



NETZ 5in1

LTE-MIMO/WIFI-MIMO/GNSS

Part #: 100-00095-01



Description

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.

GNSS Antenna Electrical Specifications

Parameter	Specification
Frequency Range	1561 / 1575.42 / 1602 MHz
V.S.W.R	< 2.0 : 1
Impedance	50 Ω
Polarization	Linear
Gain @ Zenith	3 dBi Typ. @1561 MHz 3 dBi Typ. @1575 MHz 3.5 dBi Typ. @1602 MHz

LNA Electrical Properties

Parameter	Specification
Frequency Range	1561 / 1575.42 / 1602 MHz
V.S.W.R	< 2.0 : 1
Impedance	50 Ω
Antenna Gain (@3.3V)	28 dB Typ. / 25 dB Min
DC Power Input	3~5 V
Noise Figure	1.5 dB Typ
Power Consumption (@3.3V)	9 Typ. mA

LTE MIMO1 Antenna Electrical Specifications

Parameter	Specification
Frequency Range	698~960 / 1710~2170 / 2300~2690 MHz
V.S.W.R	< 4.0 : 1
Impedance	50 Ω
Peak Gain	4.0 dBi Typ. @698~960 MHz 6.0 dBi Typ. @1710~2170 MHz 5.0 dBi Typ. @2300~2690 MHz
Average Efficiency	698~960 MHz > 40% 1710~2170 MHz > 40% 2300~2690 MHz > 50%

Features

- LTE/Wifi/GNSS frequencies
- High performance
- MIMO technology solution
- A low profile design with easy mounting
- An integrated SMA connectors

Applications

- Fleet management
- Commercial transport
- HD video monitoring
- Buses, train, and commercial applications
- Smart city

LTE MIMO2 Antenna Electrical Specifications

Parameter	Specification
Frequency Range	698~960 / 1710~2170 / 2300~2690 MHz
V.S.W.R	< 4.0 : 1
Impedance	50 Ω
Peak Gain	4.0 dBi Typ. @698~960 MHz 6.0 dBi Typ. @1710~2170 MHz 5.0 dBi Typ. @2300~2690 MHz
Average Efficiency	698~960 MHz > 40% 1710~2170 MHz > 50% 2300~2690 MHz > 50%

