: 100-00236-01

✓ Easy mounting: screw mount ✓ Anti-rotation mounting ✓ Customizable cable and connector ✓ IK09, IP67, IP69K

Key electrical specifications:

	Parameter	**Specification**
Cable1	Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
	Peak Gain	-1.7dBi /-1.7 dBi /-1.3 dBi /0.6 dBi
Cable2	Frequency	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V

Key mechanical specifications:

Parameter	**Specification**
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 146 x 31.5 mm

MEA-5G-1575-1606

5GNR GPS/GLONASS Screw Mount

Part #: 100-00238-01

✓ 5GNR & GPS/GLONASS/QZSS/Galileo ✓ Easy mounting: screw mount ✓ Ground plane independent ✓ Customizable cable and connector ✓ IP67 & IP69

Key electrical specifications:

	Parameter	**Specification**
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	2.9 dBi / 2.1 dBi/ 0.5 dBi /1.0 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
	Active Gain	28 dB @ 2.7 V
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	**Specification**
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 54 x 50 mm

MEA-5in1-SMA

5GNR MIMO, 2.4/5.0/6.0 GHZ ISM and GNSS - Screw mount antenna

Part #: 100-00243-01

✓ 5GNR,2.4/5.0/6.0 GHz ISM & GPS/GLONASS/QZSS/Galileo frequency coverage ✓ Easy mounting: screw mount ✓ Heavy duty antenna ✓ High performance ✓ Ground plane independent ✓ Anti-rotation mounting ✓ Customizable cable and connector ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.8 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.6 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

MEA-5G-ISM-MIMO-GNSS

5GNR MIMO, 2.4/5.0 GHz ISM, and GNSS Screw Mount

Part #: 100-00240-01

✓ 5GNR , 2.4/5.0 GHz ISM /GPS/GLONASS/QZSS/Galileo - 1575-1606 MHz ✓ Easy mounting: screw mount ✓ Heavy duty antenna ✓ High performance ✓ Ground plane independent ✓ Anti-rotation mounting ✓ Customizable cable and connector ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	0.3 dBi / 3.6 dBi / 4.7 dBi / 3.8 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	0.7 dBi / 3.7 dBi / 4.6 dBi / 3.6 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.3 dBi / 1.5 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.3 dBi / 2.3 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

5G Antennas
Magnet Mount

MEA-5800-MM

5GNR Magnetic Mount Antenna

Part #: 100-00200-01

5GNR Frequency range (617-960 MHz, 1427-2690 MHz, 3300-5000 MHz, 5150-5925 MHz) Easy mounting: Magnetic Mount High Performance Customizable Cable and Connector Low profile: Ø 31 x 109 mm

Key electrical specifications:

Parameter	Specification
Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
Antenna element peak gain	1.0 dBi @ 617-960 MHz 2.9 dBi @1427-2690 MHz 2.5 dBi @3300-5000 MHz 0.4 dBi @5150-5925 MHz
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	105.1 x 30.1 x 6.7 mm

MEA-5IG-MA

5GNR, Iridium and GNSS Magnetic/Adhesive Mount

Part #: 100-00206-01

Easy mounting: Magnetic/Adhesive Mount Iridium Certified Low Profile High Performance Pre-Filtered GNSS Ground Plane Independent Customizable Cable and Connector Dimensions 89 × 76 × 27/30 mm IP67, IP69

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
	Antenna element peak	2.3 dBi / 5.1 dBi / 2.6 dBi / 2.7 dBi
Cable2	Frequency	1616-1627 MHz
	Antenna element peak	5.2 dBi
Cable3	Frequency	1575.42 MHz /1602 MHz
	Antenna element peak	28 dB @ 2.7 / 28 dB @ 2.7
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic/Adhesive Mount/ SMA Male
Dimensions	89 × 76 × 27/30 mm

MEA-5GNR-MM

5GNR Magnetic Mount

Part #: 100-00233-01

5GNR Frequency Range Magnetic Mount High Performance Ground plane independent Customized Cable and Connector Low profile : Ø 54 x 80 mm IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
Antenna element peak gain	0.3 dBi @ 617-960 MHz 3.4 dBi @1427-2690 MHz 1.5 dBi @3300-5000 MHz 0.1 dBi @5150-5925 MHz
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic Mount / SMA-Male
Dimensions	Ø 54 x 80 mm

5G Antennas
Adhesive Mount

MEA-5IG-MA

5GNR, Iridium and GNSS Magnetic/Adhesive Mount

Part #: 100-00206-01

✓Easy mounting: Magnetic/Adhesive Mount ✓Iridium Certified ✓Low Profile ✓High Performance ✓Pre-Filtered GNSS ✓Ground Plane Independent ✓Customizable Cable and Connector ✓Dimensions 89 × 76 × 27/30 mm ✓IP67, IP69

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
	Antenna element peak	2.3 dBi / 5.1 dBi / 2.6 dBi / 2.7 dBi
Cable2	Frequency	1616-1627 MHz
	Antenna element peak	5.2 dBi
Cable3	Frequency	1575.42 MHz /1602 MHz
	Antenna element peak	28 dB @ 2.7 / 28 dB @ 2.7
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

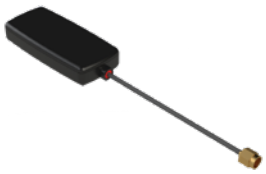
Parameter	*Specification*
Mounting option / Connector	Magnetic/Adhesive Mount/ SMA Male
Dimensions	89 × 76 × 27/30 mm

MEA-5GNR-AM

5GNR Adhesive Mount

Part #: 100-00221-01

✓Easy mounting: Adhesive Mount ✓High Performance ✓ Ground Plane Independent ✓Customizable Cable and Connector ✓Dimensions 83 × 35 × 13.3 mm ✓ IP67, IP69



Key electrical specifications:

Parameter	**Specification**
Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
Antenna element peak gain	1.1dBi@617-960MHz 3.6dBi@1427-2690MHz 1.9dBi@3300-5000MHz 1.2dBi@5150-5925MHz
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	**Specification**
Mounting option / Connector	Adhesive Mount/ SMA-Male
Dimensions	83 × 35 × 13.3 mm

MEA-5GNR-UWB-AM

5GNR Adhesive Mount Antenna

Part #: 100-00253-01

✓Easy mounting: Adhesive Mount ✓ Ultra-wide band antenna ✓Flexible housing ✓ High performance ✓Ground plane independent ✓Customizable cable and connector

Key electrical specifications:

Parameter	**Specification**
Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
Antenna element peak gain	2.0 dBi@617-960MHz 2.4 dBi@1427-2690MHz 4.6 dBi@3300-5000MHz 5.8 dBi@5150-5925MHz
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	**Specification**
Mounting option / Connector	Adhesive Mount/ SMA-Male
Dimensions	117.4 x 12.5 x 6.5 mm

MEA-5000-AM

5GNR Antenna Adhesive Mount

Part #: 100-00228-01

5GNR Frequency Range · Easy mounting: Adhesive Mount · Ground Plane Independent · Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
Antenna element peak gain	3.2 dBi @ 617-960 MHz 3.6 dBi @ 1427-2690 MHz 1.0 dBi @ 3300-5000 MHz 1.6 dBi @ 5150-5925 MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount / SMA Male
Dimensions	116 × 22 × 6.7 mm

5G Antennas
Connector Mount

MEA-2690-CM

5GNR Connector Mount Antenna

Part #: 100-00205-01

✓ 5GNR frequency range (617-960 MHz, 1525-2690 MHz) ✓ Easy mounting: Connector Mount ✓ N-Male Standard ✓ Ground Plane Independent ✓ Dimensions 232 × Ø 20 (Ø 16) mm

Key electrical specifications:

Parameter	Specification
Frequency	617-960 MHz 1525-2690 MHz
Antenna element peak gain	0.5 dBi @ 617-960 MHz 2.0 dBi @1525-2690 MHz
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / N-male connector
Dimensions	Ø 20 (Ø 16) × 232 mm

MEA-2400-N

Ultra-Rugged Dipole Antenna

Part #: 100-00190-01/02

✓ High Performance ✓ Dual Band 2.4/5 GHz ✓ UV Protected ✓ IP 67 ✓ Low profile antenna ✓ N-Jack or N-Plug ✓ Easy installation: Pole / Wall Mount

Key electrical specifications:

Parameter	Specification	
Frequency	2.4 - 2.5 GHz	4.8 - 6.0GH
Antenna element peak gain	6 dBi	6 dBi
Radiation pattern	Omni-Directional	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pole / Wall Mount / N-Jack or N-Plug
Dimensions	Ø 30 x 280 mm (N-Jack) Ø 23 x 255 mm (N-Plug)

MEA-5000-CM

5GNR Connector Mount

Part #: 100-00215-01

✓ Easy mounting: Connector Mount ✓ Ultra-Wide band Antenna ✓ High Performance ✓ Ground Plane Independent ✓ Waterproof Dimensions 192 × 20 × 18 mm ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	617-960 MHz 1427-2690 MHz 3300-3800 MHz
Antenna element peak gain	2.3 dBi / 5.1 dBi / 2.6 dBi / 2.7 dBi
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	192 × 20 × 18 mm

MEA-5GNR-UWB-CM

5GNR Connector Mount

Part #: 100-00218-01

Easy mounting: Connector Mount Ground Plane Independent Ultra-Wide band Antenna High Performance Ground Plane Independent Hinged Connector Low profile 171 × 38 × 13.8 mm

Key electrical specifications:

Parameter	Specification
Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
Antenna element peak gain	0.0dBi@617-960MHz 1.7dBi@1427-2690MHz 1.1dBi@3300-5000MHz 1.6dBi@5150-5925MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	171 × 38 × 13.8 mm

MEA-5GNR-UWB-SMA

5GNR/UHF Connector Mount

Part #: 100-00216-01

Easy mounting: Connector Mount Ultra-Wide band Antenna High Performance Ground Plane Independent Hinged Connector Low profile 171 × 38 × 13.8 mm

Key electrical specifications:

Parameter	Specification
Frequency	410-496 MHz 617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
Antenna element peak gain	-4.5dBi@410-496MHz 0.5dBi@617-960MHz 2.1dBi@1427-2690MHz 1.5dBi@3300-5000MHz 2.5dBi@5150-5925MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	171 × 38 × 13.8 mm

MEA-5GNR-LP-WM

5GNR antenna Wall Mount

Part #: 100-00231-01

5GNR Frequency Range ✓ Wall Mount ✓ High Performance ✓ 4.0 dBi 5G NR Peak Gain ✓ Ground Plane Independent ✓ Customized Cable and Connector ✓ Antenna Bracket Included ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
Antenna element peak gain	3.9 dBi @ 617-960 MHz 4.0 dBi @ 1427-2690 MHz 3.9 dBi @ 3300-5000 MHz 3.9 dBi @ 5150-5925 MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Wall Mount/ SMA Male
Dimensions	272 × 30 × 115 (220 × Ø 16) mm

MEA-5GNR-WM

5GNR Antenna WALL Mount

Part #: 100-00234-01

5GNR Frequency Range ✓ Wall Mount ✓ High Performance ✓ Ground plane independent ✓ Customized Cable and Connector ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
Antenna element peak gain	3.9 dBi @ 617-960 MHz 4.0 dBi @ 1427-2690 MHz 3.9 dBi @ 3300-5000 MHz 3.9 dBi @ 5150-5925 MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

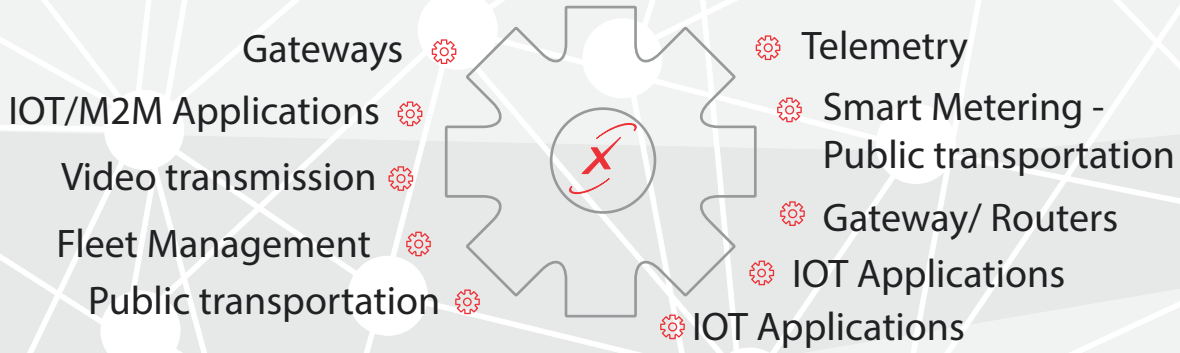
Parameter	Specification
Mounting option / Connector	Wall Mount/ SMA Male
Dimensions	325 × 36 × 155 (220 × Ø 16) mm

3G/4G/LTE Antennas

3G/4G/LTE Antennas

Maxtena offers a wide selection of antennas across a broad range of frequencies between 700- 960 MHz, 1710-2170 MHz and 2500-2700 MHz, dual-band 2.4GHz/5GHz, cellular, and Bluetooth antennas. It enhances connectivity for multiple devices in nearly any location. Our antennas are purpose-built to provide compact, high gain, and a constant worldwide connectivity for Wi-Fi, Bluetooth, and ZigBee. The antennas are available in several different sizes depending on customer requirements. We produce both external antennas that come in a range of rugged housings, as well as embedded antennas. These antennas can be customized with different cable lengths and connectors upon request.
We have developed countless high-performance antennas, and they are currently being used in multiple Iot devices (Wearables, Routers, Smart Home, UAV/Drone, and Connected Vehicles).

Applications



Discover

Our best seller **Netz 4in1**

our LTE/Cellular/WIFI and MIMO 4in1 Antenna

Netz 4in1

The NETZ 4 in 1 is a Cellular/LTE/MIMO/WIFI technology solution by Maxtena. The antenna features Cellular/LTE (698-960, 1710-2170, 2500-2700 MHz) and 2.4/5.0 GHz WIFI (2410-2490, 4920-5925 MHz) reception.
The NETZ 4 in 1 antenna is an omnidirectional, heavy-duty, and waterproof external multi-antenna for use in fleet management, smart cities, and buses, train, and commercial transport.
This cutting-edge antenna provides powerful MIMO antenna technology for global coverage LTE and Wi-Fi for constant wireless communication.
The 4 in 1 solution is ideal for high data throughput and streaming, video, industrial and IOT applications. The antennas advanced technology ensures constant reception and transmission. The underside of the antenna contains a foam adhesive for easy, reliable mounting.

Features

- Screw Mount
- High Performance
- Rated IP67, IP69K and IK09
- Compact Size: 96 x 96 x 94 mm
- Custom Cable and Connector

Suggested Applications include

- Fleet Management
- Commercial Transport
- HD Video Monitoring
- Buses, Train & Commerical Applications
- Smart Cities

The standard NETZ 4 in 1 comes with 3 meters LL195, and SMA-Male connectors. It is available with an SMA, FAKRA or customer specified connector and cable length.

NETZ 4IN1

4G LTE/Cellular/WIFI and MIMO 4in1 Antenna

Part #: 100-00142-01

Screw Mount · High Performance · Rated IP67, IP69K and IK09 · Compact Size: 96 x 96 x 94 mm · Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz 2500-2700 MHz
Antenna element peak gain	0.9 dBi 3.3 dBi 4.4 dBi
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	96 x 96 x 94 mm

MEA-SW-700-3800

2G/3G/4G/ISM/WIFI GNSS Antenna

Part #: 189-00046-01

2G/3G/4G/ISM/Wi-Fi & GNSS frequency bands · N Type connector & seal ring · IP68 rated / UV protected · Rugged industrial design · Ground plane Independent

Key electrical specifications:

Parameter	Specification
Frequency	698-3800 MHz
Antenna element peak gain	4.0 dB
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ N Type connector
Dimensions	Ø 41 x 84 mm

MEA-900-L-SM

868/915 MHz ISM/LTE - Screw Mount

Part #: 100-00197-01

2 in 1 antenna: Cellular/LTE & ISM bands · Ultra-Wide band antenna · High performance · Easy mounting: Screw Mount · Low Profile: 80 x 76 x 13 mm · Ground Plane Independent · IP67 · Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz 868 MHz 915 MHz
Antenna element peak gain	0.7 dBi@698-960 MHz 2.7 dBi@1710-2170 MHz 4.3 dBi@2500-2700 MHz 1.2 dBi@ 868 MHz 1.7 dBi@915 MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount /SMA Male
Dimensions	80 × 74 × 25.6 mm

NETZ 5IN1

LTE-MIMO/WIFI-MIMO/GNSS 5in1 Antenna

Part #: 100-00095-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ An integrated SMA connectors

Key electrical specifications:

Parameter	Specification
Frequency	1561 MHz 1575.42 MHz 1602 MHz 698-960 MHz 1710-2170 MHz 2300-2690 MHz
Antenna element peak gain	3 dBi Typ. @1561 MHz 3 dBi Typ. @1575 MHz 3.5 dBi Typ. @1602 MHz 4.0 dBi Typ. @698~960 MHz 6.0 dBi Typ. @1710~2170 MHz 5.0 dBi Typ. @2300~2690 MHz
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Permanent Mount/ SMA connectors
Dimensions	Ø 141.98 x 66.5 mm

Netz 5in1-SM

CELLULAR/LTE MIMO, 2.4/5.0 GHz ISM MIMO and GNSS - Screw Mount

Part #: 100-00177-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.3 dBi 4.3 dB
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.4 dBi 3.0 dB 3.0 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.8 dBi 3.0 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.6 dBi 3.1 dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23 dB @ 3 V; 24dB @ 5 V
Radiation pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male / SMA-Male RP
Dimensions	Ø 96 x 90 mm

MEA-LW2-SM

External Cellular/LTE, ISM and GNSS Antenna – Screw Mount

Part #: 189-00061-01

✓2in1 antenna: Cellular/LTE and 2.4/5.0GHz ISM ✓Wide band antenna ✓Ground Plane Independent ✓Rugged housing ✓IP67 rated ✓IP69 rated ✓Low profile: 80 x 74 x 43 mm ✓Anti-Rotation mounting ✓Customized Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Peak gain	2.7 dBi 5.1 dBi 5.3 dBi
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male connector
Dimensions	80 x 74 x 43 mm

MEA-2700-UWB-SM

High Performance 4G LTE Antenna

Part #: 100-00141-01

✓High Performance ✓4G LTE Ultra-Wideband Automotive Antenna ✓ROHS Compliant ✓Custom Cable and Connector ✓Rated IP67

Key electrical specifications:

Parameter	Specification
Frequency	698-960/1710-2700 MHz
Peak gain	3 dBi
Radiation pattern	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ N-connector
Dimensions	Ø 48 x 82 mm

MEA-698-3800-SM

Low Prole 5G LTE Antenna

Part #: 100-00132-01

✓ Low profile antenna ✓ Covers large frequencies 698-3800 MHz ✓ ROHS Compliant ✓ High gain for the antenna size ✓ PC + ABC housing ✓ Exceptional performance over the main 4G/5G bands

Key electrical specifications:

Parameter	Specification
Frequency	698-3800 MHz
Peak gain	5.5 dBi
Radiation pattern	-10 dBi

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	59 x 71mm

MEA-1400-SM

GNSS L1 L5 Antenna – Screw Mount

Part #: 100-00165-01

✓ GNSS L1/L55 ✓ High Precision Navigation ✓ Screw Mount ✓ Low Profile ✓ Low Noise Figure ✓ Low Power Consumption ✓ Anti-Rotation Mechanism ✓ Customizable Cable and Connector ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	1176.45 MHz / 1 561,1575, 1602 MHz
Axial Ratio	≤ 3dB
Polarization	RHCP
Bandwidth	1176 MHz / 1561-1606 MHz

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 x 74 x 25.6 mm

MEA-LTE-MIMO-ISM-SM

Cellular/LTE MIMO and 915 MHz ISM Screw Mount

Part #: 100-00203-01

✓ High Performance ✓ Easy mounting: Screw Mount ✓ Ground Plane Independent ✓ Low profile: 96 x 96 x 90 mm ✓ Customized Cable and Connector

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-1.5 dBi 3.2 dBi 6.5 dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.0 dBi 5.0 dBi
Cable3	Frequency	902-928 MHz
	Antenna element peak	0.2 dBi
Bandwidth		Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male
Dimensions	Ø 96 x 90 mm

Netz 5in1-MIMO

CELLULAR/LTE MIMO and GNSS - Screw mount antenna

Part #: 100-00177-01

✓ CELLULAR / LTE & GPS/GLONASS/QZSS/frequencies ✓ Galileo frequency range ✓ Easy mounting: Screw Mount ✓ Heavy Duty antenna ✓ High Performance ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	0.2dBi 3.8dBi 6.0dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.1dBi 3.2dBi -5.6dBi
Cable3	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.5dBi 3.1dBi 5.0dBi
Cable4	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.7dBi 3.0dBi 4.8dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 90 mm

MEA-900-L-SM

868/915 MHz ISM/LTE - Screw Mount

Part #: 100-00197-01

✓ 2 in 1 antenna: Cellular/LTE & ISM bands ✓ Ultra-Wide band antenna ✓ High performance ✓ Easy mounting: Screw Mount ✓ Low Profile: 80 x 76 x 13 mm ✓ Ground Plane Independent ✓ IP67 ✓ Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960MHz 1710-2170MHz 2500-2700MHz 868MHz 915MHz
Peak Gain	0.7 dBi@698-960MHz 2.7dBi@1710-2170MHz 4.3 dBi@2500-270MHz 1.2 dBi@ 868MHz 1.7 dBi@91MHz
Radiation pattern	Radiation pattern

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

3G/4G/LTE Antennas
Screw mount

MEA-2500-SM

CELLULAR/LTE MIMO Screw Mount

Part #: 100-00212-01

✓ CELLULAR / LTE (698-960 MHz, 1710-2170 MHz, and 2500-2700 MHz) ✓ Easy mounting: Screw Mount ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low profile : 80 x 74 x 14.7 mm ✓ IP67

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-2.7 dB -3.0 dB -5.9 dB
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.4 dBi 2.2 dBi 4.4 dBi
Radiation pattern		Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	80 x 74 x 14.7 mm

COBRA-LTE700

LTE MIMO & Active GPS High-Performance Transportation Antenna

Part #: 100-00036-01

✓ Robust arrow shape housing for easy roof-top alignment ✓ MIMO technology ✓ One connector for each application; LTE 1, LTE 2 and GPS ✓ No ground plane requirements ✓ Single-hole mounting with screws on top for easy installation ✓ Use of only one multifunction solution

Key electrical specifications:

Parameter	Specification
Frequency	690 - 960 MHz 1700 - 2200 MHz 1575.42 MHz
Antenna element peak gain	4 dBi (typical)
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

MAXWAVE

MAXWAVE™ 4×4 MIMO TRAIN ANTENNA

Part #: 100-00074-01

✓ 4 antenna elements operating simultaneously from 698 MHz to 6000 MHz ✓ Optional active GPS/GLONASS antenna with integrated surge arrestor ✓ DC grounded antenna elements for protection against lightning and high voltage power supply lines ✓ Versatile Design: Maintains performance when mounted on non-metallic surfaces ✓ Railway standard compliant to EN50155 and fire retardant according to EN 45545:2013

Key electrical specifications:

Parameter	Specification
Frequency	4 × 698 – 6000 MHz
Pattern	Omnidirectional
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

3G/4G/LTE Antennas
Screw mount

MEA-2170-GNSS-SM

CELLULAR/LTE & GNSS Screw Mount

Part #: 100-00256-01

✓ CELLULAR / LTE, and GPS/GLONASS/QZSS/Galileo ✓Easy mounting: screw mount ✓Anti-rotation mechanism ✓Customizable cable and connector ✓IP67, IK09, IP69K

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	2.7 dBi 5.1 dBi 5.3 dBi
Cable2	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	28 dB @ 2.7 V
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	80 x 74 x 25.6 mm

MEA-LTE-ISM-GNSS-TETRA

CELLULAR/LTE, 2.4/5.0 GHZ ISM, TETRA and GNSS - Screw Mount Antenna

Part #: 100-00243-01

✓ CELLULAR / LTE,TETRA/UHF, ISM, and GPS/GLONASS/QZSS/Galileo frequency ✓ Easy mounting: Screw Mount ✓ Heavy duty antenna ✓ High performance ✓ Anti-rotation mounting ✓ Customizable cable and connector ✓ IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.9 dBi / 3.0 dBi / 2.9 dBi
Cable2	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi
Cable3	Frequency	380-470 MHz
	Antenna element peak	2.1 dBi
Cable4	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	28 dB @ 2.7 V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

MEA-LTE-GNSS-UHF

CELLULAR/LTE, , TETRA/UHF and GNSS Screw Mount

Part #: 100-00248-01

✓Easy mounting: Screw Mount ✓Anti-Rotation Mechanism ✓Heavy Duty antenna ✓ High Gain ✓Customizable Cable and Connector ✓IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Peak Gain	1.9 dBi 3.0 dBi 2.9 dBi
Cable2	Frequency	380 - 470 MHz
	Peak Gain	2.1dBi
Cable3	Frequency	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V

Key mechanical specifications:

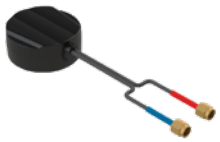
Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 96 x 130 mm

MEA-GNSS-LTE-MM

Active Multi-Frequency Antenna – External

Part #: 189-00103-03

GNSS & LTE Bands 2 in 1 Low Profile Antenna Rugged IP67 Customizable Cables and Connectors Small Size Easy Mounting Quality Textured Covert Design Tape for Quick and Easy Mounting



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz/ 1602 MHz 698~960 MHz / 1710~2170 MHz / 2300~2690 MHz
Antenna element peak gain	1 dBi Typ. @ 1575 MHz 1 dBi Typ. @ 1602 MHz 1.0 dBi Typ. @ 698-960 MHz 2.0 dBi Typ. @ 1710-2170 MHz 2.0 dBi Typ. @ 2300-2690 MHz
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount/ SMA connector
Dimensions	51.4 x (h) 11.7 mm

MEA-4-GGC

GPS/GLONASS & 2G 3G

Part #: 100-00119-01

GSM/GPRS/CDMA/PCS/DCS/WCDMA/UMTS/HSPA/GPS/GLONASS Low profile antenna for easy installation High LNA Gain Low noise figure Ultra-low power consumption IP65 water resistant Customizable connector & cable length Foam Adhesive or Magnet ROHS Compliant

Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz/ 1602 MHz 824-894 MHz / 1850-1990 MHz
Antenna element peak gain	1 dBi Typ. @ 1575 MHz 1 dBi Typ. @ 1602 MHz 1.0 dBi Typ. @824~894 MHz 5.0 dBi Typ. @1850~1990 MHz
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet or Adhesive Mount/ SMA connector
Dimensions	58.15 x 56.2 x 16.8 mm

