



MEA-900-W2-SM

2.4/5.0 GHz & 868/915 MHz ISM - Screw Mount

Part #: 100-00194-01

Description

The MEA-900-W2-SM Screw Mount Antenna is a low profile antenna solution, with a very high-performance ideal for maintaining constant network connectivity. The MEA-900-W2-SM covers all 2.4/5.0 GHz & 868/915 MHz ISM 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-900-W2-SM has two cables with a SMA-Male standard connectors, 3m standard cable lengths and is fully customizable by offering additional connector types, cable lengths and cable types.

Electrical Specifications

| Cable 1 - 868/915 MHz ISM Antenna | | |
|-----------------------------------|------------------|-------------|
| Frequency Range | 863-870 MHz | 902-928 MHz |
| Band | 868 MHz | 915 MHz |
| Return Loss | -17.3 dB | -8.9 dB |
| VSWR | 2.5:1 | 2.1:1 |
| Efficiency | 30.2% | 31.4% |
| Peak Gain | -0.6 dBi | -0.2 dBi |
| Average Gain | -5.1 dB | -5.0 dB |
| Impedance | 50 Ω | |
| Polarisation | Linear | |
| Radiation Pattern | Omni-Directional | |
| Max. Input Power | 25 W | |

| Cable 2 - 2.4/5.0 GHz ISM Antenna | | |
|-----------------------------------|------------------|---------------|
| Frequency Range | 2410-2490 MHz | 4920-5925 MHz |
| Band | 2.4 GHz | 5.0 GHz |
| Return Loss | -11.9 dB | -14.7 dB |
| VSWR | 1.8:1 | 1.5:1 |
| Efficiency | 43.4% | 31.9% |
| Peak Gain | 4.5 dBi | 3.9 dBi |
| Average Gain | -3.6 dB | -5.1 dB |
| Impedance | 50 Ω | |
| Polarisation | Linear | |
| Radiation Pattern | Omni-Directional | |
| Max. Input Power | 25 W | |