WIFI MIMO1 Antenna Electrical Specifications

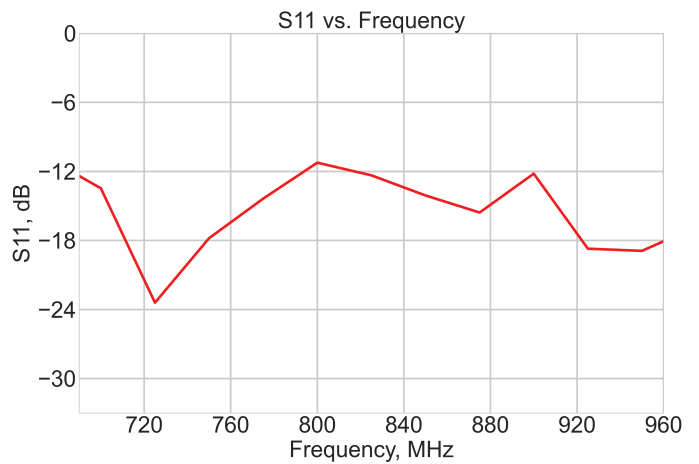
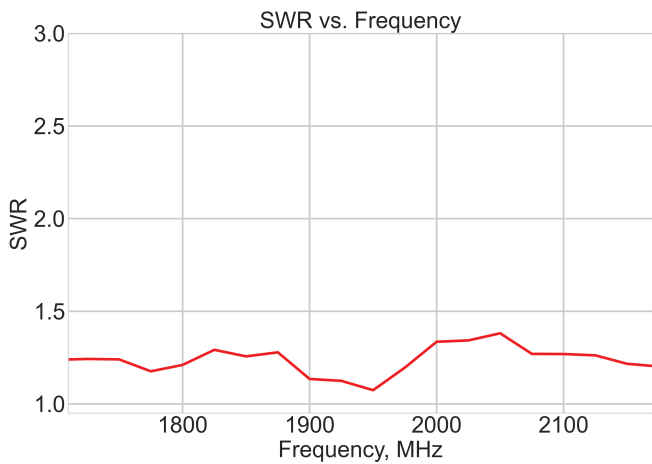
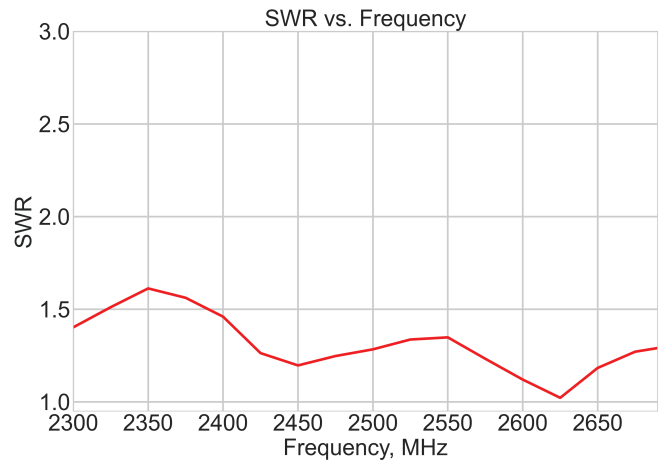
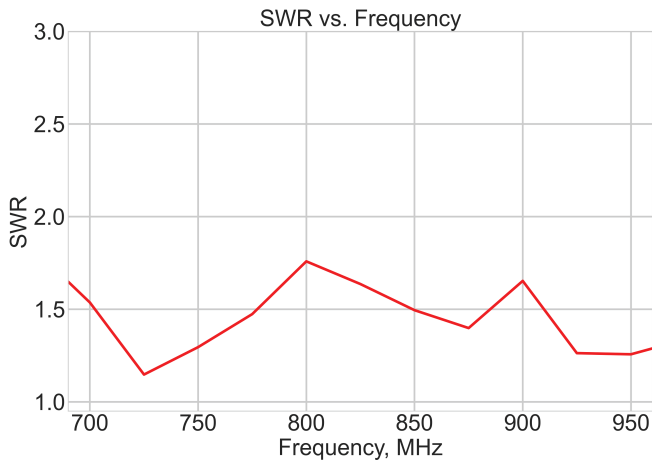
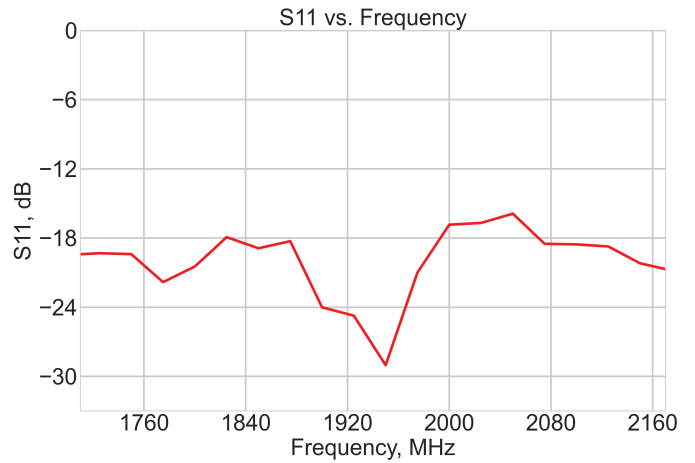
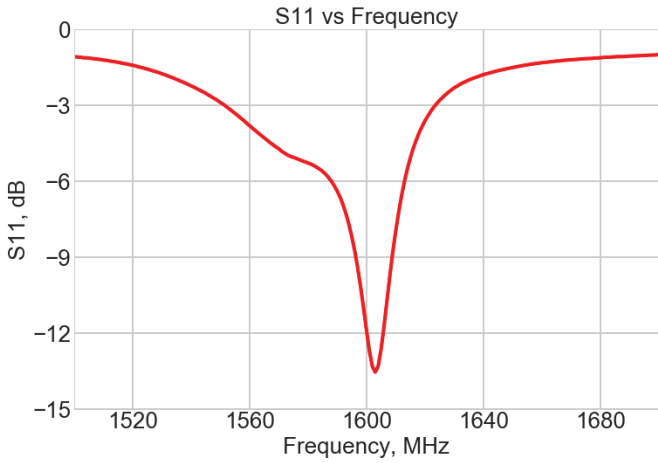
Parameter	Specification
Frequency Range	1561 / 1575.42 / 1602 MHz
V.S.W.R	< 2.0 : 1
Impedance	50 Ω
Peak Gain	5.0 dBi Typ. @2400~2500 MHz 8.0 dBi Typ. @5150~5850 MHz
Average Efficiency	2400~2500 MHz > 60% 5150~5850 MHz > 50%