MEA-LTE3MM-SMA

CELLULAR / LTE Magnetic Mount

Part #: 100-00185-01

CELLULAR / LTE - 698-960 MHz 1710-2170 MHz, 2500-2700 MHz Magnetic Mount Rugged design High Performance Customizable Cable and Connector Dimensions Ø 54 x 80 mm IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Antenna element peak gain	-2.6 dB -2.9 dB -3.6 dB
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic Mount / SMA-Male
Dimensions	Ø 54 x 80

MEA-1400-MM

GNSS L1 L5 Antenna – Magnet Mount

Part #: 100-00186-01

✓Magnetic Mount ✓28 dB Gain ✓Pre-Filter ✓Low Noise Figure ✓Low Power Consumption ✓ Customizable Cable and Connector
✓GPS/ GLO/ BEI/ QZSS/ Galileo/ IRNSS/ SBAS/ L1L5 (1176 and 1561-1606 MHz)

Key electrical specifications:

Parameter	Specification
Frequency	1164-1189 MHz / 1561-1606 MHz
Axial Ratio	≤ 3dB
Radiation	RHCP
Bandwidth	25 MHz / 45MHz

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic Mount / SMA-Male
Dimensions	Ø 54 x 21.5 mm

MEA-UWB-01-AM

Low Prole LTE Antenna

Part #: 100-00106-01

2G/3G/4G Ultra-Wideband Automotive Antenna Fully customizable cable length and connector ROHS Compliant Low Profile IP67

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2300-2700 MHz
Antenna element peak gain	3.8 dBi 2.9 dBi 4.4 dBi
Impedance	50 Ω

Key mechanical specifications:

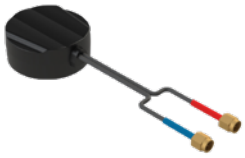
Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	105.1 mm x 30.1 mm x 6.7 mm

MEA-GNSS-LTE

Active Multi-Frequency Antenna – External Adhesive Mount

Part #: 189-00103-01

GNSS & LTE Bands 2 in 1 Low Profile Antenna Rugged IP67 Customizable Cables and Connectors Small Size Easy Mounting Quality Textured Covert Design Tape for Quick and Easy Mounting



Key electrical specifications:

Parameter	Specification
Frequency	1575.42 MHz/ 1602 MHz 698-960 MHz / 1710-2170 MHz / 2300-2690 MHz
Antenna element peak gain	1 dBi Typ. @ 1575 MHz 1 dBi Typ. @ 1602 MHz 1.0 dBi Typ. @ 698-960 MHz 2.0 dBi Typ. @ 1710-2170 MHz 2.0 dBi Typ. @ 2300-2690 MHz
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount/ SMA-Male
Dimensions	51.4 x (h) 11.7 mm

MEA-698-2700-AM

Omni-Directional 4G LTE Antenna

Part #: 100-00143-01

Dual-Port Multiband Omni-Directional LTE Antenna Covers Frequencies: 698 - 2700 MHz Low Profile Rugged Design

Key electrical specifications:

Parameter	Specification
Frequency	698-2700 MHz
Antenna element peak gain	4.5 dBi
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	101.5 x 77.6 x 15.8 mm

MEA-LG-AM

CELLULAR/LTE and GPS/GLONASS Adhesive Mount

Part #: 100-00193-01

✓Cable 1: CELLULAR/LTE - 698-960 MHz; 1710-2170 MHz; 2500-2700 MHz / Cable 2: GPS/GLONASS/QZSS/Galileo - 1575-1606 MHz
✓Adhesive Mount ✓Ground Plane Independent ✓Customizable Cable and Connector Dimensions ✓Low profile: 83 x 35 x 13.3 mm
✓IP67, IP69

Key electrical specifications:

	Parameter	Specification		
	Frequency	698-960 MHz	1710-2170 MHz	2500-2700 MHz
Cable1	Antenna element peak	-2.7 dB	-3.0 dB	-5.9 dB
Cable1	Polarization	Linear		
Cable1	VSWR	1.8:1	1.3:1	2.0:1
Cable2	Frequency	1575.42 MHz	1598-1606 MHz	
Cable2	Active gain	28 dB @ 2.7 V		
Cable2	Polarization	RHCP		
Cable2	VSWR	≤ 1.4:1		

Key mechanical specifications:

Parameter	Specification
Connector	Adhesive Mount/ SMA Connector
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MEA-LGG-AM

Cellular/LTE and GPS/GLONASS Antenna – Adhesive Mount

Part #: 100-00163-01

✓ 2in 1 antenna (CELLULAR/LTE,GPS/GLONASS/QZSS/Galileo) ✓Adhesive Mount ✓High Performance ✓Ground Plane Independent
✓ Customizable Cable and Connector ✓ Dimensions 150.5 x 42 x 15.3 mm ✓ IP67, IP69

Key electrical specifications:

	Parameter	Specification		
	Frequency	698-960 MHz	1710-2170 MHz	2500-2700 MHz
Cable1	Antenna element peak	3.4 dBi	3.5 dBi	3.9 dBi
Cable1	Efficiency	76%	69%	76%
Cable1	VSWR	1.7:1	1.4:1	1.5:1
Cable2	Frequency	1575.42 MHz	1598-1606 MHz	
Cable2	Active gain	28 dB @ 2.7 V		
Cable2	Polarization	RHCP		
Cable2	VSWR	≤ 1.4:1		

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA-Male
Dimensions	150.5 x 42 x 15.3 mm

MEA-3-GGL

GPS/GLONASS/LTE Antenna & 2G/3G LTE SOLUTION

Part #: 189-00053-01

✓Covers GNSS & LTE Bands ✓ 2 in 1 Low Profile Antenna ✓Rugged IP67 ✓Customizable Cables and Connectors ✓Small Size ✓Easy Magnet Mounting ✓ Quality Textured Covert Design

Key electrical specifications:

	Parameter	Specification		
GNSS	Frequency	1575.42 MHz		1602 MHz
	Polarization	Linear		
	Polarization	3.0 dBi Typ.		3.5 dBi Typ
	VSWR	≤ 2.0:1		
LNA	Frequency	1575.42 MHz		1602 MHz
	Power Consumption	9 Typ. mA @3.3V		
	Antenna Gain	28 dB Typ. / 25 dB Min		
	VSWR	≤ 2.0:1		
LTE	Frequency	698-960 MHz 2500-2700 MHz	1710-2170 MHz	
	Antenna element peak	1.5 dBi	0.5 dBi	0.5 dBi
	Efficiency	25%	30%	30%
	VSWR	≤ 5.5	≤ 4.0	≤ 4.0

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Foam adhesive / SMA, FAKRA or custom
Dimensions	(L) 55 x (W) 55 x (H) 20 mm

3G/4G/LTE Antennas
Connector Mount

MEA-1700-LTE

High Performance LTE Antenna

Part #: 100-00109-01

✓ 3G/4G/LTE modems ✓ Ultra-Wideband Automotive Antenna ✓ Low profile for easy installation ✓ Small size: 20 x 215 mm3 ROHS Compliant ✓ IPX67

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz
Antenna element peak gain	0~1 dBi
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N-Type
Dimensions	Ø 20 x 215 mm

MEA-960-LTE

4G LTE Omni-Directional Antenna

Part #: 100-00140-01

✓ Robust arrow shape housing for easy roof-top alignment ✓ MIMO technology ✓ One connector for each application; LTE 1, LTE 2 and GPS ✓ No ground plane requirements ✓ Single-hole mounting with screws on top for easy installation ✓ Use of only one multifunction solution

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz
Antenna element peak gain	3 dBi ± 1
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Male
Dimensions	82 x 12 x 6 mm

MEA-UWB-LTE-90

Ultra-Wideband 4G LTE Antenna

Part #: 100-00139-01

✓ LTE / GSM / CDMA /DCS /PCS / WCDMA / UMTS / HSDPA / GPRS / EDGE /GPS /Wi-Fi ✓ Ultra-Wide Band Antenna ✓ Ground Plane Independent ✓ Hinged 90° termination with SMA(M) Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz
Antenna element peak gain	2.5 / 3.5 dBi
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Male
Dimensions	163 x 22 x 7 mm

MEA-2700-LTE

Low Profile LTE Antenna

Part #: 100-00126-01

Low profile design for easy installation Heavy duty applications Can be used for mobile and fixed base applications Compact housing that makes the antenna ideal for indoor or outdoor applications 698-960/1710-2170/2500-2700 MHz Small size: 22 x 66mm ROHS compliant

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2300-2700 MHz
Antenna element peak gain	3 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N-Female connector
Dimensions	22 x 66mm

MEA-3L-SMA

Cellular/LTE Antenna – Connector Mount

Part #: 100-00166-01

CELLULAR / LTE frequency Connector Mount Low Profile Wide band Antenna Dimensions 48 x Ø 9 mm Easy integration High performance

Key electrical specifications:

Parameter	Specification	
Frequency	698-960 MHz	1710-2170 MHz
Efficiency	62.4%	62.4%
Polarization	Linear	
Average gain	-2.1 dB	2.1 dB
Bandwidth	700/850/900 MHz | 1700/1800/1900/2100 MHz	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	Ø 9 x 38 mm

MEA-2700-WIFI

Omni Fiberglass WIFI Antenna

Part #: 100-00188-01

✓ High Performance ✓ 698-960 MHz &1710-2690 MHz frequency coverage ✓ Wi-Fi band ✓ Omni-directional antenna ✓ IP67 rating ✓ N-jack connector (N-Plug available) ✓ Easy mounting: Pole/ Wall mount

Key electrical specifications:

Parameter	Specification	
Frequency	698-960 MHz	1710-2170 MHz
Antenna element peak gain	2 dBi	2 dBi
Radiation	Omni-directional	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pole / Wall Mount/ N-Jack or N-Plug
Dimensions	Ø 49 x 284 mm

MEA-698-3800-CM

Indoor Omnidirectional Antenna

Part #: 100-00187-01

✓ Wideband Omni antenna ✓ Compact and light weight ✓ Excellent performance ✓ Celling mounting ✓ N-female connector ✓ IP65

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1427-2700MHz 3400-3800 MHz
Antenna element peak gain	2.0 ± 0.5 dBi 5 ± 1 dBi 5 ± 1 dBi
Radiation pattern	Omni-directional

Key mechanical specifications:

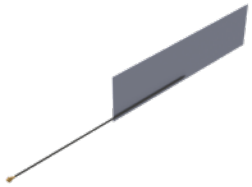
Parameter	Specification
Mounting option / Connector	Celling Mount /SMA Male
Dimensions	80 × 76 × 13 mm

MIA-HB-698-2700

Ultra-Wideband 4G LTE Antenna

Part #: 100-00160-01

✓ 4G LTE 690MHz – 960MHz | 1710MHz – 2700MHz ✓ Ground plane Independent ✓ High Efficiency across all bands ✓ Flexible embedded antenna



Key electrical specifications:

Parameter	Specification
Frequency	698 - 960 MHz 1710 - 2170 MHz 2500 - 2700 MHz
VSWR	< 3.5
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	U.FL connector
Dimensions	120mm x 30mm

MEA-2500-AM

CELLULAR / LTE flexible Polymer

Part #: 100-00268-01

✓ High performance antenna ✓ CELLULAR / LTE ✓ Self-Adhesive ✓ Left-Hand Feed ✓ Dimensions 40 × 20 × 0.2 mm ✓ Flexible Material ✓ Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698 - 960 MHz 1710 - 2170 MHz 2500 - 2700 MHz
Peak Gain	4.1 dBi / 2.7 dBi / 2.2 dBi
Polarization	Omni-Directional

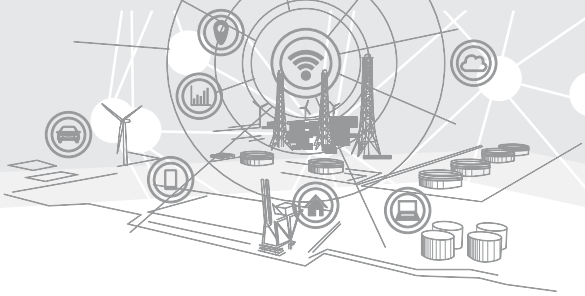
Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Self-Adhesive / U.FL connector
Dimensions	40 × 20 × 0.2 mm

WIFI/ Bluetooth/ ZigBee Antennas

MAXTENA

WIFI/ Bluetooth/ ZigBee Antennas



We offer a wide selection of WiFi/ Bluetooth/ISM antennas that operate within the 902-928 MHz, 2.4 GHz and 5.7-5.8 bands and include a wide variety of indoor and outdoor antennas.

ISM antennas are ideal for various installations for IOT, smart metering, digital signage, and industrial monitoring. The antennas are available in several different sizes depending on customer requirements. These antennas can be customized with various cable lengths and connectors upon request. All of our external antennas are IP67 rate which allow for the most environmentally challenging installations.

Applications

- LBS & M2M applications
- Handheld devices
- Law enforcement
- Vehicle and fleet tracking
- Mining equipment
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- Embedded applications

MEA-2700-WIFI

Omni Fiberglass WIFI Antenna

Part #: 100-00188-01

✓ High Performance ✓ 698-960 MHz &1710-2690 MHz frequency coverage ✓ Wi-Fi band ✓ Omni-directional antenna ✓ IP67 rating ✓ N-jack connector (N-Plug available) ✓ Easy mounting: Pole/ Wall mount

Key electrical specifications:

Parameter	Specification	
Frequency	698-960 MHz	1710-2170 MHz
Antenna element peak gain	2 dBi	2 dBi
Radiation	Omni-directional	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pole / Wall Mount/ N-Jack or N-Plug
Dimensions	Ø 49 x 284 mm

MEA-2400-UWB-SMA

High Performance 2.4 GHz WIFI Antenna

Part #: 100-00155-01

✓ Wi-Fi/ISM/ZigBee/WLAN/Bluetooth 2.4GHz frequencies ✓ IP67 rated ✓ High gain & efficiency ✓ Custom cable & connector options

Key electrical specifications:

Parameter	Specification
Frequency	2400-2483MHz
Peak gain	3 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male
Dimensions	Ø 48 x 82 mm

MAXWAVE

MAXWAVE™ 4×4 MIMO TRAIN ANTENNA

Part #: 100-00074-01

✓ 4 antenna elements operating simultaneously from 698 MHz to 6000 MHz ✓ Optional active GPS/GLONASS antenna with integrated surge arrestor ✓ DC grounded antenna elements for protection against lightning and high voltage power supply lines ✓ Versatile Design: Maintains performance when mounted on non-metallic surfaces ✓ Railway standard compliant to EN50155 and fire retardant according to EN 45545:2013

Key electrical specifications:

Parameter	Specification
Frequency	4 × 698 – 6000 MHz
Pattern	Omnidirectional
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

NETZ 5IN1

LTE-MIMO/WIFI-MIMO/GNSS 5in1 Antenna

Part #: 100-00095-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ An integrated SMA connectors

Key electrical specifications:

Parameter	Specification
Frequency	1561 MHz 1575.42 MHz 1602 MHz 698-960 MHz 1710-2170 MHz 2300-2690 MHz
Antenna element peak gain	3 dBi Typ. @1561 MHz 3 dBi Typ. @1575 MHz 3.5 dBi Typ. @1602 MHz 4.0 dBi Typ. @698~960 MHz 6.0 dBi Typ. @1710~2170 MHz 5.0 dBi Typ. @2300~2690 MHz
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Permanent Mount/ SMA connectors
Dimensions	Ø 141.98 x 66.5 mm

Netz 5in1-SM

CELLULAR/LTE MIMO, 2.4/5.0 GHz ISM MIMO and GNSS - Screw Mount

Part #: 100-00177-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.3 dBi 4.3 dB
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.4 dBi 3.0 dB 3.0 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.8 dBi 3.0 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.6 dBi 3.1 dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23 dB @ 3 V; 24dB @ 5 V
Radiation pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male / SMA-Male RP
Dimensions	Ø 96 x 90 mm

Netz 5in1-MIMO

CELLULAR/LTE MIMO and GNSS - Screw mount antenna

Part #: 100-00177-01

✓ CELLULAR / LTE & GPS/GLONASS/QZSS/frequencies ✓ Galileo frequency range ✓ Easy mounting: Screw Mount ✓ Heavy Duty antenna ✓ High Performance ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	0.2dBi 3.8dBi 6.0dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.1dBi 3.2dBi -5.6dBi
Cable3	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.5dBi 3.1dBi 5.0dBi
Cable4	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.7dBi 3.0dBi 4.8dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 90 mm

NETZ 4IN1

4G LTE/Cellular/WIFI and MIMO 4in1 Antenna

Part #: 100-00142-01

✓ Screw Mount ✓ High Performance ✓ Rated IP67, IP69K and IK09 ✓ Compact Size: 96 x 96 x 94 mm ✓ Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz 2500-2700 MHz
Antenna element peak gain	0.9 dBi 3.3 dBi 4.4 dBi
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	96 x 96 x 94 mm

MEA-698-3800-SM

Low Profile LTE Antenna

Part #: 100-00132-01

✓ Low profile antenna ✓ Covers large frequencies 698-3800 MHz ✓ ROHS Compliant ✓ High gain for the antenna size ✓ PC + ABC housing ✓ Exceptional performance over the main 4G/5G bands

Key electrical specifications:

Parameter	Specification
Frequency	698-3800 MHz
Peak gain	5.5 dBi
Radiation pattern	-10 dBi

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	59 x 71mm

MEA-UWB-LTE-90

Ultra-Wideband 4G LTE Antenna

Part #: 100-00139-01

✓ LTE / GSM / CDMA /DCS /PCS / WCDMA / UMTS / HSDPA / GPRS / EDGE /GPS /Wi-Fi ✓Ultra-Wide Band Antenna ✓ Ground Plane Independent ✓ Hinged 90° termination with SMA(M) Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz
Antenna element peak gain	2.5 / 3.5 dBi
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Male
Dimensions	163 x 22 x 7 mm

MEA-2400-N

2.4 GHz WIFI/Bluetooth/ISM Antenna

Part #: 100-00152-01

✓ 2400-2500 GHz frequency coverage ✓ 2.4GHz Wi-Fi/Bluetooth/ISM band ✓ Omni-directional whip antenna ✓ IP66 rating ✓ SMA connector

Key electrical specifications:

Parameter	Specification
Frequency	2.4 ~ 2.5 GHz
Antenna element peak gain	2 ± 1 dBi
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Male connector
Dimensions	9.7 x 80 x 11.7 mm

MEA-2400-N

Ultra-Rugged Dipole Antenna

Part #: 100-00190-01/02

✓ High Performance ✓ Dual Band 2.4/5 GHz ✓ UV Protected ✓ IP 67 ✓ Low profile antenna ✓ N-Jack or N-Plug ✓ Easy installation: Pole / Wall Mount

Key electrical specifications:

Parameter	Specification	
Frequency	2.4 - 2.5 GHz	4.8 - 6.0GH
Antenna element peak gain	6 dBi	6 dBi
Radiation pattern	Omni-Directional	

Key mechanical specifications:

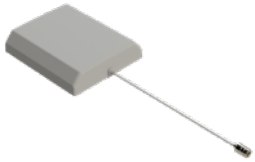
Parameter	Specification
Mounting option / Connector	Pole / Wall Mount / N-Jack or N-Plug
Dimensions	Ø 30 x 280 mm (N-Jack) Ø 23 x 255 mm (N-Plug)

MEA-1710-WM

Indoor Omnidirectional Wall mount Antenna

Part #: 100-00189-01

✓Wideband Omni antenna ✓Compact and light weight ✓ Excellent performance ✓Wall mounting ✓N-female connector ✓IP65



Key electrical specifications:

Parameter	Specification	
Frequency	2.4 - 2.5 GHz	4.8 - 6.0GH
Antenna element peak gain	6 dBi	6 dBi
Radiation pattern	Omni-Directional	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pole / Wall Mount / N-Jack or N-Plug
Dimensions	Ø 30 x 280 mm (N-Jack) Ø 23 x 255 mm (N-Plug)

MEA-2500-LTE-MIMO

CELLULAR/LTE MIMO Screw Mount

Part #: 100-00211-01

✓ Wide-band antenna ✓Easy mounting: Screw Mount ✓ Anti-rotation mounting ✓ High Performance ✓ Customizable Cable and Connector ✓Dimensions: Ø 60 x 69 mm ✓ IP67, IP69, IK09 ✓Heavy duty antenna.

Key electrical specifications:

	Parameter	Specification		
Cable1	Frequency	698-960 MHz 2500-2700 MHz	1710-2170 MHz	
Cable1	Antenna element peak	-0.8 dBi	3.6 dBi	4.1 dB
Cable2	Frequency	698-960 MHz 2500-2700 MHz	1710-2170 MHz	
Cable2	Antenna element peak	-0.6 dBi	2.8 dBi	3.0 dBi
Radiation pattern		Omni-Directional		

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 60 x 69 mm

MEA-2500-SM

CELLULAR/LTE MIMO Screw Mount

Part #: 100-00212-01

✓CELLULAR / LTE (698-960 MHz, 1710-2170 MHz, and 2500-2700 MHz) ✓ Easy mounting: Screw Mount ✓Ground Plane Independent ✓ Customizable Cable and Connector ✓Low profile : 80 x 74 x 14.7 mm ✓IP67

Key electrical specifications:

	Parameter	Specification		
Cable1	Frequency	698-960 MHz 2500-2700 MHz	1710-2170 MHz	
Cable1	Antenna element peak	-2.7 dB	-3.0 dB	-5.9 dB
Cable2	Frequency	698-960 MHz 2500-2700 MHz	1710-2170 MHz	
Cable2	Antenna element peak	1.4 dBi	2.2 dBi	4.4 dBi
Radiation pattern		Omni-Directional		

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	80 x 74 x 14.7 mm

MEA-2410-WIFI

Dual Band Wifi ISM Antenna

Part #: 100-00280-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	2.8 dBi/ 2.4 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	Ø15.7 x 58.2 mm

MEA-4920-ISM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00279-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	3.1 dBi / -0.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	Ø12.5 x 34.7 mm

MEA-2410-FAKRA

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00277-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	2.6 dBi/ -0.3 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Fakra Beige Female
Dimensions	Ø12.5 x 44.5 mm

MEA-4920-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00276-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	4.0 dBi / 5.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	53 x 10 x 18 mm

MEA-2400-AM

2.4 GHz ISM Adhesive Mount

Part #: 100-00173-02

✓ 2.4 GHz ISM Band ✓ Adhesive Mount ✓ 3.8 dBi WIFI Peak Gain ✓ Customizable Cable and Connector ✓ Ultra rugged housing ✓ Dimensions Ø 54 × 14.7 mm ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak gain	3.8 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount / Fakra Beige Female
Dimensions	Ø 54 × 14.7 mm

MEA-7000-WIFI

2.4/5.0/6.0 GHZ ISM Connector Mount

Part #: 100-00299-01

✓ 2.4/5.0/6.0 GHz ISM MHz ✓ Connector Mount ✓ Wifi 6E Antenna ✓ Low profile ✓ High efficiency ✓ Hinged Connector ✓ Fakra-I-Beige Connector ✓ Dimensions 81 × 14 × 10 mm

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz 5925-7125 MHz
Peak Gain	2.0 dBi / 1.3 dBi / 2.0 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	81 × 14 × 10 mm

MEA-5900-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00300-01

✓2.4/5.0/6.0 GHz ISM ✓Wifi 6E Antenna ✓High Gain ✓ Ground plane independent ✓Hinged Connector

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz
Peak Gain	4.1 dBi / 3.9 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	135 × 19 × 10 mm

MEA-5000-LP-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00298-01

✓2.4/5.0 GHz ISM ✓ Connector Mount ✓Low profile ✓High efficiency

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz
Peak Gain	3.0 dBi / 1.0 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	Ø 10 × 71 mm

MEA-2400-CM

2.4 GHz ISM Connector Mount

Part #: 100-00278-01

✓ 2.4 GHz ISM ✓Connector Mount ✓ Low profile ✓ Dimensions Ø 9.5 × 56 mm

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak Gain	3.6 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	Ø 9.5×56mm

MEA-2410-LP-CM

2.4 GHz ISM Connector Mount

Part #: 100-00274-01

2.4 GHz ISM Connector Mount Low profile High efficiency

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak Gain	3.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

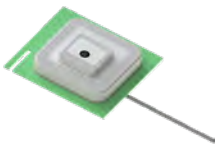
Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	53 ×10 × 18 mm

MPA-254-WIFI

WIFI Embedded Antenna – 25mm x 4 mm

Part #: 189-00055-01

✓2.4GHz & 5.8 GHz Wi-Fi frequency ✓Integrated Ground plane with cable ✓ Easy mounting ✓ Surface Mount ✓ Compact size ✓Advanced Ceramic Material ✓ Terminator using IPEX connector



Key electrical specifications:

Parameter	Specification
Frequency	2400-2500 MHz 5700-5870MH
Gain at Zenith	1.0 dBi typ.
Polarization	Linear

Key mechanical specifications:

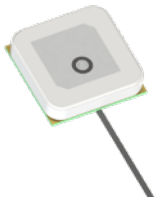
Parameter	Specification
Mounting option / Connector	I-PEX (U.FL)
Dimensions	25 mm x 25 mm x 4 mm

MPA-258-WIFI

WIFI Embedded Antenna – 25mm x 4.5mm

Part #: 189-00051-01

✓ 2.4GHz Wi-Fi frequency ✓ Integrated Ground plane with cable ✓Easy mounting ✓ Surface Mount ✓ Compact size ✓ Advanced Ceramic Material ✓Ground Plane Dependent ✓Terminator using IPEX connector ✓Dimensions 25 x 25 x 4.5 mm



Key electrical specifications:

Parameter	Specification
Frequency	2450 ± 50 MHz
Gain at Zenith	> 0.5 dBi
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	I-PEX (MHF)
Dimensions	25 x 25 x 4.5 mm

Bluetooth Antennas
External

MEA-2400-UWB-SM

High Performance 2.4 GHz WIFI Antenna

Part #: 100-00155-01

Wi-Fi/ISM/ZigBee/WLAN/Bluetooth 2.4GHz frequencies IP67 rated High gain & efficiency Custom cable & connector options

Key electrical specifications:

Parameter	Specification
Frequency	2400-2483MHz
Peak gain	3 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male
Dimensions	Ø 48 x 82 mm

MEA-2700-WIFI

Omni Fiberglass WIFI Antenna

Part #: 100-00188-01

High Performance 698-960 MHz &1710-2690 MHz frequency coverage Wi-Fi band Omni-directional antenna IP67 rating N-jack connector (N-Plug available) Easy mounting: Pole/ Wall mount

Key electrical specifications:

Parameter	Specification	
Frequency	698-960 MHz	1710-2170 MHz
Antenna element peak gain	2 dBi	2 dBi
Radiation	Omni-directional	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pole / Wall Mount/ N-Jack or N-Plug
Dimensions	Ø 49 x 284 mm