Features

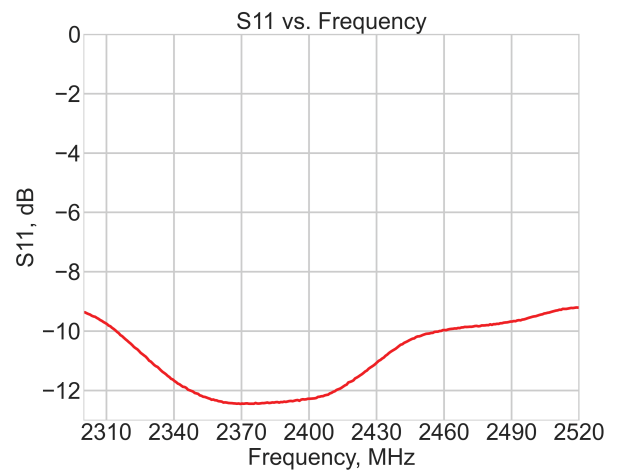
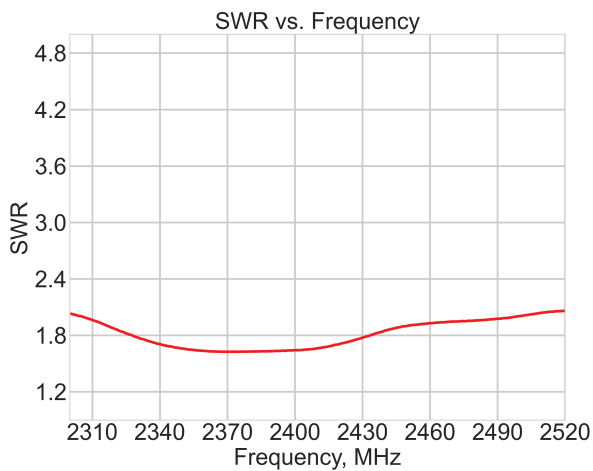
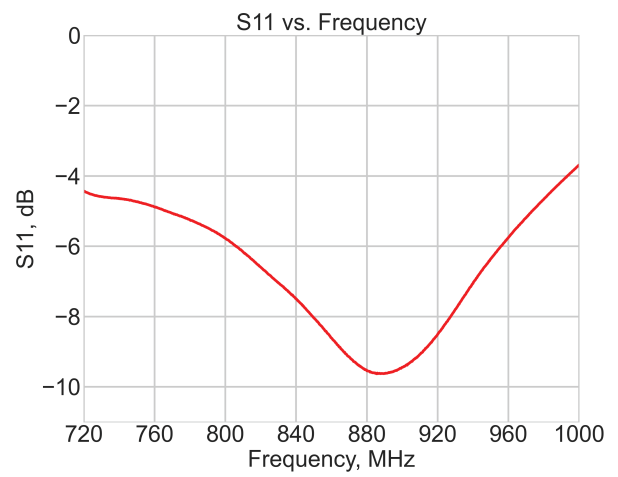
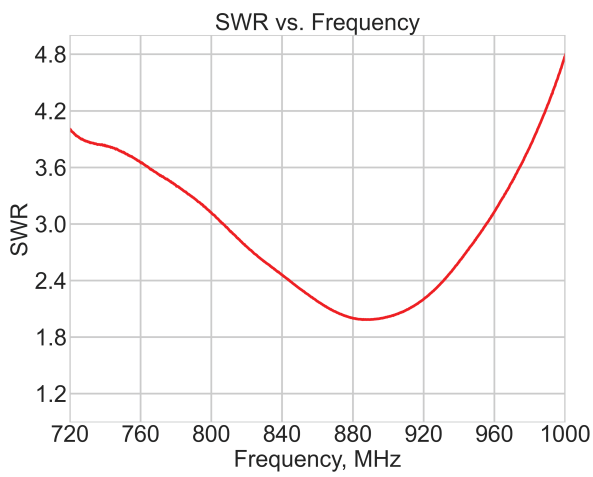
- 2.4/5.0 GHz ISM
- Screw Mount
- Anti-Rotation Mechanism
- Ground Plane Independent
- Customizable Cable and Connector
- IP67, IK09, IP69K
- Dimensions 80 x 76 x 13 mm

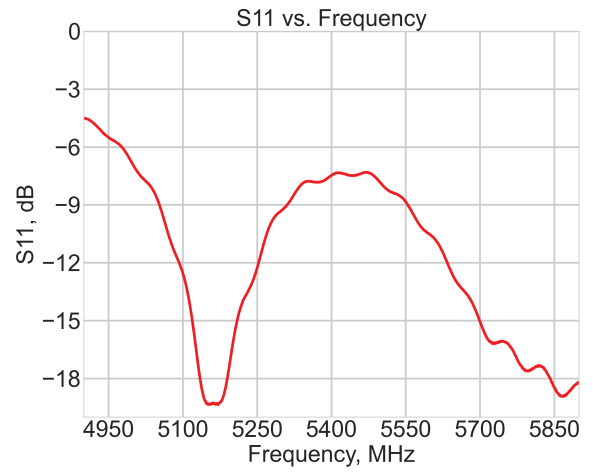
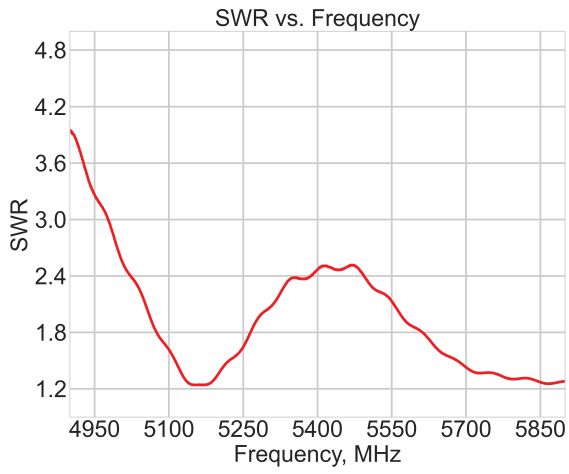
Applications