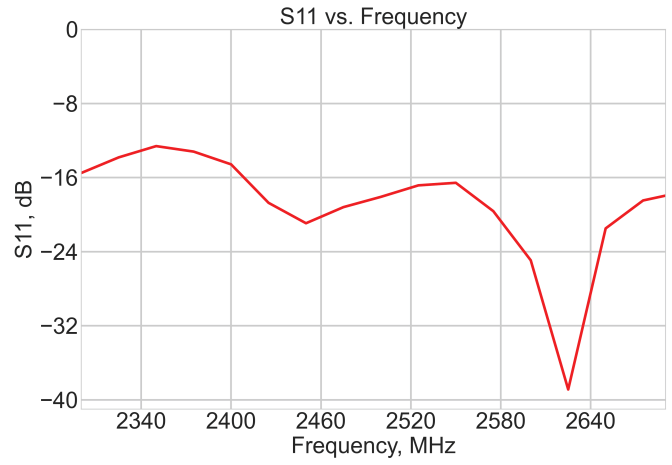
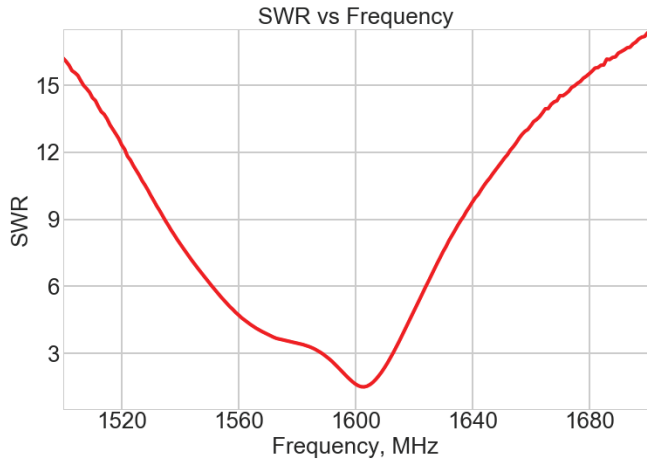
WIFI MIMO2 Antenna Electrical Specifications

Parameter	Specification
Frequency Range	2400~2500 / 5150~5850 MHz
V.S.W.R	< 2.0 : 1
Impedance	50 Ω
Peak Gain	5.0 dBi Typ. @2400~2500 MHz 8.0 dBi Typ. @5150~5850 MHz
Average Efficiency	2400~2500 MHz > 60% 5150~5850 MHz > 50%