NETZ 5IN1

LTE-MIMO/WIFI-MIMO/GNSS 5in1 Antenna

Part #: 100-00095-01

LTE/Wifi/GNSS frequencies High performance MIMO technology solution A low profile design with easy mounting An integrated SMA connectors

Key electrical specifications:

Parameter	Specification
Frequency	1561 MHz 1575.42 MHz 1602 MHz 698-960 MHz 1710-2170 MHz 2300-2690 MHz
Antenna element peak gain	3 dBi Typ. @1561 MHz 3 dBi Typ. @1575 MHz 3.5 dBi Typ. @1602 MHz 4.0 dBi Typ. @698~960 MHz 6.0 dBi Typ. @1710~2170 MHz 5.0 dBi Typ. @2300~2690 MHz
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Permanent Mount/ SMA connectors
Dimensions	Ø 141.98 x 66.5 mm

Netz 5in1-SM

CELLULAR/LTE MIMO, 2.4/5.0 GHz ISM MIMO and GNSS - Screw Mount

Part #: 100-00177-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification		
Cable1	Frequency	698-960 MHz 2500-2700 MHz	1710-2170 MHz	
	Antenna element peak	-0.9 dBi	3.3 dBi	4.3 dB
Cable2	Frequency	698-960 MHz 2500-2700 MHz	1710-2170 MHz	
	Antenna element peak	1.4 dBi	3.0 dB	3.0 dBi
Cable3	Frequency	2410-2490 MHz	4920-5925 MHz	
	Antenna element peak	4.8 dBi	3.0 dBi	
Cable4	Frequency	2410-2490 MHz	4920-5925 MHz	
	Antenna element peak	4.6 dBi	3.1 dBi	
Cable5	Frequency	1575.42 MHz	1602 MHz	
	Antenna element peak	23 dB @ 3 V; 24dB @ 5 V		
Radiation pattern		Omni-directional / Hemispherical		

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male / SMA-Male RP
Dimensions	Ø 96 x 90 mm

MEA-2400-N

Ultra-Rugged Dipole Antenna

Part #: 100-00190-01/02

✓ High Performance ✓ Dual Band 2.4/5 GHz ✓ UV Protected ✓ IP 67 ✓ Low profile antenna ✓ N-Jack or N-Plug ✓ Easy installation: Pole / Wall Mount

Key electrical specifications:

Parameter	Specification	
Frequency	2.4 - 2.5 GHz	4.8 - 6.0GH
Antenna element peak gain	6 dBi	6 dBi
Radiation pattern	Omni-Directional	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pole / Wall Mount / N-Jack or N-Plug
Dimensions	Ø 30 x 280 mm (N-Jack) Ø 23 x 255 mm (N-Plug)

MEA-2400-SMA

2.4 GHz WIFI/Bluetooth/ISM Antenna

Part #: 100-00152-01

✓ 2400-2500 GHz frequency coverage ✓ 2.4GHz Wi-Fi/Bluetooth/ISM band ✓ Omni-directional whip antenna ✓ IP66 rating ✓ SMA connector

Key electrical specifications:

Parameter	Specification
Frequency	2.4 ~ 2.5 GHz
Antenna element peak gain	2 ± 1 dBi
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Male connector
Dimensions	9.7 x 80 x 11.7 mm

MEA-2400-MM

2.4 GHz ISM Antenna – Magnetic Mount

Part #: 100-00173-01

✓ 2.4 GHz ISM Band ✓ Magnetic Mount ✓ 3.8 dBi WIFI Peak Gain ✓ Customizable Cable and Connector ✓ Ultra rugged housing ✓ Dimensions Ø 54 × 14.7 mm ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak gain	3.8 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount / SMA-Male
Dimensions	Ø 54 × 14.7 mm

MEA-2490-VM

2.4/5.0 GHz ISM Velcro/Adhesive Mount

Part #: 100-00210-01

✓ Velcro/Adhesive Mount ✓ Ground plane independent ✓ Customizable Cable and Connector ✓ Low profile: 71 × 25 × 7 mm

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz
Peak Gain	3.4 dBi / 2.6 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

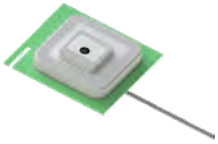
Parameter	Specification
Mounting option / Connector	Velcro/Adhesive Mount / RP SMA Male
Dimensions	71 × 25 × 7 mm

MPA-254-WIFI

WIFI Embedded Antenna – 25mm x 4 mm

Part #: 189-00055-01

2.4GHz & 5.8 GHz Wi-Fi frequency Integrated Ground plane with cable Easy mounting Surface Mount Compact size Advanced Ceramic Material Terminator using IPEX connector



Key electrical specifications:

Parameter	Specification
Frequency	2400-2500 MHz 5700-5870MH
Gain at Zenith	1.0 dBi typ.
Polarization	Linear

Key mechanical specifications:

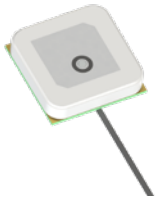
Parameter	Specification
Mounting option / Connector	I-PEX (U.FL)
Dimensions	25 mm x 25 mm x 4 mm

MPA-258-WIFI

WIFI Embedded Antenna – 25mm x 4.5mm

Part #: 189-00051-01

2.4GHz Wi-Fi frequency Integrated Ground plane with cable Easy mounting Surface Mount Compact size Advanced Ceramic Material Ground Plane Dependent Terminator using IPEX connector Dimensions 25 x 25 x 4.5 mm



Key electrical specifications:

Parameter	Specification
Frequency	2450 ± 50 MHz
Gain at Zenith	> 0.5 dBi
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	I-PEX (MHF)
Dimensions	25 x 25 x 4.5 mm

WIFI Terminal Mount Antennas
Screw Mount

MAXWAVE

MAXWAVE™ 4×4 MIMO TRAIN ANTENNA

Part #: 100-00074-01

✓ 4 antenna elements operating simultaneously from 698 MHz to 6000 MHz ✓ Optional active GPS/GLONASS antenna with integrated surge arrestor ✓ DC grounded antenna elements for protection against lightning and high voltage power supply lines ✓ Versatile Design: Maintains performance when mounted on non-metallic surfaces ✓ Railway standard compliant to EN50155 and fire retardant according to EN 45545:2013

Key electrical specifications:

Parameter	Specification
Frequency	4 × 698 – 6000 MHz
Pattern	Omnidirectional
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

NETZ 4IN1

4G LTE/Cellular/WIFI and MIMO 4in1 Antenna

Part #: 100-00142-01

✓ Screw Mount ✓ High Performance ✓ Rated IP67, IP69K and IK09 ✓ Compact Size: 96 x 96 x 94 mm ✓ Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz 2500-2700 MHz
Antenna element peak gain	0.9 dBi 3.3 dBi 4.4 dBi
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	96 x 96 x 94 mm

MEA-SW-700-3800

2G/3G/4G/ISM/WIFI GNSS Antenna

Part #: 189-00046-01

✓ 2G/3G/4G/ISM/Wi-Fi & GNSS frequency bands ✓ N Type connector & seal ring ✓ IP68 rated / UV protected ✓ Rugged industrial design ✓ Ground plane Independent

Key electrical specifications:

Parameter	Specification
Frequency	698-3800 MHz
Antenna element peak gain	4.0 dB
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ N Type connector
Dimensions	Ø 41 x 84 mm

MEA-2400-SMA

2.4 GHz WIFI/Bluetooth/ISM Antenna

Part #: 100-00152-01

✓ 2400-2500 GHz frequency coverage ✓ 2.4GHz Wi-Fi/Bluetooth/ISM band ✓ Omni-directional whip antenna ✓ IP66 rating ✓ SMA connector

Key electrical specifications:

Parameter	Specification
Frequency	2.4 ~ 2.5 GHz
Antenna element peak gain	2 ± 1 dBi
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Male connector
Dimensions	9.7 x 80 x 11.7 mm

MEA-2700-WIFI

Omni Fiberglass WIFI Antenna

Part #: 100-00188-01

✓ High Performance ✓ 698-960 MHz &1710-2690 MHz frequency coverage ✓ Wi-Fi band ✓ Omni-directional antenna ✓ IP67 rating
✓ N-jack connector (N-Plug available) ✓ Easy mounting: Pole/ Wall mount

Key electrical specifications:

Parameter	Specification	
Frequency	698-960 MHz	1710-2170 MHz
Antenna element peak gain	2 dBi	2 dBi
Radiation	Omni-directional	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Pole / Wall Mount/ N-Jack or N-Plug
Dimensions	Ø 49 x 284 mm

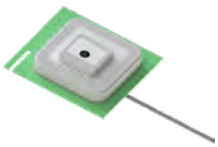
WIFI Terminal Mount Antennas
Surface Mount

MPA-254-WIFI

WIFI Embedded Antenna – 25mm x 4 mm

Part #: 189-00055-01

2.4GHz & 5.8 GHz Wi-Fi frequency Integrated Ground plane with cable Easy mounting Surface Mount Compact size Advanced Ceramic Material Terminator using IPEX connector



Key electrical specifications:

Parameter	Specification
Frequency	2400-2500 MHz 5700-5870MH
Gain at Zenith	1.0 dBi typ.
Polarization	Linear

Key mechanical specifications:

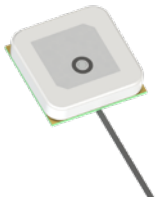
Parameter	Specification
Mounting option / Connector	I-PEX (U.FL)
Dimensions	25 mm x 25 mm x 4 mm

MPA-258-WIFI

WIFI Embedded Antenna – 25mm x 4.5mm

Part #: 189-00051-01

2.4GHz Wi-Fi frequency Integrated Ground plane with cable Easy mounting Surface Mount Compact size Advanced Ceramic Material Ground Plane Dependent Terminator using IPEX connector Dimensions 25 x 25 x 4.5 mm



Key electrical specifications:

Parameter	Specification
Frequency	2450 ± 50 MHz
Gain at Zenith	> 0.5 dBi
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	I-PEX (MHF)
Dimensions	25 x 25 x 4.5 mm

MEA-2400-MM

2.4 GHz ISM Antenna – Magnetic Mount

Part #: 100-00173-01

2.4 GHz ISM Band Magnetic Mount 3.8 dBi WIFI Peak Gain Customizable Cable and Connector Ultra rugged housin
Dimensions Ø 54 × 14.7 mm IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak gain	3.8 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount / SMA-Male
Dimensions	Ø 54 × 14.7 mm

MEA-2400-MM

2.4 GHz ISM Antenna – Magnetic Mount

Part #: 100-00173-01

✓ 2.4 GHz ISM Band ✓ Magnetic Mount ✓ 3.8 dBi WIFI Peak Gain ✓ Customizable Cable and Connector ✓ Ultra rugged housin
✓ Dimensions Ø 54 × 14.7 mm ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak gain	3.8 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnet Mount / SMA-Male
Dimensions	Ø 54 × 14.7 mm

MEA-868-IGG

868 MHZ ISM/GPS/GLONASS Screw Mount

Part #: 100-00251-01

✓ Easy mounting: Screw Mount ✓ Anti-Rotation Mechanism ✓ Low Profile ✓ High Gain ✓ Customizable Cable and Connector
✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	863-870 MHz
	Peak Gain	3.2 dBi
	Polarization	Linear
Cable2	Frequency Range	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
	Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 77.3 x 15 mm

MIMO Antennas

MAXTENA

MIMO Antennas

Our patented & fully EN 50155 Certified Rail 4x4 MIMO LTE antennas are the most advanced solutions available. They ensure the most optimal data aggregation connectivity by providing outstanding RF performances.

As technology capabilities increase, the world is becoming more connected and so does the demand for a smart, and fastest growing transportation market. Maxtena is the industry leader in developing new antenna technologies for vehicle – to – vehicle (V2V) and vehicle – to – anything (V2X) applications. We have developed cutting edge dedicated short-range communications (DSRC) antennas which are vehicle and DSRC transponder agnostic. All DSRC antennas are available for external and internal automotive applications.

At Maxtena, we offers the most advanced train and rail antennas in rugged, low profile form factors.

Applications

- Fleet management
- Smart city
- HD video monitoring
- Commercial transport
- Buses, train, and commercial applications
- Wireless LAN

Discover

Our best seller

Netz 5in1, our LTE-MIMO/WIFI MIMO/GNSS 5in1 Antenna

Netz 5in1

The NETZ 5 in 1 is a MIMO technology solution by Maxtena that combines two LTE antennas, and two WiFi antennas with GNSS. Our 5 in 1 solution is ideal for high data throughput and streaming, video, industrial and IOT applications.

The NETZ 5 in 1 antenna is an omnidirectional, heavy-duty, and waterproof external multi-antenna for use in fleet management, smart cities, and buses, train and commercial transport.

This cutting-edge antenna provides powerful MIMO antenna technology for global coverage LTE and Wi-Fi, plus GPS/GLONASS for constant wireless communication.

It offers a low-profile design with easy mounting and integrated SMA connectors. The antenna is designed with rugged PC+ABS black plastic housing and is ideal for the most demanding environmental challenges.

The standard NETZ 5 in 1 comes with 3 meters RG-174 (GNSS) / CFD-200 (LTE) / CFD-200 (WIFI) and SMA-Male connectors. Cable and connectors are customizable upon request.

Features

- LTE/Wifi/GNSS frequencies
- High performance
- MIMO technology solution
- A low-profile design with easy mounting
- An integrated SMA connectors

Suggested Applications include

- Fleet management
- Commercial transport
- HD video monitoring
- Buses, train, and commercial application
- Smart city

MAXWAVE

MAXWAVE™ 4×4 MIMO TRAIN ANTENNA

Part #: 100-00074-01

✓ 4 antenna elements operating simultaneously from 698 MHz to 6000 MHz ✓ Optional active GPS/GLONASS antenna with integrated surge arrestor ✓ DC grounded antenna elements for protection against lightning and high voltage power supply lines ✓ Versatile Design: Maintains performance when mounted on non-metallic surfaces ✓ Railway standard compliant to EN50155 and fire retardant according to EN 45545:2013

Key electrical specifications:

Parameter	Specification
Frequency	4 × 698 – 6000 MHz
Pattern	Omnidirectional
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

NETZ 5IN1

LTE-MIMO/WIFI-MIMO/GNSS 5in1 Antenna

Part #: 100-00095-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ An integrated SMA connectors

Key electrical specifications:

Parameter	Specification
Frequency	1561 MHz 1575.42 MHz 1602 MHz 698-960 MHz 1710-2170 MHz 2300-2690 MHz
Antenna element peak gain	3 dBi Typ. @1561 MHz 3 dBi Typ. @1575 MHz 3.5 dBi Typ. @1602 MHz 4.0 dBi Typ. @698~960 MHz 6.0 dBi Typ. @1710~2170 MHz 5.0 dBi Typ. @2300~2690 MHz
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Permanent Mount/ SMA connectors
Dimensions	Ø 141.98 x 66.5 mm

NETZ 4IN1

4G LTE/Cellular/WIFI and MIMO 4in1 Antenna

Part #: 100-00142-01

✓ Screw Mount ✓ High Performance ✓ Rated IP67, IP69K and IK09 ✓ Compact Size: 96 x 96 x 94 mm ✓ Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz 2500-2700 MHz
Antenna element peak gain	0.9 dBi 3.3 dBi 4.4 dBi
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	96 x 96 x 94 mm

Netz 5in1-SM

CELLULAR/LTE MIMO, 2.4/5.0 GHz ISM MIMO and GNSS - Screw Mount

Part #: 100-00177-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.3 dBi 4.3 dB
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.4 dBi 3.0 dB 3.0 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.8 dBi 3.0 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.6 dBi 3.1 dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23 dB @ 3 V; 24dB @ 5 V
Radiation pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male / SMA-Male RP
Dimensions	Ø 96 x 90 mm

Netz 5in1-MIMO

CELLULAR/LTE MIMO and GNSS - Screw mount antenna

Part #: 100-00177-01

✓ CELLULAR / LTE & GPS/GLONASS/QZSS/frequencies ✓ Galileo frequency range ✓ Easy mounting: Screw Mount ✓ Heavy Duty antenna ✓ High Performance ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	0.2dBi 3.8dBi 6.0dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.1dBi 3.2dBi -5.6dBi
Cable3	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.5dBi 3.1dBi 5.0dBi
Cable4	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.7dBi 3.0dBi 4.8dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 90 mm

MIMO Antennas

COBRA-LTE700

LTE MIMO & Active GPS High-Performance Transportation Antenna

Part #: 100-00036-01

Robust arrow shape housing for easy roof-top alignment MIMO technology One connector for each application; LTE 1, LTE 2 and GPS No ground plane requirements Single-hole mounting with screws on top for easy installation Use of only one multifunction solution

Key electrical specifications:

Parameter	Specification
Frequency	690 - 960 MHz 1700 - 2200 MHz 1575.42 MHz
Antenna element peak gain	4 dBi (typical)
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

MEA-LTE-MIMO-ISM-SM

Cellular/LTE MIMO and 915 MHz ISM Screw Mount

Part #: 100-00203-01

High Performance Easy mounting: Screw Mount Ground Plane Independent Low profile: 96 x 96 x 90 mm Customized Cable and Connector

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-1.5 dBi 3.2 dBi 6.5 dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.0 dBi 5.0 dBi
Cable3	Frequency	902-928 MHz
	Antenna element peak	0.2 dBi
Bandwidth		Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male
Dimensions	Ø 96 x 90 mm

MEA-5G-MIMO-GGG

5GNR, MIMO and GNSS GPS/GLONASS Screw Mount

Part #: 100-00250-01

Easy mounting: Screw Mount Heavy Duty antenna High Performance Ground Plane Independent Anti-Rotation Mounting Customizable Cable and Connector IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
	Peak Gain	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
	Peak Gain	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	1575.42 MHz /1598-1610 MHz
	Active Gain	23 dB @ 3V / 24 dB @ 5V
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	*Specification*
Mounting option / Connector	Screw Mount/ SMA Male
Dimensions	Ø 96 X 130 mm

MEA-5in1-SMA

5GNR MIMO, 2.4/5.0/6.0 GHZ ISM and GNSS - Screw mount antenna

Part #: 100-00243-01

5GNR,2.4/5.0/6.0 GHz ISM & GPS/GLONASS/QZSS/Galileo frequency coverage Easy mounting: screw mount Heavy duty antenna High performance Ground plane independent Anti-rotation mounting Customizable cable and connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.8 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.6 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

MEA-5G-ISM-MIMO-GNSS

5GNR MIMO, 2.4/5.0 GHz ISM, and GNSS Screw Mount

Part #: 100-00240-01

5GNR , 2.4/5.0 GHz ISM /GPS/GLONASS/QZSS/Galileo - 1575-1606 MHz Easy mounting: screw mount Heavy duty antenna High performance Ground plane independent Anti-rotation mounting Customizable cable and connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	0.3 dBi / 3.6 dBi / 4.7 dBi / 3.8 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	0.7 dBi / 3.7 dBi / 4.6 dBi / 3.6 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.3 dBi / 1.5 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.3 dBi / 2.3 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

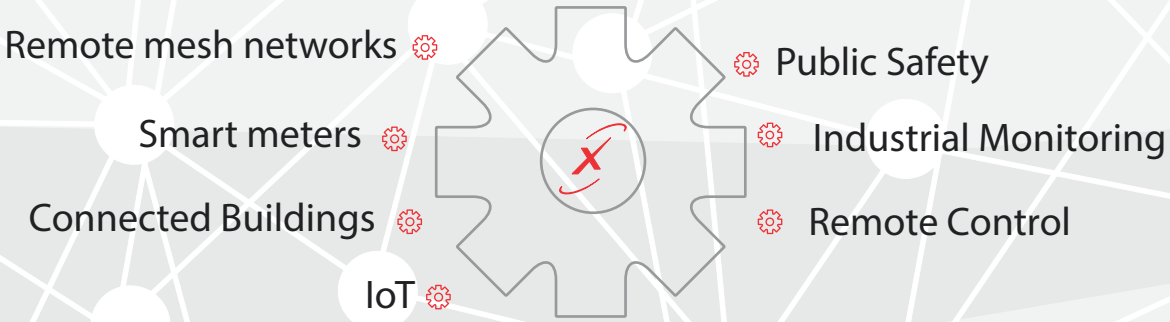
Sigfox/LoRa/ISM Antennas

Sigfox/LoRa/ISM Antennas

We offer a wide selection of SigFox/LoRA/ISM antennas that operate within the 902-928 MHz, 2.4 GHz and 5.7-5.8 bands and include a wide variety of indoor and outdoor antennas.

ISM antennas are ideal for various installations for IOT, smart metering, digital signage, and industrial monitoring. The antennas are available in several different sizes depending on customer requirements. These antennas can be customized with various cable lengths and connectors upon request. All of our external antennas are IP67 rate which allow for the most environmentally challenging installations.

Applications



Discover

Our best seller

MEA-868-915-N
Ultra Rugged Dipole Antenna for SIGFOX/LORA/ISM

MEA-868-915-N

Maxtena releases the MEA-868-915-N an Ultra Rugged Dipole Antenna for SIGFOX/LORA/ISM applications.

MEA-868-915-N is a heavy duty, omni-directional fiberglass base station antenna for outdoor applications operating at 868MHz – 915MHz ISM band. It is ideal for long-distance coverage. This antenna is fully compatible with Sigfox/ LoRA/ISM standards. The MEA-868-915-N is a dipole antenna which is ideal for various installations for IOT, smart metering, digital signage, and industrial monitoring.

The antenna is supplied with a N-Type connector and is light weight. The UV resistant coated fiberglass housing makes this antenna suitable to be mounted in very challenging robust outdoor environments. It can be connected directly to the access point or can be mounted on the wall or customer device via the N-type connector and a pole-mount and wall-mount bracket is included.

The antenna is IP 65 rated.

Features

- Suitable to use in Robust Outdoor Environment
- High performance for increased coverage
- UV protected
- Wall & pole mount
- N-Type Connector
- IP 65 rated

Suggested Applications include

- Smart Metering
- Industrial Monitoring
- Remote Control
- IOT & M2M
- Connected Buildings

MEA-900-L-SM

868/915 MHz ISM/LTE - Screw Mount

Part #: 100-00197-01

✓ 2 in 1 antenna: Cellular/LTE & ISM bands ✓ Ultra-Wide band antenna ✓ High performance ✓ Easy mounting: Screw Mount ✓ Low Profile: 80 x 76 x 13 mm ✓ Ground Plane Independent ✓ IP67 ✓ Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960MHz 1710-2170MHz 2500-2700MHz 868MHz 915MHz
Peak Gain	0.7 dBi@698-960MHz 2.7dBi@1710-2170MHz 4.3 dBi@2500-270MHz 1.2 dBi@ 868MHz 1.7 dBi@91MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

MEA-900-W2-SM

2.4/5.0 GHz & 868/915 MHz ISM - Screw Mount

Part #: 100-00194-01

✓ 2.4/5.0 GHz ISM ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ IP67, IK09, IP69K ✓ Dimensions Ø 80 × 76 × 13 m

Key electrical specifications:

Parameter	Specification
Frequency	868 MHz 915 MHz 2.4 GHz 5.0 GHz
Peak Gain	-0.6 dBi@ 868 MHz -0.2 dBi@915 MHz 4.5 dBi@ 2.4 GHz 3.9 dBi@5.0 GHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 76 × 13 mm

MEA-868-01-SMA

868 MHz ISM- Connector Mount

Part #: 100-00201-01

✓ Small Form Factor ✓ High Performance ✓ Frequency range 863-870 MHz ✓ Low profile: 9 x 48.0mm ✓ RoHS Compliant ✓ Connector Type: SMA Male

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Antenna element peak gain	-1.2 dB
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	9 x 48.0mm

MEA-868-915-SMA

High Performance 868-915 MHz ISM Antenna

Part #: 100-00153-01

✓ Ultra High Performance ✓ LoRa/Sigfox/ ISM Band coverage ✓ ROHS Compliant ✓ Robust Housing IP67 Rated ✓ Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	868-915 MHz
Peak gain	3 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-868-ISM

868 MHz ISM – Screw Mount

Part #: 100-00198-01

✓ 868 MHz ISM LoRa band antenna ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low Profile ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Axial Ratio	-1.4 dB
Polarization	Linear
VSWR	1.1:1

Key mechanical specifications:

Parameter	Specification
Connector	SMA Male
Cable Type	D302 Standard
Dimensions	80 x 76 x 13 mm

MEA-868-SM-LP

868 MHz ISM Antenna – Screw Mount

Part #: 100-00172-01

✓ 868 MHz ISM - 863-870 MHz ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 50 x 50.8 mm ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Peak gain	-0.8 dBi
Polarization	Linear
VSWR	≤ 1.9:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 50 x 50.8 mm

MEA-915-SM-LP

868 MHz ISM Antenna – Screw Mount

Part #: 100-00171-01

915 MHz ISM Screw Mount Ground Plane Dependent High Performance Low Profile Customizable Cable and Connector Dimensions 80 x 74 x 14.7 mm IP67

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Average gain	-3 dB
Polarization	Linear
VSWR	1.5:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male (other available)
Dimensions	80 x 74 x 14.7 mm

MEA-698-3800-SM

Low Profile 5G LTE Antenna

Part #: 100-00132-01

Low profile antenna Covers large frequencies 698-3800 MHz ROHS Compliant High gain for the antenna size PC + ABC housing Exceptional performance over the main 4G/5G bands

Key electrical specifications:

Parameter	Specification
Frequency	698-3800 MHz
Peak gain	5.5 dBi
Radiation pattern	-10 dBi

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	59 x 71mm

MEA-UWB-LTE-90

Ultra-Wideband 4G LTE Antenna

Part #: 100-00139-01

LTE / GSM / CDMA /DCS /PCS / WCDMA / UMTS / HSDPA / GPRS / EDGE /GPS /Wi-Fi Ultra-Wide Band Antenna Ground Plane Independent Hinged 90° termination with SMA(M) Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz
Antenna element peak gain	2.5 / 3.5 dBi
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Male
Dimensions	163 x 22 x 7 mm

Netz 5in1-SM

CELLULAR/LTE MIMO, 2.4/5.0 GHz ISM MIMO and GNSS - Screw Mount

Part #: 100-00177-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.3 dBi 4.3 dB
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.4 dBi 3.0 dB 3.0 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.8 dBi 3.0 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.6 dBi 3.1 dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23 dB @ 3 V; 24dB @ 5 V
Radiation pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male / SMA-Male RP
Dimensions	Ø 96 x 90 mm