- Navigation and telematics systems
- IoT applications
- Automotive connectivity
- Multimedia
- Fleet management
- HD video and audio streaming

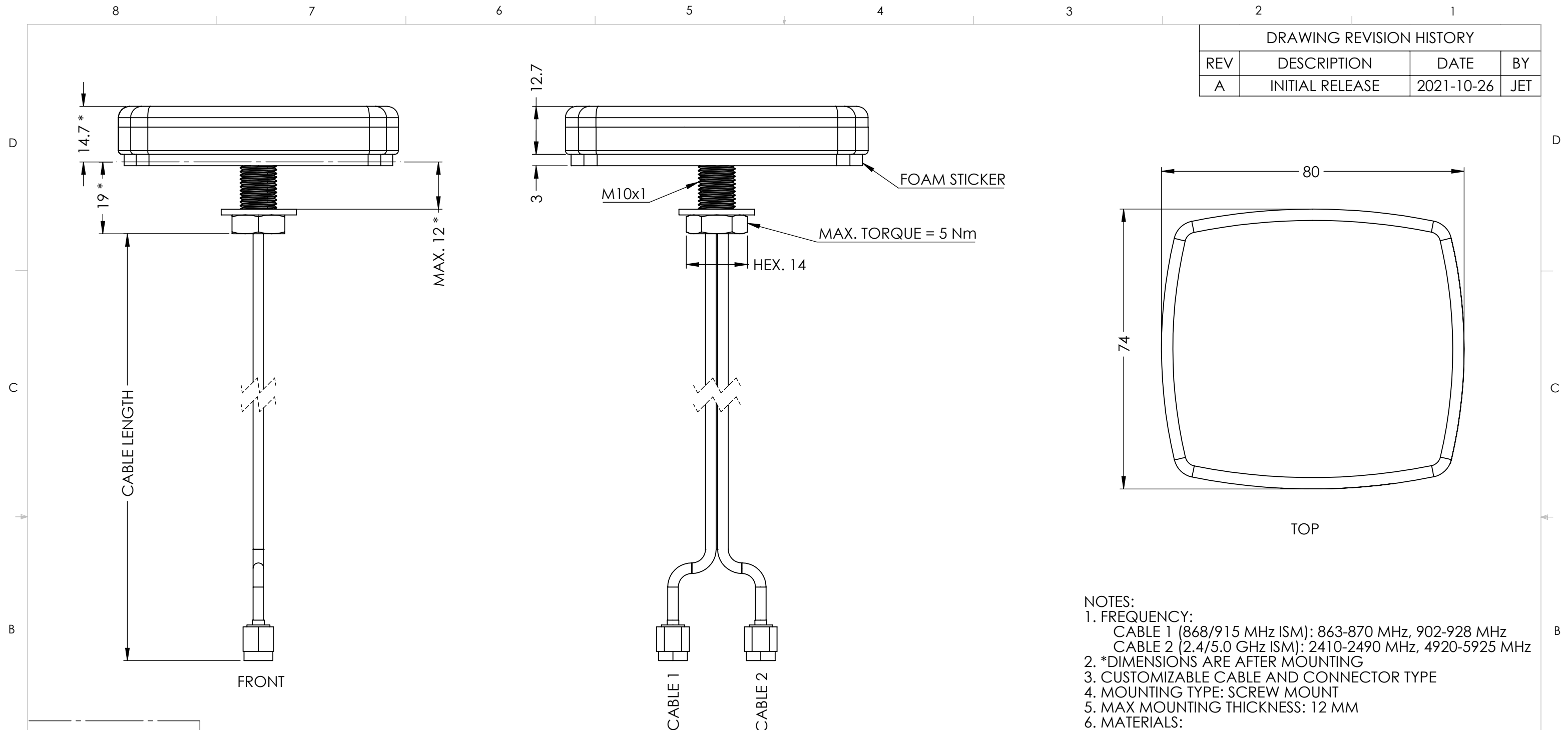
Mechanical Specification

| Parameter | Specification |
|-----------------------|--|
| Antenna Dimensions | 80 x 76 x 13 mm |
| Operating Temperature | -40°C to 85°C |
| Connector Type | SMA-Male Standard / RP-SMA-Male Standard |
| Mounting Type | Screw Mount |
| Radome | ABS UV Stabl |
| Radome color | Black |
| Substance Compliance | RoHS |
| Certification | IP67 |

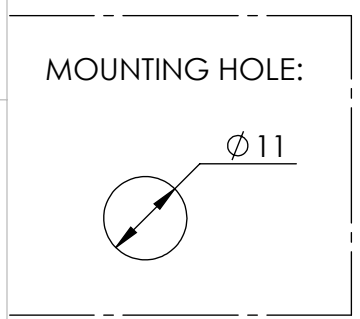




| DRAWING REVISION HISTORY | | | |
|--------------------------|-----------------|------------|-----|
| REV | DESCRIPTION | DATE | BY |
| A | INITIAL RELEASE | 2021-10-26 | JET |



- NOTES:
- FREQUENCY:
 CABLE 1 (868/915 MHz ISM): 863-870 MHz, 902-928 MHz
 CABLE 2 (2.4/5.0 GHz ISM): 2410-2490 MHz, 4920-5925 MHz
 - *DIMENSIONS ARE AFTER MOUNTING
 - CUSTOMIZABLE CABLE AND CONNECTOR TYPE
 - MOUNTING TYPE: SCREW MOUNT
 - MAX MOUNTING THICKNESS: 12 MM
 - MATERIALS:
 - RADOME: ABS UV STABLE
 - RADOME COLOR: BLACK or WHITE
 - OPERATING TEMPERATURE: -40°C ~ +85°C
 - STORAGE TEMPERATURE: -40°C ~ +85°C
 - CERTIFICATION: IP67



| 100-00194 CONFIGURATION TABLE | | | | |