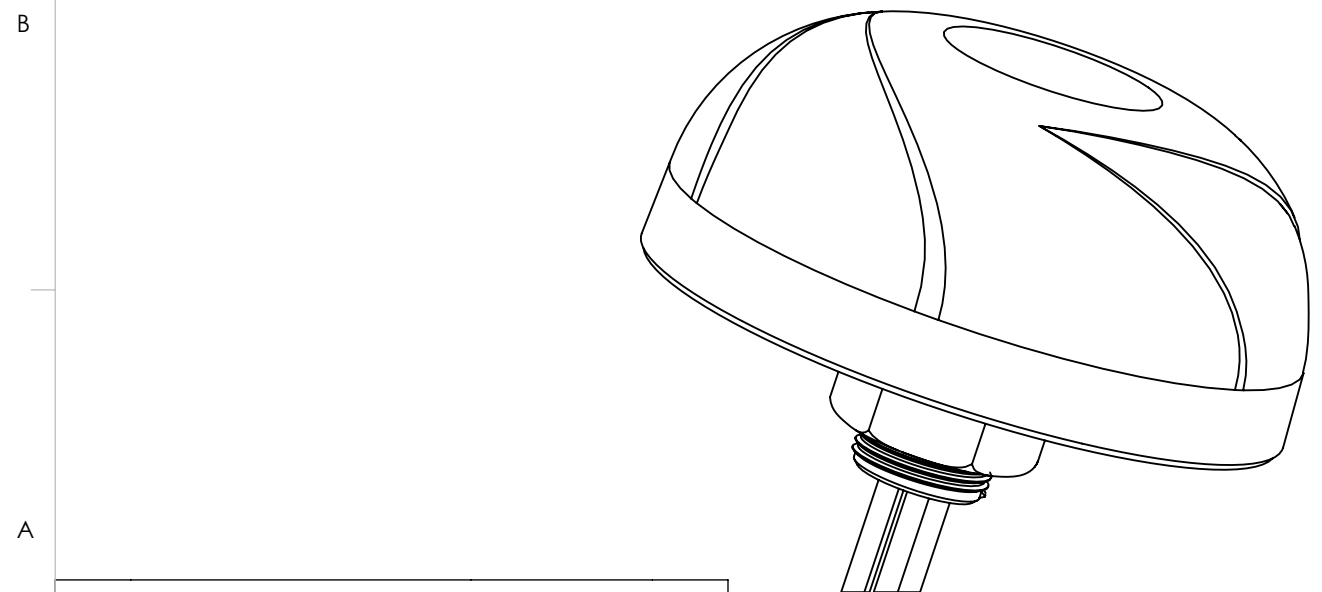
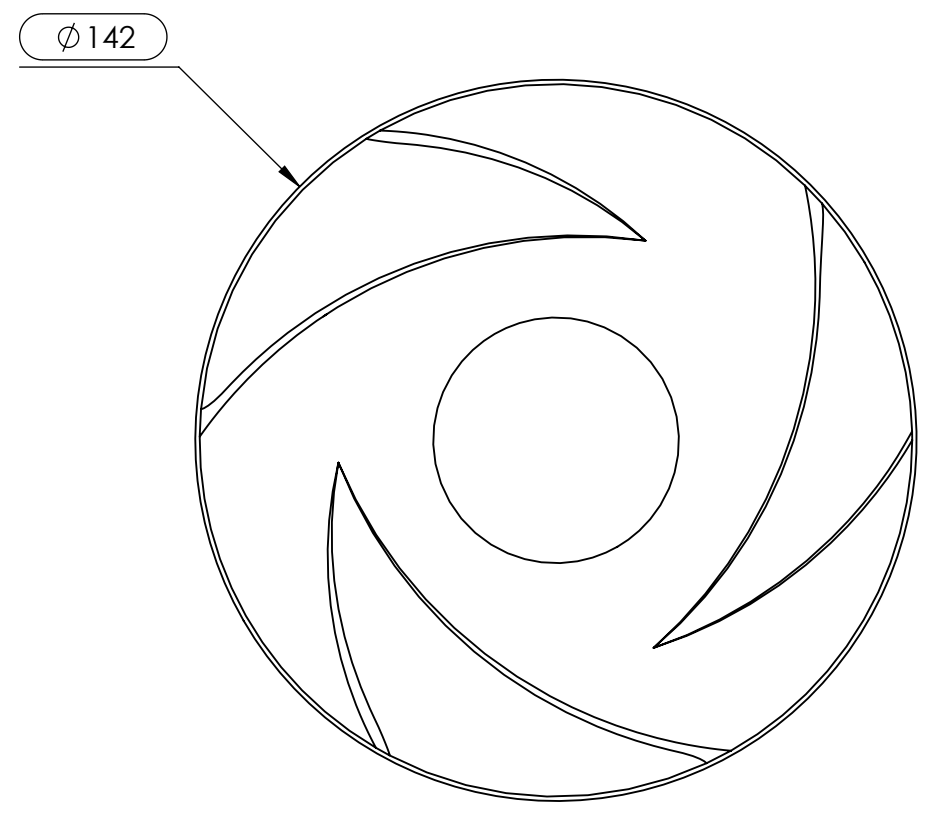
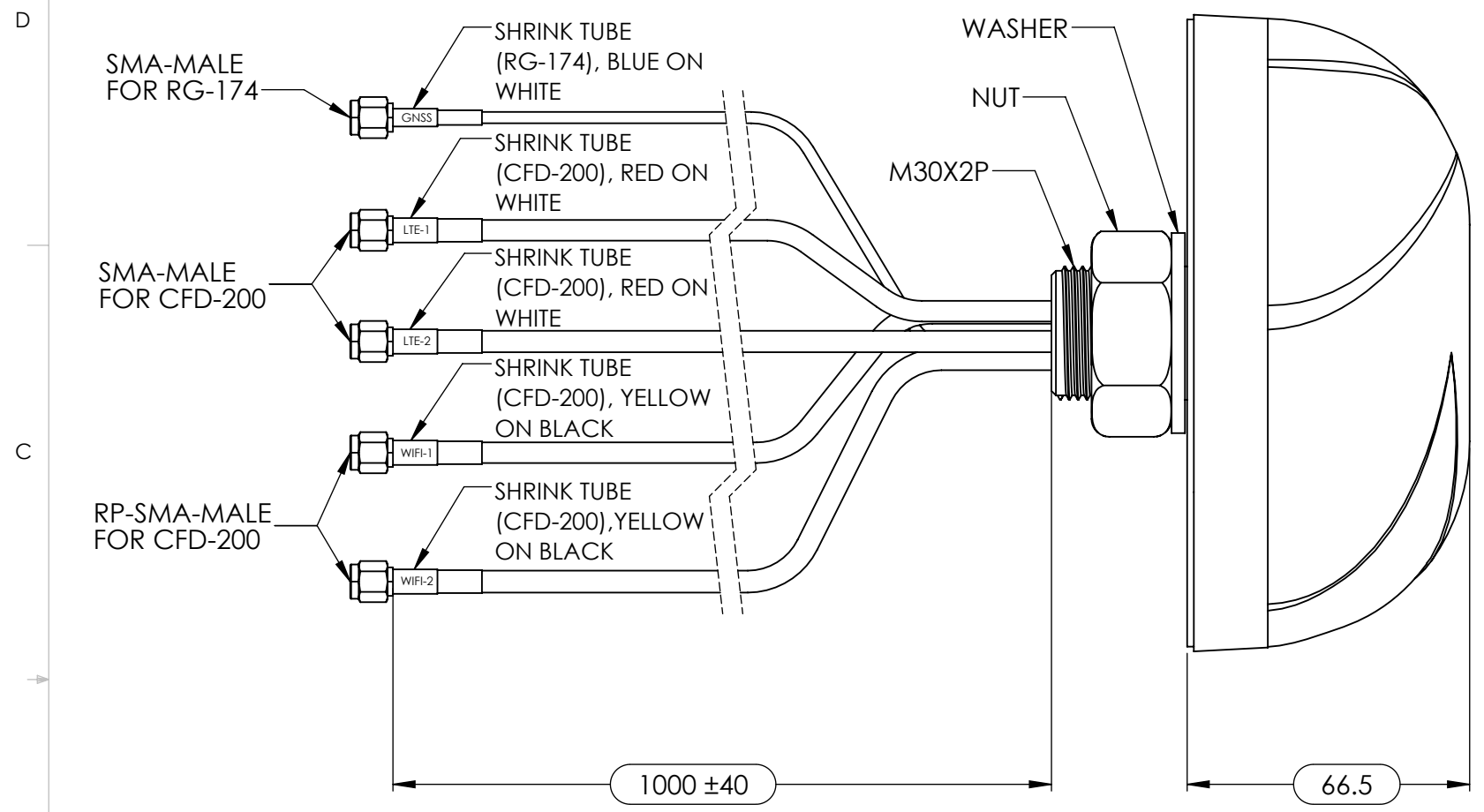
Mechanical Specifications