Netz 5in1-MIMO

CELLULAR/LTE MIMO and GNSS - Screw mount antenna

Part #: 100-00177-01

✓ CELLULAR / LTE & GPS/GLONASS/QZSS/frequencies ✓ Galileo frequency range ✓ Easy mounting: Screw Mount ✓ Heavy Duty antenna ✓ High Performance ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	0.2dBi 3.8dBi 6.0dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.1dBi 3.2dBi -5.6dBi
Cable3	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.5dBi 3.1dBi 5.0dBi
Cable4	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.7dBi 3.0dBi 4.8dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 90 mm

MEA-2700-LTE

Low Profile LTE Antenna

Part #: 100-00126-01

✓Low profile design for easy installation ✓Heavy duty applications ✓ Can be used for mobile and fixed base applications ✓Compact housing that makes the antenna ideal for indoor or outdoor applications ✓ 698-960/1710-2170/2500-2700 MHz ✓ Small size: 22 x 66mm ✓ROHS compliant

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2300-2700 MHz
Antenna element peak gain	3 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N-Female connector
Dimensions	22 x 66mm

MAXWAVE

MAXWAVE™ 4×4 MIMO Train Antenna

Part #: 100-00074-01

✓ 4 antenna elements operating simultaneously from 698 MHz to 6000 MHz ✓ Optional active GPS/GLONASS antenna with integrated surge arrestor ✓ DC grounded antenna elements for protection against lightning and high voltage power supply lines ✓Versatile Design: Maintains performance when mounted on non-metallic surfaces ✓ Railway standard compliant to EN50155 and fire retardant according to EN 45545:2013

Key electrical specifications:

Parameter	Specification
Frequency	4 × 698 – 6000 MHz
Pattern	Omnidirectional
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

MEA-915-N-60

Ultra-Rugged Dipole Antenna

Part #: 100-00263-01

✓915 MHz ISM LoRa band antenna ✓ High performance for increased coverage ✓ UV protected ✓ N-female Connector

Key electrical specifications:

Parameter	Specification
Frequency	915 MHz
Peak Gain	5.5dBi
Polarization	Vertical

Key mechanical specifications:

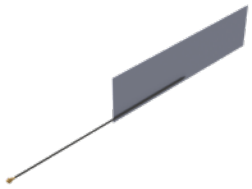
Parameter	Specification
Connector	N-Female
Dimensions	Ø 24.5 x 636 mm

MIA-HB-698-2700

Ultra-Wideband 4G LTE Antenna

Part #: 100-00160-01

✓ 4G LTE 690MHz – 960MHz | 1710MHz – 2700MHz ✓ Ground plane Independent ✓ High Efficiency across all bands ✓ Flexible embedded antenna



Key electrical specifications:

Parameter	Specification
Frequency	698 MHz ~ 960 MHz 1710 MHz ~ 2170 MHz 2500 MHz ~ 2700 MHz
VSWR	< 3.5
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	U.FL connector
Dimensions	120mm x 30mm

MEA-LW2-SM

External Cellular/LTE, ISM and GNSS Antenna – Screw Mount

Part #: 189-00061-01

✓ 2in1 antenna: Cellular/LTE and 2.4/5.0GHz ISM ✓ Wide band antenna ✓ Ground Plane Independent ✓ Rugged housing ✓ IP67 rated ✓ IP69 rated ✓ Low profile: 80 x 74 x 43 mm ✓ Anti-Rotation mounting ✓ Customized Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Peak gain	2.7 dBi 5.1 dBi 5.3 dBi
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male connector
Dimensions	80 x 74 x 43 mm

MEA-2700-UWB-SM

High Performance 4G LTE Antenna

Part #: 100-00141-01

✓ High Performance ✓ 4G LTE Ultra-Wideband Automotive Antenna ✓ ROHS Compliant ✓ Custom Cable and Connector ✓ Rated IP67

Key electrical specifications:

Parameter	Specification
Frequency	698-960/1710-2700 MHz
Peak gain	3 dBi
Radiation pattern	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ N-connector
Dimensions	Ø 48 x 82 mm

MEA-LG-AM

CELLULAR/LTE and GPS/GLONASS Adhesive Mount

Part #: 100-00193-01

✓Cable 1: CELLULAR/LTE - 698-960 MHz; 1710-2170 MHz; 2500-2700 MHz / Cable 2: GPS/GLONASS/QZSS/Galileo - 1575-1606 MHz ✓Adhesive Mount ✓Ground Plane Independent ✓Customizable Cable and Connector Dimensions ✓Low profile: 83 x 35 x 13.3 mm ✓IP67, IP69

Key electrical specifications:

	Parameter	Specification		
Cable1	Frequency	698-960 MHz 2500-2700 MHz	1710-2170 MHz	
	Antenna element peak	-2.7 dB	-3.0 dB	-5.9 dB
	Polarization	Linear		
	VSWR	1.8:1	1.3:1	2.0:1
Cable2	Frequency	1575.42 MHz	1598-1606 MHz	
	Active gain	28 dB @ 2.7 V		
	Polarization	RHCP		
	VSWR	≤ 1.4:1		

Key mechanical specifications:

Parameter	Specification
Connector	Adhesive Mount/ SMA Connector
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MEA-LTE3MM-SMA

CELLULAR / LTE Magnetic Mount

Part #: 100-00185-01

✓ CELLULAR / LTE - 698-960 MHz 1710-2170 MHz, 2500-2700 MHz ✓Magnetic Mount ✓Rugged design ✓High Performance ✓Customizable Cable and Connector ✓Dimensions Ø 54 x 80 mm ✓IP67, IP69K

Key electrical specifications:

Parameter	Specification		
Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz		
Antenna element peak gain	-2.6 dB	-2.9 dB	-3.6 dB
Radiation	Omni-directional		

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic Mount / SMA-Male
Dimensions	Ø 54 x 80

MEA-3L-SMA

Cellular/LTE Antenna – Connector Mount

Part #: 100-00166-01

✓ CELLULAR / LTE frequency ✓Connector Mount ✓Low Profile ✓Wide band Antenna Dimensions 48 x Ø 9 mm ✓ Easy integration ✓High performance

Key electrical specifications:

Parameter	Specification	
Frequency	698-960 MHz	1710-2170 MHz
Efficiency	62.4%	62.4%
Polarization	Linear	
Average gain	-2.1 dB	2.1 dB
Bandwidth	700/850/900 MHz | 1700/1800/1900/2100 MHz	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	Ø 9 x 38 mm

MEA-LGG-AM

Cellular/LTE and GPS/GLONASS Antenna – Adhesive Mount

Part #: 100-00163-01

✓ 2in 1 antenna (CELLULAR/LTE,GPS/GLONASS/QZSS/Galileo) ✓ Adhesive Mount ✓ High Performance ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions 150.5 x 42 x 15.3 mm ✓ IP67, IP69

Key electrical specifications:

	Parameter	Specification		
Cable1	Frequency	698-960 MHz	1710-2170 MHz	2500-2700 MHz
	Antenna element peak	3.4 dBi	3.5 dBi	3.9 dBi
	Efficiency	76%	69%	76%
	VSWR	1.7:1	1.4:1	1.5:1
Cable2	Frequency	1575.42 MHz	1598-1606 MHz	
	Active gain	28 dB @ 2.7 V		
	Polarization	RHCP		
	VSWR	≤ 1.4:1		

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount / SMA Connector
Dimensions	150.5 x 42 x 15.3 mm

MEA-3-GGL

GPS/GLONASS/LTE Antenna & 2G/3G LTE SOLUTION

Part #: 189-00053-01

✓ Covers GNSS & LTE Bands ✓ 2 in 1 Low Profile Antenna ✓ Rugged IP67 ✓ Customizable Cables and Connectors ✓ Small Size ✓ Easy Magnet Mounting ✓ Quality Textured Covert Design

Key electrical specifications:

	Parameter	Specification		
GNSS	Frequency	1575.42 MHz		1602 MHz
	Polarization	Linear		
	Polarization	3.0 dBi Typ.		3.5 dBi Typ
	VSWR	≤ 2.0:1		
LNA	Frequency	1575.42 MHz		1602 MHz
	Power Consumption	9 Typ. mA @3.3V		
	Antenna Gain	28 dB Typ. / 25 dB Min		
	VSWR	≤ 2.0:1		
LTE	Frequency	698-960 MHz	1710-2170 MHz	2500-2700 MHz
	Antenna element peak	1.5 dBi	0.5 dBi	0.5 dBi
	Efficiency	25%	30%	30%
	VSWR	≤ 5.5	≤ 4.0	≤ 4.0

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Foam adhesive / SMA, FAKRA or custom
Dimensions	(L) 55 x (W) 55 x (H) 20 mm

MEA-LTE-MIMO-ISM-SM

Cellular/LTE MIMO and 915 MHz ISM Screw Mount

Part #: 100-00203-01

✓ High Performance ✓ Easy mounting: Screw Mount ✓ Ground Plane Independent ✓ Low profile: 96 x 96 x 90 mm ✓ Customized Cable and Connector

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-1.5 dBi 3.2 dBi 6.5 dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.0 dBi 5.0 dBi
Cable3	Frequency	902-928 MHz
	Antenna element peak	0.2 dBi
Bandwidth		Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male
Dimensions	Ø 96 x 90 mm

NETZ 4IN1

4G LTE/Cellular/WIFI and MIMO 4in1 Antenna

Part #: 100-00142-01

✓ Screw Mount ✓ High Performance ✓ Rated IP67, IP69K and IK09 ✓ Compact Size: 96 x 96 x 94 mm ✓ Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz 2500-2700 MHz
Antenna element peak gain	0.9 dBi 3.3 dBi 4.4 dBi
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	96 x 96 x 94 mm

MEA-UWB-LTE-90

Ultra-Wideband 4G LTE Antenna

Part #: 100-00139-01

✓ LTE / GSM / CDMA /DCS /PCS / WCDMA / UMTS / HSDPA / GPRS / EDGE /GPS /Wi-Fi ✓ Ultra-Wide Band Antenna ✓ Ground Plane Independent ✓ Hinged 90° termination with SMA(M) Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz
Antenna element peak gain	2.5 / 3.5 dBi
Radiation	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA Male
Dimensions	163 x 22 x 7 mm

MEA-2500-LTE-MIMO

CELLULAR/LTE MIMO Screw Mount

Part #: 100-00211-01

✓ Wide-band antenna ✓ Easy mounting: Screw Mount ✓ Anti-rotation mounting ✓ High Performance ✓ Customizable Cable and Connector ✓ Dimensions: Ø 60 x 69 mm ✓ IP67, IP69, IK09 ✓ Heavy duty antenna.

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.8 dBi 3.6 dBi 4.1 dB
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.6 dBi 2.8 dBi 3.0 dBi
Radiation pattern		Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 60 x 69 mm

MEA-2500-SM

CELLULAR/LTE MIMO Screw Mount

Part #: 100-00212-01

✓ CELLULAR / LTE (698-960 MHz, 1710-2170 MHz, and 2500-2700 MHz) ✓ Easy mounting: Screw Mount ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low profile : 80 x 74 x 14.7 mm ✓ IP67

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-2.7 dB -3.0 dB -5.9 dB
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.4 dBi 2.2 dBi 4.4 dBi
Radiation pattern		Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	80 x 74 x 14.7 mm

COBRA-LTE700

LTE MIMO & Active GPS High-Performance Transportation Antenna

Part #: 100-00036-01

✓ Robust arrow shape housing for easy roof-top alignment ✓ MIMO technology ✓ One connector for each application; LTE 1, LTE 2 and GPS ✓ No ground plane requirements ✓ Single-hole mounting with screws on top for easy installation ✓ Use of only one multifunction solution

Key electrical specifications:

Parameter	Specification
Frequency	690 - 960 MHz 1700 - 2200 MHz 1575.42 MHz
Antenna element peak gain	4 dBi (typical)
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

MEA-5800-MM

5GNR Magnetic Mount Antenna

Part #: 100-00200-01

5GNR Frequency range (617-960 MHz, 1427-2690 MHz, 3300-5000 MHz, 5150-5925 MHz) Easy mounting: Magnetic Mount High Performance Customizable Cable and Connector Low profile: Ø 31 x 109 mm

Key electrical specifications:

Parameter	Specification
Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
Antenna element peak gain	1.0 dBi @ 617-960 MHz 2.9 dBi @1427-2690 MHz 2.5 dBi @3300-5000 MHz 0.4 dBi @5150-5925 MHz
Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	105.1 x 30.1 x 6.7 mm

MEA-DSRC-02Z

External Mount DSRC Antenna

Part #: 100-00089-01

External mount DSRC antenna for 5850 - 5950MHz Different mounting options available IPX5 SMA & N-Type or customer specified connector

Key electrical specifications:

Parameter	Specification
Frequency	5850 - 5950 MHz
Antenna passive peak gain	5.0 dBi Typ. @ 5850-5950 MHz
Impendence	50Ω

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N-Type or customer specified
Dimensions	120 x 120 x 45 mm

MEA-DSRC-01P

External Mount DSRC Antenna

Part #: Part #: 100-00087-01

External mount DSRC antenna for 5850 - 5950MHz IPX7 SMA &N-Type or customer specified connector Foam Adhesive 30 cm cable length RG-174

Key electrical specifications:

Parameter	Specification
Frequency	5850 - 5950 MHz
Antenna passive peak gain	5.0 dBi Typ. @ 2300-2700 MHz
Impendence	50Ω

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA / N-Type or customer specied
Dimensions	105.1 x 30.1 x 6.7 mm

MEA-DSRC-03Z

External Mount DSRC Antenna

Part #: 100-00088-01

External mount DSRC antenna for 5850 - 5950MHz IPX7 N-Type connector

Key electrical specifications:

Parameter	Specification
Frequency	5850 - 5950 MHz
Antenna passive peak gain	5.0 dBi Typ. @ 2300-2700 MHz
Impendence	50Ω

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N-Type or customer specified
Dimensions	Ø 20 x 215 mm

MEA-2410-ISM

2.4/5.0 GHz ISM Screw Mount Antenna

Part #: 100-00196-01

Screw Mount Anti-Rotation Mechanism Ground Plane Independent Customizable Cable and Connector IP67 IK09 IP69K

Key electrical specifications:

Parameter	Specification	
Frequency	2410-2490 MHz	4920-5925 MHz
Peak Gain	2.6 dBi	4.4 dBi
Radiation Pattern	Omni-directional	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ SMA connector
Dimensions	Ø 77.3 × 65.5 mm

MEA-868-SM-50

868 MHz ISM Screw Mount

Part #: 189-00064-01

Screw Mount Low Profile Customized Cable and Connector Dimensions 77.3 × 15 mm IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Peak Gain	-0.8 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ SMA connector
Dimensions	Ø 77.3 x 15 mm

MEA-868-IGG

868 MHZ ISM/GPS/GLONASS Screw Mount

Part #: 100-00251-01

✓Easy mounting: Screw Mount ✓Anti-Rotation Mechanism ✓Low Profile ✓ High Gain ✓Customizable Cable and Connector ✓IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	863-870 MHz
	Peak Gain	3.2 dBi
	Polarization	Linear
Cable2	Frequency Range	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
	Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 77.3 x 15 mm

MEA-5in1-SMA

5GNR MIMO, 2.4/5.0/6.0 GHZ ISM and GNSS - Screw mount antenna

Part #: 100-00243-01

✓5GNR,2.4/5.0/6.0 GHz ISM & GPS/GLONASS/QZSS/Galileo frequency coverage ✓Easy mounting: screw mount ✓Heavy duty antenna ✓High performance ✓Ground plane independent ✓ Anti-rotation mounting ✓ Customizable cable and connector ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.8 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.6 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

MEA-169-ISM-GG

169 MHZ ISM-ERMES And GPS/GLONASS Screw Mount

Part #: 100-00242-01

Easy mounting: Magnetic/Adhesive Mount Iridium Certified Low Profile High Performance Pre-Filtered GNSS Ground Plane Independent Customizable Cable and Connector Dimensions 89 × 76 × 27/30 mm IP67, IP69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	169.4-169.8 MHz
	Antenna element peak	0 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
	Active Gain	26 dB @ 3 V / 27 dB @ 5 V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 60 x 97 mm

MEA-LTE-ISM-GNSS-TETRA

CELLULAR/LTE, 2.4/5.0 GHZ ISM, TETRA and GNSS - Screw Mount Antenna

Part #: 100-00243-01

CELLULAR / LTE,TETRA/UHF, ISM, and GPS/GLONASS/QZSS/Galileo frequency Easy mounting: Screw Mount Heavy duty antenna High performance Anti-rotation mounting Customizable cable and connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.9 dBi / 3.0 dBi / 2.9 dBi
Cable2	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi
Cable3	Frequency	380-470 MHz
	Antenna element peak	2.1 dBi
Cable4	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	28 dB @ 2.7 V
	Radiation pattern	Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

MEA-433-01-SMA

433 MHz ISM Connector Mount

Part #: 100-00229-01

Small Form Factor High Performance Frequency range 433-435MHz RoHS Compliant

Key electrical specifications:

Parameter	Specification
Frequency	433-435 MHz
Peak Gain	-0.6 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA connector
Dimensions	Ø 9 x 48 mm

MEA-2410-CM

2.4 GHz ISM Ultra-Wideband Antenna

Part #: 100-00235-01

✓ Easy Mounting: Connector Mount ✓ Ground Plane Independent ✓ Hinged Connector ✓ High Efficiency

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak Gain	1.5 dB
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	Ø 10 x 113 mm

MEA-433-IGG

433 MHz ISM/GPS/GLONASS Screw Mount

Part #: 100-00239-01

✓ ISM and GPS/GLONASS ✓ Easy mounting: Screw Mount ✓ Customizable Cable and Connector ✓ IP67, IP69K ✓ Low weight 166g

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	433-435 MHz
	Antenna element peak	-0.4 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
	Active Gain	26 @ 3V / 27dB @ 5V
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 63 x 186.5 mm

MEA-2410-FAKRA

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00279-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	2.6 dBi/ -0.3 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Fakra Beige Female
Dimensions	Ø12.5 x 44.5 mm

MEA-5G-ISM-MIMO-GNSS

5GNR MIMO, 2.4/5.0 GHz ISM, and GNSS Screw Mount

Part #: 100-00240-01

✓ 5GNR , 2.4/5.0 GHz ISM /GPS/GLONASS/QZSS/Galileo - 1575-1606 MHz ✓ Easy mounting: screw mount ✓ Heavy duty antenna ✓ High performance ✓ Ground plane independent ✓ Anti-rotation mounting ✓ Customizable cable and connector ✓ IP67, IP69, IK09

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	0.3 dBi / 3.6 dBi / 4.7 dBi / 3.8 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	0.7 dBi / 3.7 dBi / 4.6 dBi / 3.6 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.3 dBi / 1.5 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.3 dBi / 2.3 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

MEA-2410-WIFI

Dual Band Wifi ISM Antenna

Part #: 100-00280-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	2.8 dBi/ 2.4 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	Ø15.7 x 58.2 mm

MEA-4920-ISM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00279-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	3.1 dBi / -0.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	Ø12.5 x 34.7 mm

ISM Antennas
External

MEA-4920-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00276-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	4.0 dBi / 5.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	53 x 10 x 18 mm

MEA-2410-SMA

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00275-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	4.0 dBi / 5.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	Ø 10 x 56 mm

MEA-LGI-SM

CELLULAR/LTE, ISM and GNSS Screw Mount

Part #: 189-00058-01

✓ Ultra-Wide Band Antenna ✓ High Performance ✓ Screw Mount ✓ Anti-Rotation Mounting ✓ Ground plane independent ✓ Customizable ✓ Cable and Connector ✓ Low profile 80 × 74 × 25.6 mm ✓ IP69,IP67

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz / 1710-2170 MHz 2500-2700 MHz
	Peak Gain	2.7 dBi / 5.1 dBi / 5.3 dBi
Cable2	Frequency	2410-2490 MHz / 4920-5925 MHz
	Peak Gain	3.4 dBi / 3.2 dBi
Cable3	Frequency	1575.42 MHz /1602 MHz
	Active Gain	28 dB @ 2.7 / 28 dB @ 2.7
Radiation Pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ SMA Male
Dimensions	89 × 76 × 25.6 mm

MEA-915-SW-SMA

915 MHz ISM Screw Mount

Part #: 100-00182-01

✓LoRa/ Sigfox/ NB-IOT ✓Screw Mount ✓Anti-Rotation Mechanism ✓Ground plane independent ✓ Customizable Cable and Connector ✓Low Profile ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Peak Gain	4.0 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 9 x 48 mm

MEA-2490-VM

2.4/5.0 GHz ISM Velcro/Adhesive Mount

Part #: 100-00210-01

✓Velcro/Adhesive Mount ✓Ground plane independent ✓Customizable Cable and Connector ✓ Low profile: 71 × 25 × 7 mm

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz
Peak Gain	3.4 dBi / 2.6 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Velcro/Adhesive Mount / RP SMA Male
Dimensions	71 × 25 × 7 mm

MEA-7000-WIFI

2.4/5.0/6.0 GHZ ISM Connector Mount

Part #: 100-00299-01

✓2.4/5.0/6.0 GHz ISM MHz ✓Connector Mount ✓Wifi 6E Antenna ✓Low profile ✓ High efficiency ✓Hinged Connector ✓Fakra-I-Beige Connector ✓ Dimensions 81 × 14 × 10 mm

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz 5925-7125 MHz
Peak Gain	2.0 dBi / 1.3 dBi / 2.0 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	81 × 14 × 10 mm

MEA-5900-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00300-01

✓2.4/5.0/6.0 GHz ISM ✓Wifi 6E Antenna ✓High Gain ✓ Ground plane independent ✓Hinged Connector

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz
Peak Gain	4.1 dBi / 3.9 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	135 × 19 × 10 mm

MEA-5000-LP-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00298-01

✓2.4/5.0 GHz ISM ✓ Connector Mount ✓Low profile ✓High efficiency

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz
Peak Gain	3.0 dBi / 1.0 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	Ø 10 × 71 mm

MEA-2400-CM

2.4 GHz ISM Connector Mount

Part #: 100-00278-01

✓ 2.4 GHz ISM ✓Connector Mount ✓Low profile ✓Dimensions Ø 9.5 × 56 mm

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak Gain	3.6 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	Ø 9.5×56mm

MEA-2410-LP-CM

2.4 GHz ISM Connector Mount

Part #: 100-00274-01

2.4 GHz ISM Connector Mount Low profile High efficiency

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak Gain	3.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	53 ×10 × 18 mm

MPA-716-868

868 MHz ISM PASSIVE PATCH

Part #: 189-00069-01

868 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material

Key electrical specifications:

Parameter	Specification
Frequency	865 MHz - 867MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MPA-716-915

915 MHz ISM PASSIVE PATCH

Part #: 189-00068-01

915 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material

Key electrical specifications:

Parameter	Specification
Frequency	915 MHz ± 1 MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

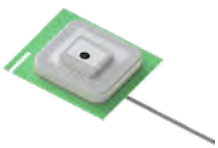
Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MPA-254-WIFI

WIFI Embedded Antenna – 25mm x 4 mm

Part #: 189-00055-01

2.4GHz & 5.8 GHz Wi-Fi frequency · Integrated Ground plane with cable · Easy mounting · Surface Mount · Compact size · Advanced Ceramic Material · Terminator using IPEX connector



Key electrical specifications:

Parameter	Specification
Frequency	2400-2500 MHz 5700-5870MH
Gain at Zenith	1.0 dBi typ.
Polarization	Linear

Key mechanical specifications:

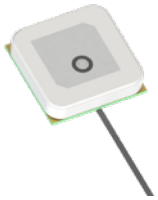
Parameter	Specification
Mounting option / Connector	I-PEX (U.FL)
Dimensions	25 mm x 25 mm x 4 mm

MPA-258-WIFI

WIFI Embedded Antenna – 25mm x 4.5mm

Part #: 189-00051-01

✓ 2.4GHz Wi-Fi frequency ✓ Integrated Ground plane with cable ✓ Easy mounting ✓ Surface Mount ✓ Compact size ✓ Advanced Ceramic Material ✓ Ground Plane Dependent ✓ Terminator using IPEX connector ✓ Dimensions 25 x 25 x 4.5 mm



Key electrical specifications:

Parameter	Specification
Frequency	2450 ± 50 MHz
Gain at Zenith	> 0.5 dBi
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	I-PEX (MHF)
Dimensions	25 x 25 x 4.5 mm

MEA-2400-AM

2.4 GHz ISM Adhesive Mount

Part #: 100-00173-02

✓ 2.4 GHz ISM Band ✓ Adhesive Mount ✓ 3.8 dBi WIFI Peak Gain ✓ Customizable Cable and Connector ✓ Ultra rugged housing ✓ Dimensions Ø 54 × 14.7 mm ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak gain	3.8 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount / Fakra Beige Female
Dimensions	Ø 54 × 14.7 mm

MEA-868-01-SMA

868 MHz ISM- Connector Mount

Part #: 100-00201-01

Small Form Factor High Performance Frequency range 863-870 MHz Low profile: 9 x 48.0mm RoHS Compliant Connector Type: SMA Male

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Antenna element peak gain	-1.2 dB
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-915-01-SMA

915 MHz ISM Connector Mount

Part #: 100-00159-01

Small Form Factor High Performance Frequency range 900 - 1000 MHz Low profile: 9 x 48.0mm RoHS Compliant Connector Type: SMA Male

Key electrical specifications:

Parameter	Specification
Frequency	915 MHz
Antenna element peak gain	3.3 dBi
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-868-915-SMA

High Performance 868-915 MHz ISM Antenna

Part #: 100-00153-01

Ultra High Performance LoRa/Sigfox/ ISM Band coverage ROHS Compliant Robust Housing IP67 Rated Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	868-915 MHz
Peak gain	3 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-868-SM

High Performance 868 MHz ISM Antenna

Part #: 100-00154-01

868MHz frequencies IP67 rated High gain & efficiency Custom cable & connector options

Key electrical specifications:

Parameter	Specification
Frequency	865-868MHz
Peak gain	3-5 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-915-SM

High Performance 915 MHz ISM Antenna

Part #: 100-00156-01

915MHz frequencies IP67 rated High gain & efficiency Custom cable & connector options

Key electrical specifications:

Parameter	Specification
Frequency	902-928MHz
Peak gain	3-5 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-LGI-SMA

5GNR & Iridium GNSS Antenna – Screw Mount

Part #: 189-00065-01

3in1 antenna: 5GNR, Iridium and GNSS Ultra-Wide band antenna High performance Easy mounting: Screw Mount
Anti-Rotation Mounting Optimized for Iridium network Ground Plane Independent Customizable Cable and Connector
Low profile 80 × 74 × 25.6 mm IP69

Key electrical specifications:

Parameter	Specification	
Frequency	617-960 MHz 3300-5000 MHz 1616 - 1627 MHz	1427-2690 MHz 5150-5925 MHz 1559 - 1608 MHz
Antenna element peak gain	2.3 dBi 2.6 dBi 5.2 dBic	5.1 dBi 2.7dBi 28 dB @ 2.7 V
Polarization	Linear	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	80 × 74 × 25.6 mm