|-------------------------------|----------------------------------|-----------------|-------------------------|--------------|
| DASH NO | CABLE TYPE | CABLE LENGTH | CONNECTOR TYPE | RADOME COLOR |
| -01 | CABLE 1: LL100 CABLE 2: LL100 | 300 CM 300CM | SMA-MALE SMA-MALE-RP | BLACK |

| ITEM 100-00194 REVISION HISTORY | | | |
|---------------------------------|-----------------|------------|-----|
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| | | |
|--------------------------------------|---|----------------|
| UNLESS OTHERWISE SPECIFIED: | NAME | DATE |
| DIMENSIONS ARE IN MM | DRAWN | JET 2021-10-26 |
| TOLERANCES: | CHECKED | ZX 2021-10-26 |
| FRACTIONAL: ± | ENG APPR. | NPC 2021-10-26 |
| ANGULAR: MACH ± .5° BEND ± | MFG APPR. | |
| ONE PLACE DECIMAL ± 1.0 | Q.A. | |
| TWO PLACE DECIMAL ± .50 | | |
| INTERPRET GEOMETRIC TOLERANCING PER: | CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY. | |
| | DO NOT SCALE DRAWING | |

| | | |
|--------------------------------------|---------------------------------|-----------------|
| MAXTENA, INC | | |
| TITLE: 100-00194 MEA-900-W2-SM | | |
| SIZE B | DWG. NO. 117-00490-01 | REV A |
| CAGE CODE: 5KQH7 | SCALE: NONE | SHEET 1 OF 1 |

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