Parameter	Specification
Antenna Dimensions	Φ 141.98 x 66.5 mm
Mounting Function	Permanent Mount
Operating Temperature	-40 °C +85 °C
Housing Material & Color	PC+ABS & Black
Cable	RG-174 (GNSS) / CFD-200 (LTE) / CFD-200 (WIFI)
Cable Length	1 m
Connector	SMA / FAKRA or customer specification
Waterproof	Waterproof





DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-03-12	QZ



NOTES:

- FREQUENCY:
 - GNSS ACTIVE ANTENNA: 1561 / 1575.42 / 1602 MHz
 - LTE MIMO ANTENNA: 698~960/ 1710~2170/ 2300~2690 MHz
 - WIFI MIMO ANTENNA: 2400~2500 / 5150~5850 MHz
- CRITICAL DIMENSIONS MARK AS **(DIM)**
- OPERATING TEMPERATURE: -40°C ~ +85°C
- WATERPROOF: IPX7

ITEM 100-00095-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-03-12	QZ

PROPRIETARY AND CONFIDENTIAL

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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	MAXTENA, INC TITLE: 100-00095-01 NETZ 5 IN 1
DIMENSIONS ARE IN MM		DRAWN	QZ 2021-03-12	
TOLERANCES:		CHECKED	ZX 2021-03-15	
FRACTIONAL ±		ENG APPR.	NPC 2021-03-23	
ANGULAR: MACH ± .5° BEND ±		MFG APPR.		
INTEGER ± 2		Q.A.		
ONE PLACE DECIMAL ± 1.0		CAD MAINTAINED.		SIZE
TWO PLACE DECIMAL ± .50		CHANGES SHALL BE		DWG. NO.
INTERPRET GEOMETRIC		INCORPORATED BY		REV
TOLERANCING PER:		THE DESIGN ACTIVITY.		A
		DO NOT SCALE DRAWING		CAGE CODE: 5KQH7
				SCALE: NONE
				SHEET 1 OF 1