MEA-868-915-N

Ultra-Rugged Dipole Antenna

Part #: 189-00045-01

✓ SigFox/LoRA/ISM (868MHz – 915MHz) ✓ High performance for increased coverage ✓ UV protected ✓ N-Type Connector Rated IP65

Key electrical specifications:

Parameter	Specification
Frequency	868-915 MHz
Peak gain	6 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N - Connector
Dimensions	ø 23 x 795mm

MEA-LW2-SM

External Cellular/LTE, ISM and GNSS Antenna – Screw Mount

Part #: 189-00061-01

✓ 2in1 antenna: Cellular/LTE and 2.4/5.0GHz ISM ✓ Wide band antenna ✓ Ground Plane Independent ✓ Rugged housing ✓ IP67 rated ✓ IP69 rated ✓ Low profile: 80 x 74 x 43 mm ✓ Anti-Rotation mounting ✓ Customized Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Peak gain	2.7 dBi 5.1 dBi 5.3 dBi
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male connector
Dimensions	80 x 74 x 43 mm

MEA-868-ISM

868 MHz ISM SCREW MOUNT

Part #: 100-00198-01

✓ 868 MHz ISM LoRa band antenna ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low Profile ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Axial Ratio	-1.4 dB
Polarization	Linear
VSWR	1.1:1

Key mechanical specifications:

Parameter	Specification
Connector	SMA Male
Cable Type	D302 Standard
Dimensions	80 x 76 x 13 mm

MEA-915-ISM

915 MHz ISM Screw Mount

Part #: 100-00184-01

915 MHz ISM LoRa band antenna ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low Profile ✓ Dimensions Ø 54 x 80 mm ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Axial Ratio	RHCP
Polarization	Vertical
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male connector
Dimensions	80 x 74 x 25.6 mm

MEA-868-SM-LP

868 MHz ISM Antenna – Screw Mount

Part #: 100-00172-01

868 MHz ISM - 863-870 MHz ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 50 x 50.8 mm ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Peak gain	-0.8 dBi
Polarization	Linear
VSWR	≤ 1.9:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 50 x 50.8 mm

MEA-915-SM-LP

868 MHz ISM Antenna – Screw Mount

Part #: 100-00171-01

915 MHz ISM ✓ Screw Mount ✓ Ground Plane Dependent ✓ High Performance ✓ Low Profile ✓ Customizable Cable and Connector Dimensions 80 x 74 x 14.7 mm ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Average gain	-3 dB
Polarization	Linear
VSWR	1.5:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male (other available)
Dimensions	80 x 74 x 14.7 mm

MEA-868-ISM

868 MHz ISM SCREW MOUNT

Part #: 100-00198-01

915 MHz ISM - 902-928 MHz · LoRa/ Sigfox/ NB-IOT · Screw Mount · Anti-Rotation Mechanism · Ground Plane Independent · Customizable Cable and Connector · Low Profile Dimensions Ø 9 x 48 mm · IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Peak gain	4.0 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-LTE-MIMO-ISM-SM

Cellular/LTE MIMO and 915 MHz ISM Screw Mount

Part #: 100-00203-01

High Performance · Easy mounting: Screw Mount · Ground Plane Independent · Low profile: 96 x 96 x 90 mm · Customized Cable and Connector

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-1.5 dBi 3.2 dBi 6.5 dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.0 dBi 5.0 dBi
Cable3	Frequency	902-928 MHz
	Antenna element peak	0.2 dBi
Bandwidth		Omni-Directional

Key mechanical specifications:

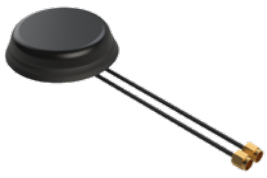
Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male
Dimensions	Ø 96 x 90 mm

MEA-868-IGG

868 MHZ ISM/GPS/GLONASS Screw Mount

Part #: 100-00251-01

Easy mounting: Screw Mount · Anti-Rotation Mechanism · Low Profile · High Gain · Customizable Cable and Connector · IP67, IP69, IK09



Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	863-870 MHz
	Peak Gain	3.2 dBi
	Polarization	Linear
Cable2	Frequency Range	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
	Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 77.3 x 15 mm

MEA-900-L-SM

868/915 MHz ISM/LTE - Screw Mount

Part #: 100-00197-01

✓ 2 in 1 antenna: Cellular/LTE & ISM bands ✓ Ultra-Wide band antenna ✓ High performance ✓ Easy mounting: Screw Mount ✓ Low Profile: 80 x 76 x 13 mm ✓ Ground Plane Independent ✓ IP67 ✓ Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960MHz 1710-2170MHz 2500-2700MHz 868MHz 915MHz
Peak Gain	0.7 dBi@698-960MHz 2.7dBi@1710-2170MHz 4.3 dBi@2500-270MHz 1.2 dBi@ 868MHz 1.7 dBi@91MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

MEA-900-W2-SM

2.4/5.0 GHz & 868/915 MHz ISM - Screw Mount

Part #: 100-00194-01

✓ 2.4/5.0 GHz ISM ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ IP67, IK09, IP69K ✓ Dimensions Ø 80 × 76 × 13 m

Key electrical specifications:

Parameter	Specification
Frequency	868 MHz 915 MHz 2.4 GHz 5.0 GHz
Peak Gain	-0.6 dBi@ 868 MHz -0.2 dBi@915 MHz 4.5 dBi@ 2.4 GHz 3.9 dBi@5.0 GHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 76 × 13 mm

MEA-915-N-60

Ultra-Rugged Dipole Antenna

Part #: 100-00263-01

✓ 915 MHz ISM LoRa band antenna ✓ High performance for increased coverage ✓ UV protected ✓ N-female Connector

Key electrical specifications:

Parameter	Specification
Frequency	915 MHz
Peak Gain	5.5dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Connector	N-Female
Dimensions	Ø 24.5 x 636 mm

MEA-915-SW-SMA

915 MHz ISM Screw Mount

Part #: 100-00182-01

LoRa/ Sigfox/ NB-IOT · Screw Mount · Anti-Rotation Mechanism · Ground plane independent · Customizable Cable and Connector · Low Profile · IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Peak Gain	4.0 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 9 x 48 mm

MEA-2490-VM

2.4/5.0 GHz ISM Velcro/Adhesive Mount

Part #: 100-00210-01

Velcro/Adhesive Mount · Ground plane independent · Customizable Cable and Connector · Low profile: 71 × 25 × 7 mm

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz
Peak Gain	3.4 dBi / 2.6 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Velcro/Adhesive Mount / RP SMA Male
Dimensions	71 × 25 × 7 mm

MEA-5in1-SMA

5GNR MIMO, 2.4/5.0/6.0 GHZ ISM and GNSS - Screw mount antenna

Part #: 100-00243-01

5GNR,2.4/5.0/6.0 GHz ISM & GPS/GLONASS/QZSS/Galileo frequency coverage · Easy mounting: screw mount · Heavy duty antenna · High performance · Ground plane independent · Anti-rotation mounting · Customizable cable and connector · IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.8 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.6 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

MEA-169-ISM-GG

169 MHZ ISM-ERMES And GPS/GLONASS Screw Mount

Part #: 100-00242-01

Easy mounting: Magnetic/Adhesive Mount Iridium Certified Low Profile High Performance Pre-Filtered GNSS Ground Plane Independent Customizable Cable and Connector Dimensions 89 × 76 × 27/30 mm IP67, IP69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	169.4-169.8 MHz
	Antenna element peak	0 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
	Active Gain	26 dB @ 3 V / 27 dB @ 5 V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 60 x 97 mm

MEA-433-01-SMA

868 MHz ISM Connector Mount

Part #: 100-00229-01

Small Form Factor High Performance Frequency range 433-435MHz RoHS Compliant

Key electrical specifications:

Parameter	Specification
Frequency	433-435 MHz
Peak Gain	-0.6 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA connector
Dimensions	Ø 9 x 48 mm

MEA-433-IGG

433 MHz ISM/GPS/GLONASS Screw Mount

Part #: 100-00239-01

ISM and GPS/GLONASS Easy mounting: Screw Mount Customizable Cable and Connector IP67, IP69K Low weight 166g

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	433-435 MHz
	Antenna element peak	-0.4 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
	Active Gain	26 @ 3V / 27dB @ 5V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 63 x 186.5 mm

MEA-2410-CM

2.4 GHz ISM Ultra-Wideband Antenna

Part #: 100-00235-01

✓ Easy Mounting: Connector Mount ✓ Ground Plane Independent ✓ Hinged Connector ✓ High Efficiency

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak Gain	1.5 dB
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	Ø 10 x 113 mm

MEA-2410-WIFI

Dual Band Wifi ISM Antenna

Part #: 100-00280-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	2.8 dBi/ 2.4 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	Ø15.7 x 58.2 mm

MEA-4920-ISM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00279-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	3.1 dBi / -0.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	Ø12.5 x 34.7 mm

MEA-2410-FAKRA

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00279-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	2.6 dBi/ -0.3 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Fakra Beige Female
Dimensions	Ø12.5 x 44.5 mm

MEA-4920-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00276-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	4.0 dBi / 5.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	53 x 10 x 18 mm

MEA-2400-AM

2.4 GHz ISM Adhesive Mount

Part #: 100-00173-02

✓ 2.4 GHz ISM Band ✓ Adhesive Mount ✓ 3.8 dBi WIFI Peak Gain ✓ Customizable Cable and Connector ✓ Ultra rugged housin
✓ Dimensions Ø 54 × 14.7 mm ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak gain	3.8 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount / Fakra Beige Female
Dimensions	Ø 54 × 14.7 mm

MEA-7000-WIFI

2.4/5.0/6.0 GHZ ISM Connector Mount

Part #: 100-00299-01

✓2.4/5.0/6.0 GHz ISM MHz ✓Connector Mount ✓Wifi 6E Antenna ✓Low profile ✓ High efficiency ✓Hinged Connector ✓Fakra-I-Beige Connector ✓ Dimensions 81 × 14 × 10 mm

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz 5925-7125 MHz
Peak Gain	2.0 dBi / 1.3 dBi / 2.0 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	81 × 14 × 10 mm

MEA-5900-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00300-01

✓2.4/5.0/6.0 GHz ISM ✓Wifi 6E Antenna ✓High Gain ✓ Ground plane independent ✓Hinged Connector

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz
Peak Gain	4.1 dBi / 3.9 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	135 × 19 × 10 mm

MEA-5000-LP-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00298-01

✓2.4/5.0 GHz ISM ✓ Connector Mount ✓Low profile ✓High efficiency

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz / 4920-5925 MHz
Peak Gain	3.0 dBi / 1.0 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	Ø 10 × 71 mm

MEA-2400-CM

2.4 GHz ISM Connector Mount

Part #: 100-00278-01

✓ 2.4 GHz ISM ✓ Connector Mount ✓ Low profile ✓ Dimensions Ø 9.5 × 56 mm

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak Gain	3.6 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	Ø 9.5×56mm

MEA-2410-LP-CM

2.4 GHz ISM Connector Mount

Part #: 100-00274-01

✓ 2.4 GHz ISM ✓ Connector Mount ✓ Low profile ✓ High efficiency

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak Gain	3.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

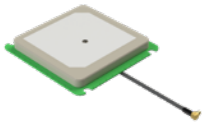
Parameter	Specification
Mounting option / Connector	Connector Mount
Dimensions	53 ×10 × 18 mm

MPA-716-868

868 MHz ISM PASSIVE PATCH

Part #: 189-00069-01

868 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material



Key electrical specifications:

Parameter	Specification
Frequency	865 MHz - 867MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

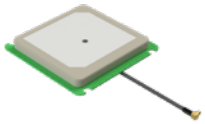
Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MPA-716-915

915 MHz ISM PASSIVE PATCH

Part #: 189-00068-01

915 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material



Key electrical specifications:

Parameter	Specification
Frequency	915 MHz ± 1 MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MEA-868-01-SMA

868 MHz ISM- Connector Mount

Part #: 100-00201-01

Small Form Factor High Performance Frequency range 863-870 MHz Low profile: 9 x 48.0mm RoHS Compliant Connector Type: SMA Male

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Antenna element peak gain	-1.2 dB
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-915-01-SMA

915 MHz ISM Connector Mount

Part #: 100-00159-01

Small Form Factor High Performance Frequency range 900 - 1000 MHz Low profile: 9 x 48.0mm RoHS Compliant Connector Type: SMA Male

Key electrical specifications:

Parameter	Specification
Frequency	915 MHz
Antenna element peak gain	3.3 dBi
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-868-915-SMA

High Performance 868-915 MHz ISM Antenna

Part #: 100-00153-01

Ultra High Performance LoRa/Sigfox/ ISM Band coverage ROHS Compliant Robust Housing IP67 Rated Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	868-915 MHz
Peak gain	3 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-868-SM

High Performance 868 MHz ISM Antenna

Part #: 100-00154-01

868MHz frequencies IP67 rated High gain & efficiency Custom cable & connector options

Key electrical specifications:

Parameter	Specification
Frequency	865-868MHz
Peak gain	3-5 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-915-SM

High Performance 915 MHz ISM Antenna

Part #: 100-00156-01

915MHz frequencies IP67 rated High gain & efficiency Custom cable & connector options

Key electrical specifications:

Parameter	Specification
Frequency	902-928MHz
Peak gain	3-5 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-LGI-SMA

5GNR & Iridium GNSS Antenna – Screw Mount

Part #: 189-00065-01

3in1 antenna: 5GNR, Iridium and GNSS Ultra-Wide band antenna High performance Easy mounting: Screw Mount
Anti-Rotation Mounting Optimized for Iridium network Ground Plane Independent Customizable Cable and Connector
Low profile 80 × 74 × 25.6 mm IP69

Key electrical specifications:

Parameter	Specification	
Frequency	617-960 MHz 3300-5000 MHz 1616 - 1627 MHz	1427-2690 MHz 5150-5925 MHz 1559 - 1608 MHz
Antenna element peak gain	2.3 dBi 2.6 dBi 5.2 dBic	5.1 dBi 2.7dBi 28 dB @ 2.7 V
Polarization	Linear	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	80 × 74 × 25.6 mm

SigFox Antennas
External

MEA-868-915-N

Ultra-Rugged Dipole Antenna

Part #: 189-00045-01

✓ SigFox/LoRA/ISM (868MHz – 915MHz) ✓ High performance for increased coverage ✓ UV protected ✓ N-Type Connector Rated IP65

Key electrical specifications:

Parameter	Specification
Frequency	868-915 MHz
Peak gain	6 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N - Connector
Dimensions	ø 23 x 795mm

MEA-LW2-SM

External Cellular/LTE, ISM and GNSS Antenna – Screw Mount

Part #: 189-00061-01

✓ 2in1 antenna: Cellular/LTE and 2.4/5.0GHz ISM ✓ Wide band antenna ✓ Ground Plane Independent ✓ Rugged housing ✓ IP67 rated ✓ IP69 rated ✓ Low profile: 80 x 74 x 43 mm ✓ Anti-Rotation mounting ✓ Customized Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Peak gain	2.7 dBi 5.1 dBi 5.3 dBi
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male connector
Dimensions	80 x 74 x 43 mm

MEA-868-ISM

868 MHz ISM SCREW MOUNT

Part #: 100-00198-01

✓ 868 MHz ISM LoRa band antenna ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low Profile ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Axial Ratio	-1.4 dB
Polarization	Linear
VSWR	1.1:1

Key mechanical specifications:

Parameter	Specification
Connector	SMA Male
Cable Type	D302 Standard
Dimensions	80 x 76 x 13 mm

MEA-915-ISM

915 MHz ISM Screw Mount

Part #: 100-00184-01

915 MHz ISM LoRa band antenna ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low Profile ✓ Dimensions Ø 54 x 80 mm ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Axial Ratio	RHCP
Polarization	Vertical
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male connector
Dimensions	80 x 74 x 25.6 mm

MEA-868-SM-LP

868 MHz ISM Antenna – Screw Mount

Part #: 100-00172-01

868 MHz ISM - 863-870 MHz ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 50 x 50.8 mm ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Peak gain	-0.8 dBi
Polarization	Linear
VSWR	≤ 1.9:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 50 x 50.8 mm

MEA-915-SM-LP

915 MHz ISM Antenna – Screw Mount

Part #: 100-00171-01

915 MHz ISM ✓ Screw Mount ✓ Ground Plane Dependent ✓ High Performance ✓ Low Profile ✓ Customizable Cable and Connector Dimensions 80 x 74 x 14.7 mm ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Average gain	-3 dB
Polarization	Linear
VSWR	1.5:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male (other available)
Dimensions	80 x 74 x 14.7 mm

MEA-868-ISM

868 MHz ISM SCREW MOUNT

Part #: 100-00198-01

✓868 MHz ISM LoRa band ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low Profile ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Peak gain	4.0 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-LTE-MIMO-ISM-SM

Cellular/LTE MIMO and 915 MHz ISM Screw Mount

Part #: 100-00203-01

✓High Performance ✓Easy mounting: Screw Mount ✓Ground Plane Independent ✓Low profile: 96 x 96 x 90 mm ✓Customized Cable and Connector

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-1.5 dBi 3.2 dBi 6.5 dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.0 dBi 5.0 dBi
Cable3	Frequency	902-928 MHz
	Antenna element peak	0.2 dBi
Bandwidth		Omni-Directional

Key mechanical specifications:

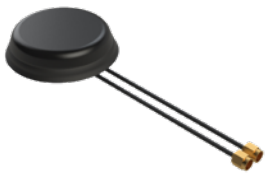
Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male
Dimensions	Ø 96 x 90 mm

MEA-868-IGG

868 MHZ ISM/GPS/GLONASS Screw Mount

Part #: 100-00251-01

✓Easy mounting: Screw Mount ✓Anti-Rotation Mechanism ✓Low Profile ✓ High Gain ✓Customizable Cable and Connector ✓IP67, IP69, IK09



Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	863-870 MHz
	Peak Gain	3.2 dBi
	Polarization	Linear
Cable2	Frequency Range	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
	Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 77.3 x 15 mm

MEA-900-L-SM

868/915 MHz ISM/LTE - Screw Mount

Part #: 100-00197-01

✓ 2 in 1 antenna: Cellular/LTE & ISM bands ✓ Ultra-Wide band antenna ✓ High performance ✓ Easy mounting: Screw Mount ✓ Low Profile: 80 x 76 x 13 mm ✓ Ground Plane Independent ✓ IP67 ✓ Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960MHz 1710-2170MHz 2500-2700MHz 868MHz 915MHz
Peak Gain	0.7 dBi@698-960MHz 2.7dBi@1710-2170MHz 4.3 dBi@2500-270MHz 1.2 dBi@ 868MHz 1.7 dBi@91MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

MEA-900-W2-SM

2.4/5.0 GHz & 868/915 MHz ISM - Screw Mount

Part #: 100-00194-01

✓ 2.4/5.0 GHz ISM ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ IP67, IK09, IP69K ✓ Dimensions Ø 80 × 76 × 13 m

Key electrical specifications:

Parameter	Specification
Frequency	868 MHz 915 MHz 2.4 GHz 5.0 GHz
Peak Gain	-0.6 dBi@ 868 MHz -0.2 dBi@915 MHz 4.5 dBi@ 2.4 GHz 3.9 dBi@5.0 GHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 76 × 13 mm

MEA-915-N-60

Ultra-Rugged Dipole Antenna

Part #: 100-00263-01

✓ 915 MHz ISM LoRa band antenna ✓ High performance for increased coverage ✓ UV protected ✓ N-female Connector

Key electrical specifications:

Parameter	Specification
Frequency	915 MHz
Peak Gain	5.5dBi
Polarization	Vertical

Key mechanical specifications:

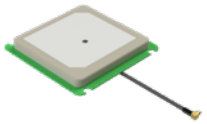
Parameter	Specification
Connector	N-Female
Dimensions	Ø 24.5 x 636 mm

MPA-716-868

868 MHz ISM PASSIVE PATCH

Part #: 189-00069-01

868 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material



Key electrical specifications:

Parameter	Specification
Frequency	865 MHz - 867MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

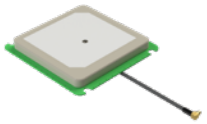
Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MPA-716-915

915 MHz ISM PASSIVE PATCH

Part #: 189-00068-01

915 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material



Key electrical specifications:

Parameter	Specification
Frequency	915 MHz ± 1 MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MEA-868-01-SMA

868 MHz ISM- Connector Mount

Part #: 100-00201-01

Small Form Factor High Performance Frequency range 863-870 MHz Low profile: 9 x 48.0mm RoHS Compliant Connector Type: SMA Male

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Antenna element peak gain	-1.2 dB
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-915-01-SMA

915 MHz ISM Connector Mount

Part #: 100-00159-01

Small Form Factor High Performance Frequency range 900 - 1000 MHz Low profile: 9 x 48.0mm RoHS Compliant Connector Type: SMA Male

Key electrical specifications:

Parameter	Specification
Frequency	915 MHz
Antenna element peak gain	3.3 dBi
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-868-915-SMA

High Performance 868-915 MHz ISM Antenna

Part #: 100-00153-01

Ultra High Performance LoRa/Sigfox/ ISM Band coverage ROHS Compliant Robust Housing IP67 Rated Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	868-915 MHz
Peak gain	3 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-868-SM

High Performance 868 MHz ISM Antenna

Part #: 100-00154-01

868MHz frequencies IP67 rated High gain & efficiency Custom cable & connector options

Key electrical specifications:

Parameter	Specification
Frequency	865-868MHz
Peak gain	3-5 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-915-SM

High Performance 915 MHz ISM Antenna

Part #: 100-00156-01

915MHz frequencies IP67 rated High gain & efficiency Custom cable & connector options

Key electrical specifications:

Parameter	Specification
Frequency	902-928MHz
Peak gain	3-5 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-LGI-SMA

5GNR & Iridium GNSS Antenna – Screw Mount

Part #: 189-00065-01

3in1 antenna: 5GNR, Iridium and GNSS Ultra-Wide band antenna High performance Easy mounting: Screw Mount
Anti-Rotation Mounting Optimized for Iridium network Ground Plane Independent Customizable Cable and Connector
Low profile 80 × 74 × 25.6 mm IP69

Key electrical specifications:

Parameter	Specification	
Frequency	617-960 MHz 3300-5000 MHz 1616 - 1627 MHz	1427-2690 MHz 5150-5925 MHz 1559 - 1608 MHz
Antenna element peak gain	2.3 dBi 2.6 dBi 5.2 dBic	5.1 dBi 2.7dBi 28 dB @ 2.7 V
Polarization	Linear	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	80 × 74 × 25.6 mm

MEA-868-915-N

Ultra-Rugged Dipole Antenna

Part #: 189-00045-01

SigFox/LoRA/ISM (868MHz – 915MHz) High performance for increased coverage UV protected N-Type Connector Rated IP65

Key electrical specifications:

Parameter	Specification
Frequency	868-915 MHz
Peak gain	6 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N - Connector
Dimensions	ø 23 x 795mm

MEA-LW2-SM

External Cellular/LTE, ISM and GNSS Antenna – Screw Mount

Part #: 189-00061-01

2in1 antenna: Cellular/LTE and 2.4/5.0GHz ISM Wide band antenna Ground Plane Independent Rugged housing IP67 rated IP69 rated Low profile: 80 x 74 x 43 mm Anti-Rotation mounting Customized Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Peak gain	2.7 dBi 5.1 dBi 5.3 dBi
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male connector
Dimensions	80 x 74 x 43 mm

MEA-868-ISM

868 MHz ISM SCREW MOUNT

Part #: 100-00198-01

868 MHz ISM LoRa band antenna Screw Mount Anti-Rotation Mechanism Ground Plane Independent Customizable Cable and Connector Low Profile IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Axial Ratio	-1.4 dB
Polarization	Linear
VSWR	1.1:1

Key mechanical specifications:

Parameter	Specification
Connector	SMA Male
Cable Type	D302 Standard
Dimensions	80 x 76 x 13 mm

MEA-915-ISM

915 MHz ISM Screw Mount

Part #: 100-00184-01

915 MHz ISM LoRa band antenna ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low Profile ✓ Dimensions Ø 54 x 80 mm ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Axial Ratio	RHCP
Polarization	Vertical
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male connector
Dimensions	80 x 74 x 25.6 mm

MEA-868-SM-LP

868 MHz ISM Antenna – Screw Mount

Part #: 100-00172-01

868 MHz ISM - 863-870 MHz ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 50 x 50.8 mm ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Peak gain	-0.8 dBi
Polarization	Linear
VSWR	≤ 1.9:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 50 x 50.8 mm

MEA-915-SM-LP

915 MHz ISM Antenna – Screw Mount

Part #: 100-00171-01

915 MHz ISM ✓ Screw Mount ✓ Ground Plane Dependent ✓ High Performance ✓ Low Profile ✓ Customizable Cable and Connector Dimensions 80 x 74 x 14.7 mm ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Average gain	-3 dB
Polarization	Linear
VSWR	1.5:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male (other available)
Dimensions	80 x 74 x 14.7 mm

MEA-868-ISM

868 MHz ISM SCREW MOUNT

Part #: 100-00198-01

868 MHz ISM LoRa band · Screw Mount · Anti-Rotation Mechanism · Ground Plane Independent · Customizable Cable and Connector · Low Profile · IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Peak gain	4.0 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-LTE-MIMO-ISM-SM

Cellular/LTE MIMO and 915 MHz ISM Screw Mount

Part #: 100-00203-01

High Performance · Easy mounting: Screw Mount · Ground Plane Independent · Low profile: 96 x 96 x 90 mm · Customized Cable and Connector

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Cable1	Antenna element peak	-1.5 dBi 3.2 dBi 6.5 dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Cable2	Antenna element peak	-0.9 dBi 3.0 dBi 5.0 dBi
Cable3	Frequency	902-928 MHz
Cable3	Antenna element peak	0.2 dBi
	Bandwidth	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male
Dimensions	Ø 96 x 90 mm

MEA-915-N-60

Ultra-Rugged Dipole Antenna

Part #: 100-00263-01

915 MHz ISM LoRa band antenna · High performance for increased coverage · UV protected · N-female Connector

Key electrical specifications:

Parameter	Specification
Frequency	915 MHz
Peak Gain	5.5dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Connector	N-Female
Dimensions	Ø 24.5 x 636 mm

MEA-900-L-SM

868/915 MHz ISM/LTE - Screw Mount

Part #: 100-00197-01

2 in 1 antenna: Cellular/LTE & ISM bands Ultra-Wide band antenna High performance Easy mounting: Screw Mount Low Profile: 80 x 76 x 13 mm Ground Plane Independent IP67 Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960MHz 1710-2170MHz 2500-2700MHz 868MHz 915MHz
Peak Gain	0.7 dBi@698-960MHz 2.7dBi@1710-2170MHz 4.3 dBi@2500-270MHz 1.2 dBi@ 868MHz 1.7 dBi@91MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

MEA-900-W2-SM

2.4/5.0 GHz & 868/915 MHz ISM - Screw Mount

Part #: 100-00194-01

2.4/5.0 GHz ISM Screw Mount Anti-Rotation Mechanism Ground Plane Independent Customizable Cable and Connector IP67, IK09, IP69K Dimensions Ø 80 × 76 × 13 m

Key electrical specifications:

Parameter	Specification
Frequency	868 MHz 915 MHz 2.4 GHz 5.0 GHz
Peak Gain	-0.6 dBi@ 868 MHz -0.2 dBi@915 MHz 4.5 dBi@ 2.4 GHz 3.9 dBi@5.0 GHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 76 × 13 mm

MEA-915-SW-SMA

915 MHz ISM Screw Mount

Part #: 100-00182-01

LoRa/ Sigfox/ NB-IOT Screw Mount Anti-Rotation Mechanism Ground plane independent Customizable Cable and Connector Low Profile IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Peak Gain	4.0 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

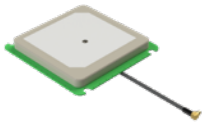
Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 9 x 48 mm

MPA-716-868

868 MHz ISM PASSIVE PATCH

Part #: 189-00069-01

868 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material



Key electrical specifications:

Parameter	Specification
Frequency	865 MHz - 867MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

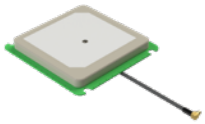
Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MPA-716-915

915 MHz ISM PASSIVE PATCH

Part #: 189-00068-01

915 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material



Key electrical specifications:

Parameter	Specification
Frequency	915 MHz ± 1 MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MEA-900-L-SM

868/915 MHz ISM/LTE - Screw Mount

Part #: 100-00197-01

✓ 2 in 1 antenna: Cellular/LTE & ISM bands ✓ Ultra-Wide band antenna ✓ High performance ✓ Easy mounting: Screw Mount ✓ Low Profile: 80 x 76 x 13 mm ✓ Ground Plane Independent ✓ IP67 ✓ Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960MHz 1710-2170MHz 2500-2700MHz 868MHz 915MHz
Peak Gain	0.7 dBi@698-960MHz 2.7dBi@1710-2170MHz 4.3 dBi@2500-270MHz 1.2 dBi@ 868MHz 1.7 dBi@91MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

MEA-900-W2-SM

2.4/5.0 GHz & 868/915 MHz ISM - Screw Mount

Part #: 100-00194-01

✓ 2.4/5.0 GHz ISM ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ IP67, IK09, IP69K ✓ Dimensions Ø 80 × 76 × 13 m

Key electrical specifications:

Parameter	Specification
Frequency	868 MHz 915 MHz 2.4 GHz 5.0 GHz
Peak Gain	-0.6 dBi@ 868 MHz -0.2 dBi@915 MHz 4.5 dBi@ 2.4 GHz 3.9 dBi@5.0 GHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 76 × 13 mm

MEA-868-01-SMA

868 MHz ISM- Connector Mount

Part #: 100-00201-01

✓ Small Form Factor ✓ High Performance ✓ Frequency range 863-870 MHz ✓ Low profile: 9 x 48.0mm ✓ RoHS Compliant ✓ Connector Type: SMA Male

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Antenna element peak gain	-1.2 dB
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount / SMA Male
Dimensions	Ø 9 x 48.0mm

MEA-868-915-SMA

High Performance 868-915 MHz ISM Antenna

Part #: 100-00153-01

✓ Ultra High Performance ✓ LoRa/Sigfox/ ISM Band coverage ✓ ROHS Compliant ✓ Robust Housing IP67 Rated ✓ Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	868-915 MHz
Peak gain	3 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-868-SM

High Performance 868 MHz ISM Antenna

Part #: 100-00154-01

✓ 868MHz frequencies ✓ IP67 rated ✓ High gain & efficiency ✓ Custom cable & connector options

Key electrical specifications:

Parameter	Specification
Frequency	865-868MHz
Peak gain	3-5 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 48 x 82 mm

MEA-868-915-N

Ultra-Rugged Dipole Antenna

Part #: 189-00045-01

✓ SigFox/LoRA/ISM (868MHz – 915MHz) ✓ High performance for increased coverage ✓ UV protected ✓ N-Type Connector Rated IP65

Key electrical specifications:

Parameter	Specification
Frequency	868-915 MHz
Peak gain	6 dBi
Polarization	Vertical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N - Connector
Dimensions	ø 23 x 795mm

MEA-868-ISM

868 MHz ISM SCREW MOUNT

Part #: 100-00198-01

868 MHz ISM LoRa band antenna ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low Profile ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Axial Ratio	-1.4 dB
Polarization	Linear
VSWR	1.1:1

Key mechanical specifications:

Parameter	Specification
Connector	SMA Male
Cable Type	D302 Standard
Dimensions	80 x 76 x 13 mm

MEA-868-SM-LP

868 MHz ISM Antenna – Screw Mount

Part #: 100-00172-01

868 MHz ISM - 863-870 MHz ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 50 x 50.8 mm ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	863-870 MHz
Peak gain	-0.8 dBi
Polarization	Linear
VSWR	≤ 1.9:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 50 x 50.8 mm

MEA-915-SM-LP

868 MHz ISM Antenna – Screw Mount

Part #: 100-00171-01

915 MHz ISM ✓ Screw Mount ✓ Ground Plane Dependent ✓ High Performance ✓ Low Profile ✓ Customizable Cable and Connector Dimensions 80 x 74 x 14.7 mm ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	902-928 MHz
Average gain	-3 dB
Polarization	Linear
VSWR	1.5:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male (other available)
Dimensions	80 x 74 x 14.7 mm

MEA-900-L-SM

868/915 MHz ISM/LTE - Screw Mount

Part #: 100-00197-01

✓ 2 in 1 antenna: Cellular/LTE & ISM bands ✓ Ultra-Wide band antenna ✓ High performance ✓ Easy mounting: Screw Mount ✓ Low Profile: 80 x 76 x 13 mm ✓ Ground Plane Independent ✓ IP67 ✓ Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960MHz 1710-2170MHz 2500-2700MHz 868MHz 915MHz
Peak Gain	0.7 dBi@698-960MHz 2.7dBi@1710-2170MHz 4.3 dBi@2500-270MHz 1.2 dBi@ 868MHz 1.7 dBi@91MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

MEA-915-N-60

Ultra-Rugged Dipole Antenna

Part #: 100-00263-01

✓ 915 MHz ISM LoRa band antenna ✓ High performance for increased coverage ✓ UV protected ✓ N-female Connector

Key electrical specifications:

Parameter	Specification
Frequency	915 MHz
Peak Gain	5.5dBi
Polarization	Vertical

Key mechanical specifications:

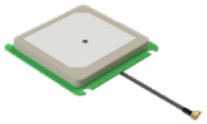
Parameter	Specification
Connector	N-Female
Dimensions	Ø 24.5 x 636 mm

MPA-716-868

868 MHz ISM PASSIVE PATCH

Part #: 189-00069-01

868 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material



Key electrical specifications:

Parameter	Specification
Frequency	865 MHz - 867MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

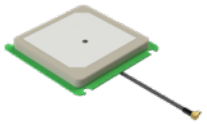
Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MPA-716-915

915 MHz ISM PASSIVE PATCH

Part #: 189-00068-01

915 MHz ISM Band · High antenna performance · Low profile · Adhesive mounting · Pin connector · Advanced Ceramic Material



Key electrical specifications:

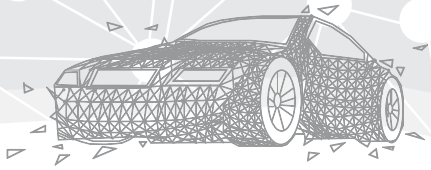
Parameter	Specification
Frequency	915 MHz ± 1 MHz
Polarization	RHCP
Axial Ratio	≤ 5 dB
VSWR	≤ 1.5

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	MMCX(MALE)
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

Transportation Antennas

Transportation Antennas



Our patented & fully EN 50155 Certified Rail 4x4 MIMO LTE antennas are the most advanced solutions available. They ensure the most optimal data aggregation connectivity by providing outstanding RF performances.

As technology capabilities increase, the world is becoming more connected and so does the demand for a smart, and fastest growing transportation market. Maxtena is the industry leader in developing new antenna technologies for vehicle – to – vehicle (V2V) and vehicle – to – anything (V2X) applications. We have developed cutting edge dedicated short-range communications (DSRC) antennas which are vehicle and DSRC transponder agnostic. All DSRC antennas are available for external and internal automotive applications.

At Maxtena, we offers the most advanced train and rail antennas in rugged, low profileform factors.

Applications

- LBS & M2M applications
- Handheld devices
- Law enforcement
- Vehicle and eet tracking
- Mining equipment
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- Embedded applications

Discover

Maxwave, our exclusive **LTE WIFI MIMO**

Antenna for Transportation

MAXWAVE

Maxtena Launches Maxwave™ a LTE/WiFi MIMO Antenna for Transportation
Maxtena designed this antenna to scale in performance and evolve as the train's wireless systems advance, providing reliable high-speed wireless internet to onboard systems. Installing two of the 4×4 Maxwave antennas in the 8×8 configuration will provide high-performance 4×4 technology immediately, and scaling to 8×8 is as simple as installing the new onboard system modems. The antenna is mounted externally on the train's roof and provides a patented omnidirectional coverage that is unmatched by comparable antennas. The antenna's superior isolation maximizes the performance between Maxwave elements as well as other antennas on the train roof while retaining remarkable efficiency.
Maxwave is easy to maintain, install, and upgrade on any train rooftop, and it is designed to be compliant with all US, European, and International Railway Certification Standards. It is also intended to be among the lowest profile, high-performance antennas on the market. Additionally, a single 8×8 model is planned for release which can configure to 16×16 MIMO performance using the same installation methods. Maxwave is perfect for high-speed trains, commuter trains, metro trains, trolleys, and even buses and other mass transit cars, and can be used for freight cars and rail CCTV systems as well.

Maxwave is easy to maintain, install, and upgrade on any train rooftop, and it is designed to be compliant with all US, European, and International Railway Certification Standards. It is also intended to be among the lowest profile, high-performance antennas on the market. Additionally, a single 8×8 model is planned for release which can configure to 16×16 MIMO performance using the same installation methods. Maxwave is perfect for high-speed trains, commuter trains, metro trains, trolleys, and even buses and other mass transit cars, and can be used for freight cars and rail CCTV systems as well.

Features

- 4 antenna elements operating simultaneously from 698 MHz to 6000 MHz
- Covers all cellular, LTE, WIFI and WiMAX frequency bands
- Optional active GPS/GLONASS antenna with integrated surge arrestor
- DC grounded antenna elements for protection against lightning and high voltage power supply lines and passenger safety
- Versatile Design: Maintains performance when mounted on non-metallic surfaces
- Railway standard compliant design to EN50155 and re retardant design according to EN 45545:2013

Suggested applications include

- Fleet management
- Commercial transport
- HD video monitoring
- Buses, train, and commercial applications
- Smart city

MEA-DSRC-02Z

External Mount DSRC Antenna

Part #: 100-00089-01

External mount DSRC antenna for 5850 - 5950MHz Different mounting options available IPX5 SMA & N-Type or customer specified connector

Key electrical specifications:

Parameter	Specification
Frequency	5850 - 5950 MHz
Antenna passive peak gain	5.0 dBi Typ. @ 5850-5950 MHz
Impendence	50Ω

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA / N-Type or customer specified
Dimensions	120 x 120 x 45 mm

MEA-DSRC-01P

External Mount DSRC Antenna

Part #: Part #: 100-00087-01

External mount DSRC antenna for 5850 - 5950MHz IPX7 SMA &N-Type or customer specified connector Foam Adhesive 30 cm cable length RG-174

Key electrical specifications:

Parameter	Specification
Frequency	5850 - 5950 MHz
Antenna passive peak gain	5.0 dBi Typ. @ 2300-2700 MHz
Impendence	50Ω

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA / N-Type or customer specified
Dimensions	105.1 x 30.1 x 6.7 mm

MEA-DSRC-03Z

External Mount DSRC Antenna

Part #: 100-00088-01

External mount DSRC antenna for 5850 - 5950MHz IPX7 N-Type connector

Key electrical specifications:

Parameter	Specification
Frequency	5850 - 5950 MHz
Antenna passive peak gain	5.0 dBi Typ. @ 2300-2700 MHz
Impendence	50Ω

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N-Type or customer specified
Dimensions	Ø 20 x 215 mm

MAXWAVE

MAXWAVE™ 4×4 MIMO TRAIN ANTENNA

Part #: 100-00074-01

✓ 4 antenna elements operating simultaneously from 698 MHz to 6000 MHz ✓ Optional active GPS/GLONASS antenna with integrated surge arrestor ✓ DC grounded antenna elements for protection against lightning and high voltage power supply lines ✓ Versatile Design: Maintains performance when mounted on non-metallic surfaces ✓ Railway standard compliant to EN50155 and fire retardant according to EN 45545:2013

Key electrical specifications:

Parameter	Specification
Frequency	4 × 698 – 6000 MHz
Pattern	Omnidirectional
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

MEA-5in1-SMA

5GNR MIMO, 2.4/5.0/6.0 GHZ ISM and GNSS - Screw mount antenna

Part #: 100-00243-01

✓ 5GNR,2.4/5.0/6.0 GHz ISM & GPS/GLONASS/QZSS/Galileo frequency coverage ✓ Easy mounting: screw mount ✓ Heavy duty antenna ✓ High performance ✓ Ground plane independent ✓ Anti-rotation mounting ✓ Customizable cable and connector ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.8 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.6 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

MEA-TETRA-UHF-GNSS

TETRA/UHF and GNSS Screw Mount

Part #: 100-00247-01

Easy mounting: Screw Mount Anti-Rotation Mechanism Heavy Duty antenna High Gain Customizable Cable and Connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	380-470 MHz
Cable1	Peak Gain	2.5 dBi
Cable1	Polarization	Linear
Cable2	Frequency Range	1575.42 MHz ,1598-1606 MHz
Cable2	Active Gain	28 dB @ 2.7 V
Cable2	Radiation Pattern	Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 96 x 130 mm

MEA-LTE-GNSS-UHF

CELLULAR/LTE, , TETRA/UHF and GNSS Screw Mount

Part #: 100-00248-01

Easy mounting: Screw Mount Anti-Rotation Mechanism Heavy Duty antenna High Gain Customizable Cable and Connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Cable1	Peak Gain	1.9 dBi 3.0 dBi 2.9 dBi
Cable2	Frequency	380 - 470 MHz
Cable2	Peak Gain	2.1dBi
Cable3	Frequency	1575.42 MHz ,1598-1606 MHz
Cable3	Active Gain	28 dB @ 2.7 V

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 96 x 130 mm

MEA-LTE-ISM-GNSS-TETRA

CELLULAR/LTE, 2.4/5.0 GHZ ISM, TETRA and GNSS - Screw Mount Antenna

Part #: 100-00243-01

CELLULAR / LTE,TETRA/UHF, ISM, and GPS/GLONASS/QZSS/Galileo frequency Easy mounting: Screw Mount Heavy duty antenna High performance Anti-rotation mounting Customizable cable and connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Cable1	Antenna element peak	1.9 dBi / 3.0 dBi / 2.9 dBi
Cable2	Frequency	2410-2490 MHz 4920-5925 MHz
Cable2	Antenna element peak	5.6 dBi / 5.5 dBi
Cable3	Frequency	380-470 MHz
Cable3	Antenna element peak	2.1 dBi
Cable4	Frequency	1575.42 MHz 1598-1610 MHz
Cable4	Active Gain	28 dB @ 2.7 V
	Radiation pattern	Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

GPS timing Antennas

GPS timing Antennas

Our GNSS Timing antennas are state of the art designed and developed rugged solutions which are IP69K rated and vertisile for any installation necessary. The antennas are fully customizable and feature high gain LNA's along with superb filtering capabilities.

Precise time is crucial to a variety of economic activities around the world.
Communication systems, electrical power grids, and financial networks all rely on precision timing for synchronization and operational efficiency. GNSS enables users to determine the time to within 100 billionths of a second, without the cost of owning and operating atomic clocks.

Maxtena has the latest antenna technology and products for professional precisiontiming applications.

Applications

- Fixed installations
- Military & security
- Timing applications
- Public safety communications
- Positive train control (PTC) networks
- Utility electric grid synchronization

Explore

Our new release

MEA-1575-TM-TNC

For professional precision timing applications

MEA-1575-TM-TNC

Precise time is crucial to a variety of economic activities around the world. Communication systems, electrical power grids, and financial networks all rely on precision timing for synchronization and operational efficiency. GPS enables users to determine the time to within 100 billionths of a second, without the cost of owning and operating atomic clocks. Maxtena has the latest antenna technology and products for professional precision timing applications. MEA-1575-TM-TNC is a very rugged GPS timing outdoor antenna solution by Maxtena covering GPS L1/GLONASS L1, Beidou B1, Galileo E1, AND QZSS L1 frequency bands. The antenna is ideal for professional precision timing applications. This antenna allows wideband coverage and achieves superior out of band rejection with a high gain of 40dB. The MEA-1575-TM-TNC provides exceptional circular polarized signal reception exceptional multipath rejection and a wide voltage input range of 2.5 to 10 VDC. It ideal for various outdoor GPS Timing installations.

The MEA-1575-TM-TNC is equipped with a TNC female connector and is ideal for any global GNSS time synchronization application that requires an externally mounted antenna. The antenna is designed with rugged waterproof housing (IP67 compliant) and is ideal for the most demanding environmental challenges. It can be mounted through a hole or L-Bracket.

Features

- High bandwidth for GNSS coverage
- Low VSWR
- High Gain Performance
- High out of band rejection
- Outdoor use
- Designed for harsh environment 40dB LNA Gain
- Wide voltage input range: 2.5 to 10 VDC
- IP67 Compliant
- Filtering RF Jamming environment

Suggested Applications include

- Timing applications
- Military and security
- Utility electric grid synchronization
- Positive train control (PTC) networks
- Public safety communications
- Fixed installations

MEA-1575-TM-TNC

External Mount DSRC Antenna

Part #: 100-00167-01

✓ High bandwidth for GNSS coverage: GPS L1/GLONASS L1, Beidou B1, Galileo E1, AND QZSS L1 frequency bands ✓ Low VSWR ✓ High Gain Performance ✓ High out of band rejection ✓ Outdoor use Designed for harsh environment 40dB LNA Gain ✓ Wide voltage input range: 2.5 to 10 VDC ✓ IP67 Compliant ✓ Filtering RF Jamming environment

Key electrical specifications:

Parameter	Specification
Frequency	1559-1606 MHz
Antenna element peak gain	40dBi
Impendence	50Ω

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	A screw mount/ TNC female connector Through hole/L-Bracket (not included) Pole mounting via clamp (included)
Dimensions	ø 66.5mmx76.4 mm

Combination antenna

Combination antenna

Maxtena's combination antenna include advanced RF technologies all in one configuration like GNSS, LTE, WiFi and ISM. This allows the customers to have increased efficiencies, performances and advantages. The consolidation of antennas leads to more innovative products and excessive cost savings.

Maxtena provides a wide range of multiband antennas starting from 2-in-1 and 3-in-1, to 5-in-1 antennas combination to increase efficiency and coverage while maintaining outstanding isolation specifications.

Applications

Explore

Our new launch **MEA-LWIG-SM**

5GNR, 2.4/5.0/6.0 GHz ISM, Iridium & GNSS Antenna

MEA-LWIG-SM

The MEA-LWIG-SM Screw Mount Antenna is a 4-in-1 low profile antenna solution, with a very high-performance ideal for maintaining constant network connectivity. The MEA-LWIG-SM covers all 5GNR, ISM, Iridium and GPS/GLONASS/QZSS/Galileo standard frequencies. This is an ideal antenna for telematics systems, remote surveillance, asset tracking and any IOT system applications.

The high performance and low profile make this antenna ideal for the most challenging installations.

The 5G NR Antenna (Cable 1) covers frequency range within 5G NR, 4G LTE, 2G, 3G standards. It operates within 617MHz-5925MHz frequency range. The antenna has an omni-directional radiation pattern, and it is ideal for maintaining constant network connectivity.

The 2.4/5.0/6.0 GHz ISM antenna (Cable 2) covers a complete ISM frequency coverage. It operates between 2410MHz-7125 MHz frequency range. The antenna has an omni-directional radiation pattern, and it is ideal for telematics systems, remote surveillance, and asset tracking.

The iridium antenna (Cable 3) covers the Iridium standards. It operates within 1616MHz-1627MHz frequency range. The antenna provides exceptional pattern control, polarization purity and high efficiency. The antenna provides outstanding performance for any Iridium SBD telematics and IOT applications.

The GNSS active antenna (Cable 4) covers the GPS, QZSS, Galileo and GLONASS frequency standards. It operates within 1575.42MHz and 1598MHz–1606MHz frequency range. The antenna has a hemispherical radiation pattern, and it ideal to provide accuracy, and constant connectivity.

This screw mount antenna is easy to install with maximum durability offering IP67 rated housing and anti-rotation mounting. The MEA-LWIG-SM has four cables with a SMA-Male standard connectors, 3m standard cable length and is fully customizable by offering additional connector types, cable lengths and cable types.

Features

- 4in1 antenna
- Screw Mount
- Anti-Rotation Mechanism
- Customizable Cable and Connector
- Dimensions Ø 146 x 31.5 mm
- IK09
- IP67
- IP69K

Suggested Applications include

- IoT applications
- Telematic
- Navigation
- Satellite Communications
- LTE applications

Combination antenna
Screw mount

NETZ 4IN1

4G LTE/Cellular/WIFI and MIMO 4in1 Antenna

Part #: 100-00142-01

✓ Screw Mount ✓ High Performance ✓ Rated IP67, IP69K and IK09 ✓ Compact Size: 96 x 96 x 94 mm ✓ Custom Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170MHz 2500-2700 MHz
Antenna element peak gain	0.9 dBi 3.3 dBi 4.4 dBi
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	96 x 96 x 94 mm

NETZ 5IN1

LTE-MIMO/WIFI-MIMO/GNSS 5in1 Antenna

Part #: 100-00095-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ An integrated SMA connectors

Key electrical specifications:

Parameter	Specification
Frequency	1561 MHz 1575.42 MHz 1602 MHz 698-960 MHz 1710-2170 MHz 2300-2690 MHz
Antenna element peak gain	3 dBi Typ. @1561 MHz 3 dBi Typ. @1575 MHz 3.5 dBi Typ. @1602 MHz 4.0 dBi Typ. @698~960 MHz 6.0 dBi Typ. @1710~2170 MHz 5.0 dBi Typ. @2300~2690 MHz
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Permanent Mount/ SMA connectors
Dimensions	Ø 141.98 x 66.5 mm

Combination antenna
Screw mount

Netz 5in1-SM

CELLULAR/LTE MIMO, 2.4/5.0 GHz ISM MIMO and GNSS - Screw Mount

Part #: 100-00177-01

✓ LTE/Wifi/GNSS frequencies ✓ High performance ✓ MIMO technology solution ✓ A low profile design with easy mounting ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.3 dBi 4.3 dB
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.4 dBi 3.0 dB 3.0 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.8 dBi 3.0 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	4.6 dBi 3.1 dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23 dB @ 3 V; 24dB @ 5 V
Radiation pattern		Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male / SMA-Male RP
Dimensions	Ø 96 x 90 mm

Netz 5in1-MIMO

CELLULAR/LTE MIMO and GNSS - Screw mount antenna

Part #: 100-00213-01

✓ CELLULAR / LTE & GPS/GLONASS/QZSS/frequencies ✓ Galileo frequency range ✓ Easy mounting: Screw Mount ✓ Heavy Duty antenna ✓ High Performance ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions: Ø 96 x H 90 mm ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	0.2dBi 3.8dBi 6.0dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.1dBi 3.2dBi -5.6dBi
Cable3	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.5dBi 3.1dBi 5.0dBi
Cable4	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.7dBi 3.0dBi 4.8dBi
Cable5	Frequency	1575.42 MHz 1602 MHz
	Antenna element peak	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 90 mm

Combination antenna
Screw mount

MEA-LGI-SMA

5GNR & Iridium GNSS Antenna – Screw Mount

Part #: 189-00065-01

✓ 3in1 antenna: 5GNR, Iridium and GNSS ✓ Ultra-Wide band antenna ✓ High performance ✓ Easy mounting: Screw Mount ✓ Anti-Rotation Mounting ✓ Optimized for Iridium network ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Low profile 80 × 74 × 25.6 mm ✓ IP69

Key electrical specifications:

Parameter	Specification	
Frequency	617-960 MHz 3300-5000 MHz 1616 - 1627 MHz	1427-2690 MHz 5150-5925 MHz 1559 - 1608 MHz
Antenna element peak gain	2.3 dBi 2.6 dBi 5.2 dBic	5.1 dBi 2.7dBi 28 dB @ 2.7 V
Polarization	Linear	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw on design / SMA male
Dimensions	80 × 74 × 25.6 mm

MEA-LW2-SM

External Cellular/LTE, ISM and GNSS Antenna – Screw Mount

Part #: 189-00061-01

✓ 2in1 antenna: Cellular/LTE and 2.4/5.0GHz ISM ✓ Wide band antenna ✓ Ground Plane Independent ✓ Rugged housing ✓ IP67 rated ✓ IP69 rated ✓ Low profile: 80 x 74 x 43 mm ✓ Anti-Rotation mounting ✓ Customized Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Peak gain	2.7 dBi 5.1 dBi 5.3 dBi
Radiation pattern	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male connector
Dimensions	80 x 74 x 43 mm

Combination antenna
Screw mount

MEA-LTE-MIMO-ISM-SM

Cellular/LTE MIMO and 915 MHz ISM Screw Mount

Part #: 100-00203-01

✓ High Performance ✓ Easy mounting: Screw Mount ✓ Ground Plane Independent ✓ Low profile: 96 x 96 x 90 mm ✓ Customized Cable and Connector

Key electrical specifications:

Parameter		Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-1.5 dBi 3.2 dBi 6.5 dBi
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	-0.9 dBi 3.0 dBi 5.0 dBi
Cable3	Frequency	902-928 MHz
	Antenna element peak	0.2 dBi
Bandwidth		Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount/ SMA Male
Dimensions	Ø 96 x 90 mm

MEA-5GGG-SM

5GNR and GPS/GLONASS Screw Mount

Part #: 100-00204-01

✓ 5GNR & GPS/GLONASS/QZSS/Galileo frequency coverage ✓ Easy Mounting: Screw Mount ✓ Anti-Rotation Mechanism ✓ Low Profile ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions 80 × 74 × 25.6 mm ✓ IP67, IP69

Key electrical specifications:

Parameter	Specification
Frequency	698-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz 1575.42 MHz 1602 MHz
Antenna element peak gain	2.3 dBi@698-960 MHz 5.1 dBi@1427-2690 MHz 2.6 dBi @3300-5000 MHz 2.7 dBi @5150-5925 MHz 28dB @ 2.7 V @1575.42 MHz 28dB @ 2.7 V @1602 MHz
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

Combination antenna
Screw mount

MEA-698-3800-SM

Low Prole 5G LTE Antenna

Part #: 100-00132-01

Low profile antenna Covers large frequencies 698-3800 MHz ROHS Compliant High gain for the antenna size PC + ABC housing Exceptional performance over the main 4G/5G bands

Key electrical specifications:

Parameter	Specification
Frequency	698-3800 MHz
Peak gain	5.5 dBi
Radiation pattern	-10 dBi

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	59 x 71mm

MEA-SW-700-3800

2G/3G/4G/ISM/WIFI GNSS Antenna

Part #: 189-00046-01

2G/3G/4G/ISM/Wi-Fi & GNSS frequency bands N Type connector & seal ring IP68 rated / UV protected Rugged industrial design Ground plane Independent

Key electrical specifications:

Parameter	Specification
Frequency	698-3800 MHz
Antenna element peak gain	4.0 dB
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ N Type connector
Dimensions	Ø 41 x 84 mm

MEA-900-L-SM

868/915 MHz ISM/LTE - Screw Mount

Part #: 100-00197-01

2 in 1 antenna: Cellular/LTE & ISM bands Ultra-Wide band antenna High performance Easy mounting: Screw Mount Low Profile: 80 x 76 x 13 mm Ground Plane Independent IP67 Customizable Cable and Connector

Key electrical specifications:

Parameter	Specification
Frequency	698-960MHz 1710-2170MHz 2500-2700MHz 868MHz 915MHz
Peak Gain	0.7 dBi@698-960MHz 2.7dBi@1710-2170MHz 4.3 dBi@2500-270MHz 1.2 dBi@ 868MHz 1.7 dBi@91MHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 74 × 25.6 mm

Combination antenna
Screw mount

MEA-900-W2-SM

2.4/5.0 GHz & 868/915 MHz ISM - Screw Mount

Part #: 100-00194-01

✓ 2.4/5.0 GHz ISM ✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ IP67, IK09, IP69K ✓ Dimensions Ø 80 × 76 × 13 m

Key electrical specifications:

Parameter	Specification
Frequency	868 MHz 915 MHz 2.4 GHz 5.0 GHz
Peak Gain	-0.6 dBi@ 868 MHz -0.2 dBi@915 MHz 4.5 dBi@ 2.4 GHz 3.9 dBi@5.0 GHz
Radiation pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA-Male
Dimensions	80 × 76 × 13 mm

COBRA-LTE700

LTE MIMO & Active GPS High-Performance Transportation Antenna

Part #: 100-00036-01

✓ Robust arrow shape housing for easy roof-top alignment ✓ MIMO technology ✓ One connector for each application; LTE 1, LTE 2 and GPS ✓ No ground plane requirements ✓ Single-hole mounting with screws on top for easy installation ✓ Use of only one multifunction solution

Key electrical specifications:

Parameter	Specification
Frequency	690 - 960 MHz 1700 - 2200 MHz 1575.42 MHz
Antenna element peak gain	4 dBi (typical)
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

MAXWAVE

MAXWAVE™ 4×4 MIMO TRAIN ANTENNA

Part #: 100-00074-01

✓ 4 antenna elements operating simultaneously from 698 MHz to 6000 MHz ✓ Optional active GPS/GLONASS antenna with integrated surge arrestor ✓ DC grounded antenna elements for protection against lightning and high voltage power supply lines ✓ Versatile Design: Maintains performance when mounted on non-metallic surfaces ✓ Railway standard compliant to EN50155 and fire retardant according to EN 45545:2013

Key electrical specifications:

Parameter	Specification
Frequency	4 × 698 – 6000 MHz
Pattern	Omnidirectional
Polarization	Linear

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	N/A
Dimensions	166 x 200 x 88 mm

Combination antenna
Screw mount

MEA-2500-LTE-MIMO

CELLULAR/LTE MIMO Screw Mount

Part #: 100-00211-01

✓ Wide-band antenna ✓ Easy mounting: Screw Mount ✓ Anti-rotation mounting ✓ High Performance ✓ Customizable Cable and Connector ✓ Dimensions: Ø 60 x 69 mm ✓ IP67, IP69, IK09 ✓ Heavy duty antenna.

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Cable1	Antenna element peak	-0.8 dBi 3.6 dBi 4.1 dB
Cable2	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
Cable2	Antenna element peak	-0.6 dBi 2.8 dBi 3.0 dBi
	Radiation pattern	Omni-Directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 60 x 69 mm

MEA-2410-ISM

2.4/5.0 GHz ISM Screw Mount Antenna

Part #: 100-00196-01

✓ Screw Mount ✓ Anti-Rotation Mechanism ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ IP67 ✓ IK09 ✓ IP69K

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz 4920-5925 MHz
Peak Gain	2.6 dBi 4.4 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount/ SMA connector
Dimensions	Ø 77.3 x 65.5 mm

MEA-5G-MIMO-GGG

5GNR, MIMO and GNSS GPS/GLONASS Screw Mount

Part #: 100-00250-01

✓ Easy mounting: Screw Mount ✓ Heavy Duty antenna ✓ High Performance ✓ Ground Plane Independent ✓ Anti-Rotation Mounting ✓ Customizable Cable and Connector ✓ IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
Cable1	Peak Gain	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz/1427-2690 MHz 3300-5000 MHz/5150-5925 MHz
Cable2	Peak Gain	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	1575.42 MHz /1598-1610 MHz
Cable3	Active Gain	23 dB @ 3V / 24 dB @ 5V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	*Specification*
Mounting option / Connector	Screw Mount/ SMA Male
Dimensions	Ø 96 X 130 mm

Combination antenna
Screw mount

MEA-868-IGG

868 MHZ ISM/GPS/GLONASS Screw Mount

Part #: 100-00251-01

✓Easy mounting: Screw Mount ✓Anti-Rotation Mechanism ✓Low Profile ✓ High Gain ✓Customizable Cable and Connector ✓IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	863-870 MHz
	Peak Gain	3.2 dBi
	Polarization	Linear
Cable2	Frequency Range	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
	Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 77.3 x 15 mm

MEA-TETRA-UHF-GNSS

TETRA/UHF and GNSS Screw Mount

Part #: 100-00247-01

✓Easy mounting: Screw Mount ✓Anti-Rotation Mechanism ✓Heavy Duty antenna ✓ High Gain ✓Customizable Cable and Connector ✓IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	380-470 MHz
	Peak Gain	2.5 dBi
	Polarization	Linear
Cable2	Frequency Range	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
	Radiation Pattern	Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 96 x 130 mm

MEA-LTE-GNSS-UHF

CELLULAR/LTE, , TETRA/UHF and GNSS Screw Mount

Part #: 100-00248-01

✓Easy mounting: Screw Mount ✓Anti-Rotation Mechanism ✓Heavy Duty antenna ✓ High Gain ✓Customizable Cable and Connector ✓IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Peak Gain	1.9 dBi 3.0 dBi 2.9 dBi
Cable2	Frequency	380 - 470 MHz
	Peak Gain	2.1dBi
Cable3	Frequency	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 96 x 130 mm

Combination antenna
Screw mount

MEA-5GG-SM

5GNR and GNSS Screw Mount

Part #: 100-00248-01

✓Easy mounting: screw mount ✓Anti-rotation mounting ✓Customizable cable and connector ✓IK09, IP67, IP69K

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
	Peak Gain	-1.7dBi /-1.7 dBi /-1.3 dBi /0.6 dBi
Cable2	Frequency	1575.42 MHz ,1598-1606 MHz
	Active Gain	28 dB @ 2.7 V

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA male
Dimensions	Ø 146 x 31.5 mm

MEA-2170-GNSS-SM

CELLULAR/LTE & GNSS Screw Mount

Part #: 100-00256-01

✓CELLULAR / LTE, and GPS/GLONASS/QZSS/Galileo ✓Easy mounting: screw mount ✓Anti-rotation mechanism ✓Customizable cable and connector ✓IP67, IK09, IP69K

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	2.7 dBi 5.1 dBi 5.3 dBi
Cable2	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	28 dB @ 2.7 V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	80 x 74 x 25.6 mm

MEA-169-ISM-GG

169 MHZ ISM-ERMES And GPS/GLONASS Screw Mount

Part #: 100-00242-01

✓Easy mounting: Magnetic/Adhesive Mount ✓Iridium Certified ✓Low Profile ✓High Performance ✓Pre-Filtered GNSS ✓Ground Plane Independent ✓Customizable Cable and Connector ✓Dimensions 89 × 76 × 27/30 mm ✓IP67, IP69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	169.4-169.8 MHz
	Antenna element peak	0 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
	Active Gain	26 dB @ 3 V / 27 dB @ 5 V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 60 x 97 mm

Combination antenna
Screw mount

MEA-433-IGG

433 MHz ISM/GPS/GLONASS Screw Mount

Part #: 100-00239-01

✓ ISM and GPS/GLONASS ✓ Easy mounting: Screw Mount ✓ Customizable Cable and Connector ✓ IP67, IP69K ✓ Low weight 166g

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	433-435 MHz
	Antenna element peak	-0.4 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
	Active Gain	26 @ 3V / 27dB @ 5V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 63 x 186.5 mm

MEA-5G-1575-1606

5GNR GPS/GLONASS Screw Mount

Part #: 100-00238-01

✓ 5GNR & GPS/GLONASS/QZSS/Galileo ✓ Easy mounting: screw mount ✓ Ground plane independent ✓ Customizable cable and connector ✓ IP67 & IP69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	2.9 dBi / 2.1 dBi/ 0.5 dBi /1.0 dBi
Cable2	Frequency	1575.42 MHz / 1598-1610 MHz
	Active Gain	28 dB @ 2.7 V
	Radiation Pattern	Omni-directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw Mount / SMA Male
Dimensions	Ø 54 x 50 mm

MEA-5GGG-SMA-SM

5GNR and GPS/GLONASS Screw Mount

Part #: 100-00244-01

✓ 5GNR, GPS/GLONASS ✓ High performance ✓ Customizable cable and connector ✓ IP67, IP69

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.1 dBi / 3.6 dBi /1.9 dBi /1.2 dBi
Cable2	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	26dB@3V; 27dB@5V
	Radiation pattern	Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount
Dimensions	Ø 60 x 81 mm

Combination antenna
Screw mount

MEA-5in1-SMA

5GNR MIMO, 2.4/5.0/6.0 GHZ ISM and GNSS - Screw mount antenna

Part #: 100-00243-01

5GNR,2.4/5.0/6.0 GHz ISM & GPS/GLONASS/QZSS/Galileo frequency coverage Easy mounting: screw mount Heavy duty antenna High performance Ground plane independent Anti-rotation mounting Customizable cable and connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.3 dBi / 3.4 dBi / 4.7 dBi / 4.0 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	1.2 dBi / 3.6 dBi / 4.6 dBi / 3.2 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.8 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz 5925-7125 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi / 3.6 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

MEA-LTE-ISM-GNSS-TETRA

CELLULAR/LTE, 2.4/5.0 GHZ ISM, TETRA and GNSS - Screw Mount Antenna

Part #: 100-00243-01

CELLULAR / LTE,TETRA/UHF, ISM, and GPS/GLONASS/QZSS/Galileo frequency Easy mounting: Screw Mount Heavy duty antenna High performance Anti-rotation mounting Customizable cable and connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	698-960 MHz 1710-2170 MHz 2500-2700 MHz
	Antenna element peak	1.9 dBi / 3.0 dBi / 2.9 dBi
Cable2	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.6 dBi / 5.5 dBi
Cable3	Frequency	380-470 MHz
	Antenna element peak	2.1 dBi
Cable4	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	28 dB @ 2.7 V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

Combination antenna
Screw mount

MEA-5G-ISM-MIMO-GNSS

5GNR MIMO, 2.4/5.0 GHz ISM, and GNSS Screw Mount

Part #: 100-00240-01

5GNR , 2.4/5.0 GHz ISM /GPS/GLONASS/QZSS/Galileo - 1575-1606 MHz Easy mounting: screw mount Heavy duty antenna
High performance Ground plane independent Anti-rotation mounting Customizable cable and connector IP67, IP69, IK09

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	0.3 dBi / 3.6 dBi / 4.7 dBi / 3.8 dBi
Cable2	Frequency	617-960 MHz 1427-2690 MHz 3300-5000 MHz 5150-5925 MHz
	Antenna element peak	0.7 dBi / 3.7 dBi / 4.6 dBi / 3.6 dBi
Cable3	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.3 dBi / 1.5 dBi
Cable4	Frequency	2410-2490 MHz 4920-5925 MHz
	Antenna element peak	5.3 dBi / 2.3 dBi
Cable5	Frequency	1575.42 MHz 1598-1610 MHz
	Active Gain	23dB@3V; 24dB@5V
Radiation pattern		Omni-Directional / Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Screw mount / SMA-Male
Dimensions	Ø 96 x 130 mm

Combination antenna
Connector Mount

MEA-2410-WIFI

Dual Band Wifi ISM Antenna

Part #: 100-00280-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ IP67

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	2.8 dBi/ 2.4 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	Ø15.7 x 58.2 mm

MEA-4920-ISM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00279-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	3.1 dBi / -0.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ SMA Male
Dimensions	Ø12.5 x 34.7 mm

MEA-2410-FAKRA

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00279-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	2.6 dBi/ -0.3 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Fakra Beige Female
Dimensions	Ø12.5 x 44.5 mm

Combination antenna
Connector Mount

MEA-4920-CM

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00276-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ High performance antenna ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	4.0 dBi / 5.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	53 x 10 x 18 mm

MEA-2410-SMA

2.4/5.0 GHz ISM Connector Mount

Part #: 100-00275-01

✓ 2.4/5.0 GHz ISM, 2410-2490MHz, 4920-5925MHz ✓ Easy mounting: Connector Mount ✓ High Gain

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz /4920-5925MHz
Peak Gain	4.0 dBi / 5.2 dBi
Radiation Pattern	Omni-directional

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Connector Mount/ Most RF Connectors
Dimensions	Ø 10 x 56 mm

Combination antenna
Magnetic Mount

M9706CWT

L1/L2 GPS GLONASS Active Multi-Frequency Antenna – External

Part #: 100-00090-01

Low profile design Concurrent GNSS reception on L1: GPS , GLONASS, Galileo, Beidou and L2: GPS L2C, Galileo E5B, and GLONASS L3OC Rugged IP67 rating Small form factor GIS, RTK and other high accuracy GNSS applications Low power consumption Minimal phase center variation over azimuth and elevation Negligible group delay variation Automotive grade housing

Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1)
Realized gain	2.6 dB 3.3 dB
Axial Ratio	Max 1.5 dB at the Zenith Max 2.7 dB at the Zenith

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA, SMB or MCX (customer's choice)
Dimensions	75mm x 70mm x 23 mm

M9708CWT

L1/L2/L5 GPS GLONASS Active Multi-Frequency Antenna – External

Part #:100-00138-01

Low profile design Concurrent GNSS reception on L1: GPS , GLONASS, Galileo, Beidou and L2: GPS L2C, Galileo E5B, and GLONASS L3OC Rugged IP67 rating Small form factor GIS, RTK and other high accuracy GNSS applications Low power consumption Minimal phase center variation over azimuth and elevation Negligible group delay variation Automotive grade housing

Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1) 1164-1189 MHz (L5, E5A)
Realized gain	2.6 dB 3.3 dB -2dB
Axial Ratio	Max 1.5 dB at the Zenith Max 2.7 dB at the Zenith Max 3 dB at the Zenith

Key mechanical specifications:

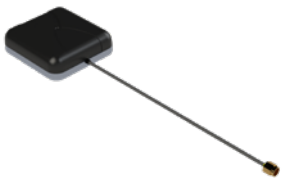
Parameter	Specification
Mounting option / Connector	SMA, SMB or MCX connector
Dimensions	75mm x 70mm x 23 mm

M1593CWT

L1/L2/L5 GPS GLONASS + L-Band- Active Multi-Frequency Antenna – External

Part #: 100-00191-01

Small form factor GIS, RTK and other high accuracy GNSS applications Low Power Consumption Minimal phase center variation over azimuth and elevation Negligible group delay variation Automotive grade housing



Key electrical specifications:

Parameter	Specification
Frequency	197-1249 MHz 1559-1606 MHz 1539 - 1559 MHz
Realized gain	2.6 dB @1197-1249 MHz 3.3 dB @1559-1606 MHz 1.5 dB @1539 - 1559 MHz
Polarization	RHCP

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic base, fixed installation option/ SMA, SMB, MCX
Dimensions	75mm x 70mm x 23 mm

Combination antenna
Magnetic Mount

M1559CWT

L1 GPS GLONASS Active Multi-Frequency Antenna – External

Part #: 100-00118-01

Concurrent GNSS reception on L1: GPS, GLONASS, Galileo, Beidou Low profile design Rugged IP67 rating Small form factor Low power consumption Minimal phase center variation over azimuth and elevation Negligible group delay variation Automotive grade

Key electrical specifications:

Parameter	Specification
Frequency	1559-1610 MHz (L1, E1, B1, B1-2, G1)
Realized gain	3.3 dB
Axial Ratio	Max 2.7 dB at the Zenith

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	SMA, SMB, MCX (customer choice)
Dimensions	75mm x 70mm x 23 mm

MEA-5800-MM

5GNR Magnetic Mount Antenna

Part #: 100-00200-01

5GNR Frequency range (617-960 MHz, 1427-2690 MHz, 3300-5000 MHz, 5150-5925 MHz) Easy mounting: Magnetic Mount High Performance Customizable Cable and Connector Low profile: Ø 31 x 109 mm

Key electrical specifications:

Parameter	Specification
Frequency	617-960MHz 1427-2690MHz 3300-5000MHz 5150-5925MHz
Antenna element peak gain	1.0 dBi @ 617-960 MHz 2.9 dBi @1427-2690 MHz 2.5 dBi @3300-5000 MHz 0.4 dBi @5150-5925 MHz
Radiation pattern	Omni-Directional

Key mechanical specifications:

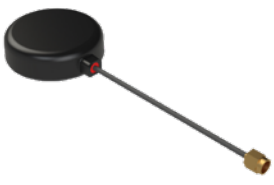
Parameter	Specification
Mounting option / Connector	SMA-Male
Dimensions	105.1 x 30.1 x 6.7 mm

MEA-1600-AM

IRIDIUM/GPS Magnetic/Adhesive Mount Antenna

Part #: 100-00237-01

Easy mounting: magnetic/adhesive mount Low profile Customizable cable and connector IP67, IP69



Key electrical specifications:

Parameter	Specification	
Frequency	1575.42 MHz	1616-1627 MHz
Peak Gain	2.5 dBi	2.6 dBi
Radiation Pattern	Hemispherical	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic/Adhesive Mount/ SMA Male
Dimensions	Ø 54 x 14.7 mm

Combination antenna
Adhesive Mount

MEA-LG-AM

CELLULAR/LTE and GPS/GLONASS Adhesive Mount

Part #: 100-00193-01

✓Cable 1: CELLULAR/LTE - 698-960 MHz; 1710-2170 MHz; 2500-2700 MHz / Cable 2: GPS/GLONASS/QZSS/Galileo - 1575-1606 MHz ✓Adhesive Mount ✓Ground Plane Independent ✓Customizable Cable and Connector Dimensions ✓Low profile: 83 x 35 x 13.3 mm ✓IP67, IP69

Key electrical specifications:

	Parameter	Specification		
Cable1	Frequency	698-960 MHz	1710-2170 MHz	2500-2700 MHz
	Antenna element peak	-2.7 dB	-3.0 dB	-5.9 dB
	Polarization	Linear		
	VSWR	1.8:1	1.3:1	2.0:1
Cable2	Frequency	1575.42 MHz	1598-1606 MHz	
	Active gain	28 dB @ 2.7 V		
	Polarization	RHCP		
	VSWR	≤ 1.4:1		

Key mechanical specifications:

Parameter	Specification
Connector	Adhesive Mount/ SMA Connector
Cable Type	RG178
Dimensions	82 x 80 x 6.6 mm

MEA-LGG-AM

Cellular/LTE and GPS/GLONASS Antenna – Adhesive Mount

Part #: 100-00163-01

✓ 2in 1 antenna (CELLULAR/LTE,GPS/GLONASS/QZSS/Galileo) ✓ Adhesive Mount ✓ High Performance ✓ Ground Plane Independent ✓ Customizable Cable and Connector ✓ Dimensions 150.5 x 42 x 15.3 mm ✓ IP67, IP69

Key electrical specifications:

	Parameter	Specification		
Cable1	Frequency	698-960 MHz	1710-2170 MHz	2500-2700 MHz
	Antenna element peak	3.4 dBi	3.5 dBi	3.9 dBi
	Efficiency	76%	69%	76%
	VSWR	1.7:1	1.4:1	1.5:1
Cable2	Frequency	1575.42 MHz	1598-1606 MHz	
	Active gain	28 dB @ 2.7 V		
	Polarization	RHCP		
	VSWR	≤ 1.4:1		

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount / SMA Connector
Dimensions	150.5 x 42 x 15.3 mm

Combination antenna
Adhesive Mount

MEA-3-GGL

GPS/GLONASS/LTE Antenna & 2G/3G LTE SOLUTION

Part #: 189-00053-01

✓Covers GNSS & LTE Bands ✓ 2 in 1 Low Profile Antenna ✓Rugged IP67 ✓Customizable Cables and Connectors ✓Small Size ✓Easy Magnet Mounting ✓ Quality Textured Covert Design

Key electrical specifications:

	Parameter	Specification		
GNSS	Frequency	1575.42 MHz		1602 MHz
	Polarization	Linear		
	Polarization	3.0 dBi Typ.		3.5 dBi Typ
	VSWR	≤ 2.0:1		
LNA	Frequency	1575.42 MHz		1602 MHz
	Power Consumption	9 Typ. mA @3.3V		
	Antenna Gain	28 dB Typ. / 25 dB Min		
	VSWR	≤ 2.0:1		
LTE	Frequency	698-960 MHz 2500-2700 MHz		1710-2170 MHz
	Antenna element peak	1.5 dBi	0.5 dBi	0.5 dBi
	Efficiency	25%	30%	30%
	VSWR	≤ 5.5	≤ 4.0	≤ 4.0

Key mechanical specifications:

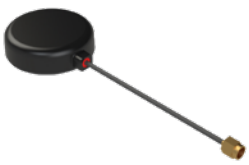
Parameter	Specification
Mounting option / Connector	Foam adhesive / SMA, FAKRA or custom
Dimensions	(L) 55 x (W) 55 x (H) 20 mm

MEA-1600-AM

IRIDIUM/GPS Magnetic/Adhesive Mount Antenna

Part #: 100-00237-01

✓Easy mounting: magnetic/adhesive mount ✓ Low profile ✓ Customizable cable and connector ✓ IP67, IP69



Key electrical specifications:

Parameter	Specification	
Frequency	1575.42 MHz	1616-1627 MHz
Peak Gain	2.5 dBi	2.6 dBi
Radiation Pattern	Hemispherical	

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Magnetic/Adhesive Mount/ SMA Male
Dimensions	Ø 54 x 14.7 mm

MEA-1600-EXP

GNSS AND Iridium adhesive Mount

Part #: 189-00026-01

✓Optimized for GPS/GLONASS/IRIDIUM networks ✓ Adhesive Mount ✓High Gain & Efficiency ✓ Low profile ✓High Performance ✓Customizable Cable and Connector

Key electrical specifications:

	Parameter	Specification
Cable1	Frequency	1575.42 MHz / 1598-1606 MHz
	Active Gain	28 dB @ 2.7 V
Cable2	Frequency	1616-1627 MHz
	Peak Gain	4.5 dBic
	Radiation Pattern	Hemispherical

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount/ SMA Male
Dimensions	80 x 76 x 16 mm

Combination antenna
Adhesive Mount

MEA-2400-AM

2.4 GHz ISM Adhesive Mount

Part #: 100-00173-02

✓ 2.4 GHz ISM Band ✓ Adhesive Mount ✓ 3.8 dBi WIFI Peak Gain ✓ Customizable Cable and Connector ✓ Ultra rugged housin
✓ Dimensions Ø 54 × 14.7 mm ✓ IP67, IP69K

Key electrical specifications:

Parameter	Specification
Frequency	2410-2490 MHz
Peak gain	3.8 dBi
Polarization	Linear
VSWR	1.4:1

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Adhesive Mount / Fakra Beige Female
Dimensions	Ø 54 × 14.7 mm

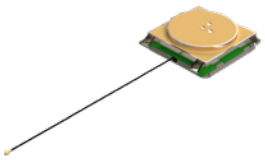
Combination antenna
Embedded

M9706CWT-UFL

L1/L2 GPS GLONASS Active Multi-Frequency Antenna – Embedded

Part #: 108-00060-02

✓ Concurrent GNSS reception on L1: GPS, GLONASS, Galileo, Beidou and ✓ L2: GPS L2C, Galileo E5B, GLONASS L30C, and L2 OF ✓ Low profile design ✓ Conformal materials ✓ Full active design with superb filtering ✓ Small form factor ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low power consumption ✓ Minimal phase center variation over azimuth and elevation ✓ Negligible group delay variation



Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1)
Realized gain	2.6 dB 3.3 dB
Axial Ratio	Max 1.5 dB at the Zenith Max 2.7 dB at the Zenith

Key mechanical specifications:

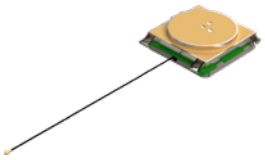
Parameter	Specification
Mounting option / Connector	Embedded/ U.FL connector
Dimensions	65mm x 65mm x 17 mm

M9708CWT-UFL

L1/L2/L5 GPS GLONASS Active Multi-Frequency Antenna – Embedded

Part #: 108-00067-01

✓ Low profile design ✓ Concurrent GNSS reception on L1: GPS GLONASS, Galileo, Beidou and L2: GPS L2C, Galileo E5B, and GLONASS L3OC ✓ Small form factor ✓ GIS, RTK and other high accuracy GNSS Applications ✓ Low power consumption ✓ Minimal phase center variation over azimuth and elevation ✓ Negligible group delay variation ✓ Custom tuned to applications enclosure



Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz (L2, B2, G2, G3, E5B) 1559-1606 MHz (L1, E1, B1, B1-2, G1) 1164-1189 MHz (L5, E5A)
Realized gain	2.6 dB 3.3 dB -2dB
Axial Ratio	Max 1.5 dB at the Zenith Max 2.7 dB at the Zenith Max 3 dB at the Zenith

Key mechanical specifications:

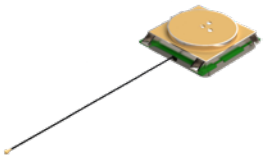
Parameter	Specification
Mounting option / Connector	Embedded/ U.FL connector
Dimensions	65mm x 65mm x 17 mm

M1593CWT-UFL

L1/L2/L5 GPS GLONASS + L-Band- Active Multi-Frequency Antenna – Embedded

Part #: 108-00083-01

✓ Small form factor ✓ GIS, RTK and other high accuracy GNSS applications ✓ Low Power Consumption ✓ Minimal phase center variation over azimuth and elevation ✓ Negligible group delay variation ✓ Automotive grade housing



Key electrical specifications:

Parameter	Specification
Frequency	1197-1249 MHz 1559-1606 MHz 1539 - 1559 MHz
Realized gain	2.6 dB 3.3 dB 1.5 dB
Noise figure	≤ 2 dB

Key mechanical specifications:

Parameter	Specification
Mounting option / Connector	Embedded/ U.FL
Dimensions	65mm x 65mm x 17 mm

Cable Options & Connectors

Our standard connectors

SMA-Male
SMA-Female
SMA-Male Right Angle
SMA-Female Right Angle
SMA-Male Reverse Polarity
SMA-Female Reverse Polarity
SMA-Male Reverse Polarity Right angle
SMA-Female Bulkhead
MCX-Male
MCX-Female
MCX-Male Right Angle
MCX-Female Right Angle
MMCX

F-Male
F-Female
N-Male
N-Female
N-Female Bulkhead
SMB-Male
SMB-Female
TNC-Male
TNC-Female
TNC-Male RP
TNC-Female Bulkhead

SMC-Male
SMC-Female
SMC-Male Right Angle
SMC-Female Bulkhead
BNC-Male
BNC-Female
FAKRA all types
U.FL

Cable list

RG174
RX174
RG174HF
RG174LL
RG174TWIN
RG178
RG223
RG316
RG58
RG6
LL100
LL195

Enviroflex 316
D
H155
D100
D302
Microcoax 0.81
Microcoax 1.13
Microcoax 1.32
Microcoax 1.37

SMA Male

SMA Male with LMR 100

U.FL connector

U.FL with Microcoax 1.13

TNC connector

TNC straight with LMR 100

MCX Right angle connector

MCX Right angle with RG 174

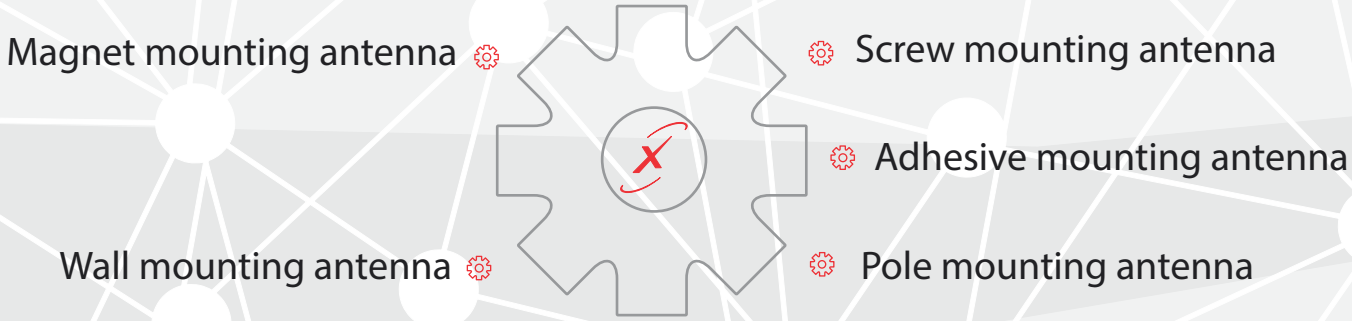
Accessories

MAXTENA

Accessories

Maxtena oers a high variety of antenna accessories including mounting brackets, RF cables and connectors. Custom solutions are available upon request.

Applications

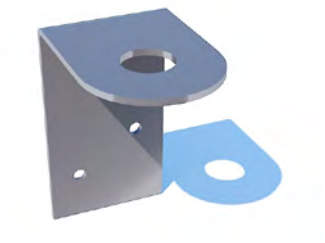


MMB-01-11-P

Wall Mount Bracket

Part #: 311-00052-01

Easy to mount Wall mount Antenna Very light: 30g ROHS Compliant Screws included Robust design



Key mechanical specifications:

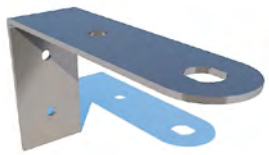
Parameter	Specification
Material	Aluminum
M4 Screw Material	Zn - Fe
Weight	30g
Operating environment	-40 °C to +85 °C

MMB-01-12-P

Wall Mount Bracket

Part #: 311-00053-01

Easy to mount Wall mount Antenna Very light: 30g ROHS Compliant Screws included Robust design



Key mechanical specifications:

Parameter	Specification
Material	Aluminum
M4 Screw Material	Zn - Fe
Weight	30g
Operating environment	-40 °C to +85 °C

MMB-04-17-SM

Magnetic/Adhesive Mount Bracket With SMA (Female) Connector

Part #: 105-00008-01

Screw mount bracket with cable and SMA F connector Gasket suitable for all types of flat surface Suitable for various connector types Equipped with RG174 or LL100 cable Possible frequency transfer up to 6 GHz Robust construction Mounting hole 19 mm/square 15x15 mm

Key mechanical specifications:

Parameter	Specification
Material	ASA - UV stable
Dimensions	Ø 60 x 25 mm
Weight	103g
Cable type	RG174 or LL100 cable
Operating environment	-40 °C to +85 °C

MMB-04-18-SM

Screw mount bracket with cable and SMA F connector

Part #: 105-00012-01

Screw mount bracket with cable and SMA F connector Gasket suitable for all types of flat surface Suitable for various connector types Equipped with D302 cable High efficiency Possible frequency transfer up to 6 GHz Robust construction Mounting hole 19 mm/square 15x15 mm

Key mechanical specifications:

Parameter	Specification
Material	ASA - UV stable
Dimensions	Ø 60 x 25 mm
Weight	115g
Cable type	D302 cable
Operating environment	-40 °C to +85 °C

MMB-04-19-MM

Magnetic/Adhesive Mount Bracket With SMA (Female) Connector

Part #: 105-00009-01

Screw mount bracket with cable and SMA F connector Gasket suitable for all types of flat surface Suitable for various connector types Equipped with D302 cable High efficiency Possible frequency transfer up to 6 GHz Robust construction Mounting hole 19 mm/square 15x15 mm

Key mechanical specifications:

Parameter	Specification
Dimensions	Ø 59 x 24 mm
Cable type	RG174 or LL100 cable

MMB-04-20-MM

Magnetic/Adhesive Mount Bracket with SMA (Female) Connector

Part #: 105-00013-01

Gasket suitable for all types of flat surface Suitable for various connector mount antenna Equipped with D302 cable Possible frequency transfer up to 6 GHz Robust construction Strong magnet for metal surface Mounting hole 19 mm/square 15x15 mm

Key mechanical specifications:

Parameter	Specification
Dimensions	Ø 54 x 24 mm
Cable type	D302 cable

MMB-04-21-AM

Magnetic/Adhesive Mount Bracket with SMA (Female) Connector

Part #: 105-00010-01

✓ Suitable for connector mount antenna ✓ Equipped with RG174 or LL100 cable ✓ Possible frequency transfer up to 6 GHz ✓ Robust construction ✓ Strong magnet for metal surface ✓ Mounting hole 19 mm / square 15x15 mm ✓ Double side adhesive sticker included

Key mechanical specifications:

Parameter	Specification
Dimensions	Ø 54 x 24 mm
Cable type	RG174 or LL100

MB-04-23-MM

Magnetic/Adhesive Mount Bracket with SMA (Female) Connector

Part #: 105-00014-01

✓ Suitable for magnetic/Adhesive surface ✓ Suitable for connector mount antenna ✓ Equipped with D302 cable ✓ Possible frequency transfer up to 6 GHz ✓ Robust construction ✓ Strong magnet for metal surface ✓ Double side adhesive sticker included ✓ Mounting hole 19 mm/square 15x15 mm

Key mechanical specifications:

Parameter	Specification
Dimensions	Ø 54 x 24 mm
Cable type	RG174 or LL100

Maxtena's Three-Phase Process for Embedded Antennas

Maxtena is the leader in the design and manufacturing of high performance, light weight antennas for use in a variety of portable wireless applications including satellite phones, military radios, handheld navigation, GPS tracking, recreational devices and laptop computers. Maxtena produces both external antennas that come in a range of plastic housings as well as embedded antennas. The embedded antennas are custom built to sit perfectly in the application's own housing.

Phase 1

Upon agreement between Maxtena and the customer that an embedded antenna is the best solution a two-way Non-Disclosure Agreement is executed so both parties can share design information. After the NDA is executed, a Maxtena Program Manager will schedule a call between Maxtena's engineering team and the Customer.

Prior to the meeting the customer should provide CAD data in a suitable exchange format (such as STEP) for review by the Maxtena engineering team.

The purpose of the meeting is for Maxtena to understand the customer's requirements and to provide the customer with design guidance for their housing to ensure the final design will achieve the best overall antenna performance. A wide range of housing design elements can and will affect the performance of an embedded antenna and addressing these items early in the design phase can reduce the overall time required for development. Antenna placement, PCB spacing, material thickness, resin selection and resin additives are just some of the design elements where Maxtena will provide guidance.

At the conclusion of the meeting Maxtena will develop and submit a proposal detailing the breakdown of tasks, the schedule, Maxtena and customer deliverables, required engineering resources, and the total project cost. Upon review and acceptance of this proposal by the customer, and submission of a Non-Recurring Engineering (NRE) Purchase Order, Maxtena will assign resources to undertake the project.

Phase 2

After the customer has incorporated Maxtena's design guidelines into the mechanical design, a new CAD database is sent to Maxtena. Maxtena's engineers will import this design into simulation software and conduct an analysis of the design to identify the expected antenna performance and provide feedback to the customer on changes they can make to the housing to ensure optimal antenna performance.

Once the customer incorporates any modifications into its design, Maxtena orders a small quantity (usually 2 to 4) of machined prototypes using the latest design. At the same time, Maxtena manufactures an equal number of antennas to be used with the new housing prototypes. The prototype assemblies are then tested by Maxtena's engineers using Maxtena's in-house near field anechoic chamber to verify the design achieves the expected results. Typically, the chamber testing confirms the results of the simulation and the customer can have tooling made for the fabrication of production parts. In rare cases, minor changes are required to the housing design before the tooling can be ordered.

Once initial chamber testing is completed Maxtena will provide a written report documenting the results. Maxtena will also schedule the manufacture of a small number of antennas, usually 20 to 30, to be used for testing when the final housings are available.

Phase 3

When the first parts are made from the tooling, the customer sends a small number of parts to Maxtena (typically 20 to 30) for final testing in the anechoic chamber. Maxtena's engineering team will test all of the units to get a broader sample and to confirm the performance will be repeatedly achieved across a production lot. Once the testing is complete Maxtena will provide the customer a final written report documenting the test results.

Maxtena will then begin production of the antennas in accordance with the customer's orders and/or forecast.

The Business Result

As a result of Maxtena's embedded antenna design process, companies are rapidly deploying products with consistent and reliable performance. This process involves substantial communication and collaboration between Maxtena and the customer and serves to cement a strong working relationship on both a business and technical basis. This interchange also serves to educate the customer on key characteristics that affect antenna performance and avoid making future design changes. Maxtena's Program Manager continues to be the customers advocate within Maxtena to ensure a smooth transition to manufacturing and to respond to any issues that may arise.

Quality, shipping & lead time

Quality

We work hard to provide customers with the very best products. We strive to provide best-in-class quality and reliability in each and every product we manufacture. We have developed a systematic approach to assure the quality of our products from development to prototyping to product qualification to manufacturing. We have selected strategic partners who meet the ISO management system standards to ensure we deliver the best quality products to our customers.
Every product manufactured is individually tested on the production line using proprietary software developed by Maxtena for quality assurance.

Shipping

We sell our products globally and use strategically picked distribution partners to shorten lead times, as well as to provide excellent on-time customer support. Shipping of sample products Sample quantities for all of Maxtena's products are available for purchase and will ship from our headquarters in Rockville, Maryland, USA or from an authorized distributor. For a complete list of Maxtena authorized distributors please visit: www.maxtena.com/company/distributors.

Lead time

The lead time for all Maxtena products is 8-10 weeks ARO, unless the product is in-stock and available o-the-shelf, in which case product(s) will ship immediately. Customers placing purchase orders (PO) will be quoted a lead time based on product availability before the PO is accepted and processed. Any custom tuned or custom-built antenna requires the sale of service ahead of the sale of antennas, such as feasibility studies, prototyping, and chamber measurement.

Antenna Specifications

Frequency

The frequency of an antenna is the range of radio frequencies it can transmit or receive. Antennas are designed to operate over a specific frequency range, and their performance can vary depending on the frequency of the signal they are transmitting or receiving. The specific frequency range of an antenna is determined by its design and construction.

Efficiency

Antenna efficiency is a measure of how effectively an antenna converts input power into radiated power. It is typically expressed as a percentage and is calculated by dividing the radiated power by the input power and multiplying by 100. A highly efficient antenna will radiate most of the input power, while a less efficient antenna will radiate less power and may suffer from losses due to resistance or other factors. Antenna efficiency is an important factor to consider when designing and selecting antennas, as it can affect the performance and range of a communication system.

Polarization

Antenna polarization refers to the orientation of the electric field of the EM waves that an antenna transmits or receives. Antennas are typically designed to transmit and receive radio waves with a specific polarization, which can be either vertical, horizontal, or circular. The polarization of an antenna is determined by the orientation of its elements relative to the ground. For example, a vertical antenna will have elements that are oriented perpendicular to the ground, while a horizontal antenna will have elements that are oriented parallel to the ground.

Right-hand circular polarization

Right-hand circular polarization (RHCP) is a type of polarization in which the electric field of the radio wave rotates in a clockwise direction as it propagates. This is the opposite of left-hand circular polarization (LHCP), in which the electric field rotates in a counterclockwise direction. Circular polarization is often used in satellite communications, as it can provide better performance in environments with significant amounts of atmospheric noise or interference. Antennas that are designed to transmit or receive RHCP signals have elements that are arranged in a circular pattern, with the elements oriented in a specific way to produce the desired polarization.

Antenna Gain

Antenna gain is a measure of the increase in the strength of a radio signal as it passes through an antenna. It is typically measured in decibels (dB). Antennas with a high gain will amplify the input signal and radiate it over a larger area, while antennas with a low gain will produce a weaker signal. Antenna gain is often used to compare the performance of different antennas and can be an important factor to consider when selecting an antenna for a particular application.

Axial Ratio

The axial ratio of an antenna is a measure of the ellipticity of its radiation pattern. It is defined as the ratio of the major axis to the minor axis of the antenna's radiation pattern in a given plane. The axial ratio is typically expressed in decibels (dB), and is often used to evaluate the performance of circularly polarized antennas. A perfect circularly polarized antenna will have an axial ratio of 0 dB, while an antenna with an axial ratio greater than 0 dB will have an elliptical radiation pattern. The axial ratio of an antenna can be affected by factors such as its design, construction, and operating environment.

Antenna Specifications

Return Loss

Return loss is the parameter that describes the amount of the power reflected back towards the source as a result of standing waves on the transmission line caused by mismatched antenna and/or mismatched line. It is a measure of how well an antenna is able to transmit or receive a signal. Return loss is typically expressed in decibels (dB). A good antenna will have a return loss typically less than -10 dB over working frequency range, which indicates that it is able to efficiently transmit or receive signals without significant reflections.

VSWR

The voltage standing wave ratio (VSWR) is a measure of the standing wave ratio that occurs on the transmission line of a radio frequency (RF) system. It is defined as the ratio of the maximum voltage to the minimum voltage of the standing wave along the transmission line. A VSWR of 1:1 indicates a perfect match, while a VSWR greater than 1:1 indicates that there is a mismatch between the system and the load.

Beamwidth

The beamwidth of an antenna is the angular width of its radiation pattern. It is typically measured in degrees and is defined as the angle between the points on the radiation pattern where the power is at least half of the peak power. The beamwidth of an antenna is determined by its design and construction, and can be affected by factors such as the size and shape of its elements and the operating frequency. Antennas with a narrow beamwidth will focus their radiation pattern into a smaller area, while antennas with a wide beamwidth will produce a more diffuse pattern.

Bandwidth

The bandwidth of an antenna is the range of frequencies over which it can operate effectively. It is typically measured in hertz (Hz) or as a percentage of the center frequency, and is determined by the design and construction of the antenna. Antennas with a wide bandwidth can operate over a broad range of frequencies. The bandwidth of an antenna is an important factor to consider when selecting an antenna for a particular application, as it can affect the performance and range of the antenna. For example, a wideband antenna may be able to receive and transmit a broader range of signals, but may also be more susceptible to interference.

Phase center variation

The phase center offset of an antenna is the difference between the phase center of the antenna and its physical center. The phase center of an antenna is the point at which the phase of the radiated electromagnetic field is the same in all directions. The physical center of an antenna is the geometric center of its elements. The phase center offset can be affected by factors such as the design and construction of the antenna, and can vary with frequency.

LNA Gain

A low-noise amplifier (LNA) is a type of amplifier that is used to amplify very weak signals with a low level of noise. The gain of an LNA is a measure of the increase in the strength of the signal that it produces. It is typically measured in decibels (dB) and is calculated by comparing the power of the input signal to the power of the amplified output signal. An LNA with a high gain will produce a stronger output signal. The gain of an LNA is an important factor to consider when selecting an LNA for a particular application.

Noise Figure

The noise figure of a device or system is a measure of the amount of noise it adds to the signal it processes. It is typically expressed in decibels (dB) and is calculated by comparing the noise power at the output of the device to the noise power at the input. A device with a low noise figure will add little noise to the signal, while a device with a high noise figure will add more noise. The noise figure of a device is an important factor to consider when selecting equipment for a communication system, as it can affect the performance and sensitivity of the system.

Out of band rejection

Out-of-band rejection is a measure of a device or system's ability to reject signals that are outside of its operating frequency range. It is typically expressed in decibels (dB) and is calculated by comparing the power of the signals within the operating frequency range to the power of the signals outside of that range. A device with a high out-of-band rejection will effectively reject signals outside of its operating frequency range.

Group Delay

Group delay is the time it takes for a signal to pass through a system or device. It is the difference between the phase of the input signal and the phase of the output signal at a particular frequency. Group delay is often used to describe the response of RF electronics systems to input signals and can be used to evaluate their ability to reproduce and process signals accurately. Depending on the design and operation of the system, the group delay may be constant or may vary with frequency. In some systems, it is desirable to have a flat group delay response across the operating frequency range, as this can improve the performance and clarity of the processed signal.

Group Delay Variation

Group delay variation refers to the change in the group delay of a signal over a certain frequency range. Group delay variation is important in many applications where it can affect the performance of systems such as filters and modulators. In general, systems with low group delay variation are desirable because they allow signals to pass through the system with minimal distortion.

Worldwide Distributors

To serve our customers internationally, Maxtena has established trusted distribution partners who are able to assist with product recommendations and purchases..

Global Distributors

Mouser Electronics

Selling Territory: Global
Website: www.mouser.com

Farnell – Electronic Component Distributor

Selling Territory: Global
Website: www.farnell.com

Richardson RFPD

Selling Territory: Global
Address:
40W267 Keslinger Road LaFox, IL 60147 – USA

Europe

Innovelec Solutions Limited

Selling Territory: Northern Europe
Address:
8 Progression Centre, Mark Road Hemel Hempstead, Herts, HP2 7DW – United Kingdom
Phone: +44 (0) 1442 573035
Email: sales@innovelec.co.uk
Website: www.innovelec.co.uk

Microdis AG

Selling Territory: Eastern Europe
Address:
Locations across Eastern and Western Europe
Phone: +48-22-8103666
Contact: Mariusz Ciesielski
Email: mariusz.ciesielski@micro-dis.net
Website: www.microdis.net

PPM GmbH

Selling Territory: Germany, Austria, Switzerland
Address:
ppM Precise Positioning Management GmbH, Grube 39a D-82377 Penzberg – Germany
Phone: 00 49/ 88 56 – 80 30 980
Contact: Stefan Geissler
Email: s.geissler@ppmgmbh.com
Website: http://www.ppmgmbh.com

Diltronic SAS

Selling Territory: France, Belgium
Address:
3 avenue du Val
78100 Saint Germain en Laye – France
Phone: +33 (0) 1 34 51 33 00
Contact: Stephane Gramfort
Email: info@diltronic.com Website:
http://www.diltronic.com

SE Spezial-Electronic GmbH

Selling Territory: Germany
Address:
Friedrich-Bach-Straße 1,
31675 Bückeburg, Germany
Phone: +49 5722 2030
Contact: Johannes Lange
Email: johannes_lange@spezial.com
website: www.spezial.com

Farnell – Electronic Component Distributor

Selling Territory: Global
Website: www.farnell.com

Mouser Electronics

Selling Territory: Global
Website: www.mouser.com

Worldwide Distributors

North America

Mouser Electronics

Selling Territory: Global
Website: www.mouser.com

Farnell – Electronic Component Distributor

Selling Territory: Global
Website: www.farnell.com

Richardson RFPD

Selling Territory: Global
Address:
40W267 Keslinger Road LaFox, IL 60147 – USA

Africa

Mouser Electronics

Selling Territory: Global
Website: www.mouser.com

Farnell – Electronic Component Distributor

Selling Territory: Global
Website: www.farnell.com

Australia

M2M Connectivity Ltd

Selling Territory: Australia, New Zealand
Address:
1 Barret Street
Kensington VIC 3031 – Australia
Phone: +61 3 9696 3011
Contact: Daryl Chambers
Email: daryl.chambers@m2mconnectivity.com.au
Website: http://www.m2mconnectivity.com.au

Step Global

Selling Territory: Australia, New Zealand
Address:
Unit 7, 444 Warrigal Road
Heatherton, VIC 3202 – Australia
Phone: +61 3 9551 7334
Contact: David Lloyd
Email: david.lloyd@stepglobal.com
Website: http://www.stepglobal.com
Website: http://www.m2mconnectivity.com.au

Mouser Electronics

Selling Territory: Global
Website: www.mouser.com

Farnell – Electronic Component Distributor

Selling Territory: Global
Website: www.farnell.com

Richardson RFPD

Selling Territory: Global
Address:
40W267 Keslinger Road LaFox, IL 60147 – USA

Worldwide Distributors

Central & Latin America

Mouser Electronics

Selling Territory: Global
Website: www.mouser.com

Farnell – Electronic Component Distributor

Selling Territory: Global
Website: www.farnell.com

Asia

Mouser Electronics

Selling Territory: Global
Website: www.mouser.com

AmTechs Corporation

Selling Territory: Japan
Address:
5-20-16, Kyodo, Setagayaku
Tokyo, 156-0052 – Japan
Phone: +81-3-5450-5311 Fax
+81-3-5450-5312
Email: info@amtechs.co.jp
Website: http://www.amtechs.co.jp

Farnell – Electronic Component Distributor

Selling Territory: Global
Website: www.farnell.com

Richardson RFPD

Selling Territory: Global
Address:
40W267 Keslinger Road LaFox, IL 60147 – USA

Israel

A.N. Security & Technology Consultation Ltd.

Selling Territory: Israel
Address:
7 Habonim St. Area Poleg, P.O.B. 8232
Netanya, 42504 – Israel
Phone: +972-50-3339333
Email: alah@an-cons.com

Notes

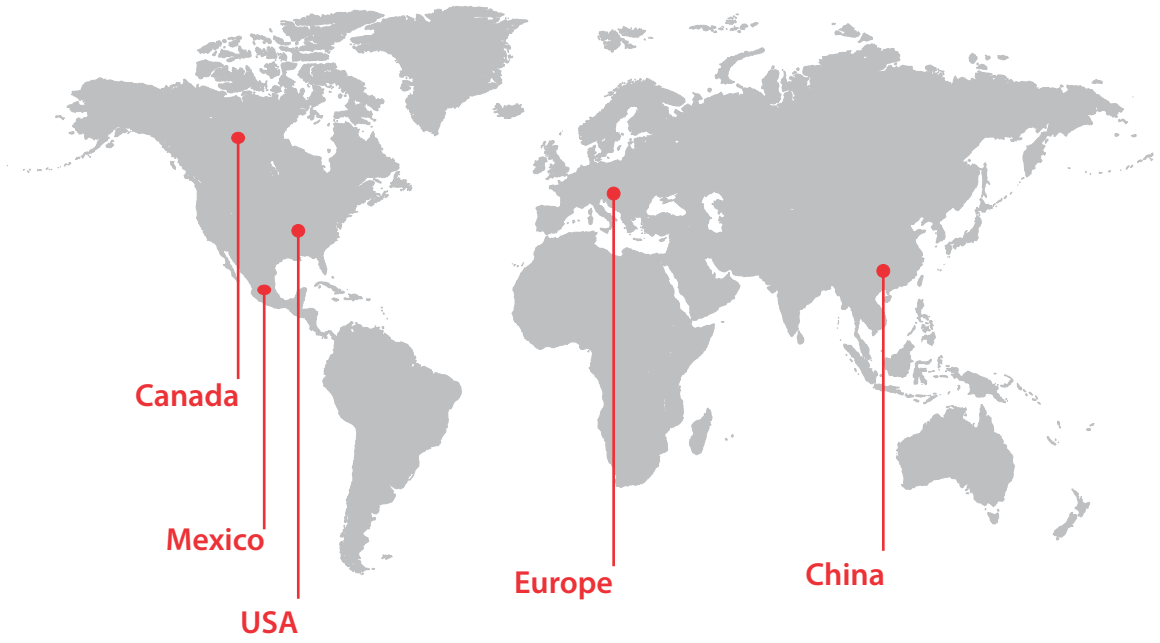
Notes

Offices & Contact

7 offices worldwide

100+ Employees

17 years in Business



Maxtena Inc. Main Office

Maxtena Inc. HQ USA

20310-A Seneca Meadows Pkwy
Germantown MD 20876
Telephone:
+001-877-629-8362

Maxtena Inc. USA

880 Harrison St.
Leesburg, VA 20175
Telephone:
+001-877-629-8362

Maxtena Inc. USA

1750 Kraft Drive, Suite 1505
Blacksburg, VA 24060
Telephone:
+001-877-629-8362

Maxtena d.o.o. Europe

Trg zrtava fasizma 2
10000 Zagreb, Croatia
Telephone:
+385-91-9188-990

Contact:

www.maxtena.com
linkedin.com/company/Maxtena/
Facebook.com/Maxtena.inc
@Maxtena

Sales inquiries:

sales@maxtena.com

Marketing contact:

Loubna.benchekroun@maxtena.com