



# MEA-5G-1575-1606

## 5G NR GPS/GLONASS SCREW MOUNT

Part #: 100-00238-01



### Description

The MEA-5G-1575-1606 screw mount antenna is a 2-in-1 solution, with high gain and efficiency ideal for maintaining constant global connectivity. The MEA-5G-1575-1606 covers GPS and 5G frequencies. This is an ideal antenna for telematics systems, remote surveillance, asset tracking and any IOT system application. 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. The MEA-5G-1575-1606 has two 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. This antenna is low profile, rugged and both IP67 and IP69 rated.

### Electrical Specifications

Cable 1 - 5G NR Antenna

| Parameter           | Specification  |           |           |           |
|---------------------|--|-----------|-----------|-----------|
| Technologies        | 5G, 4G, 3G and 2G  |           |           |           |
| Standards           | 5G NR/4GLTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G |           |           |           |
| Frequency (MHz)     | 617-960  | 1427-2690 | 3300-5000 | 5150-5925 |
| Return Loss (dB)    | ~ -9.6   | ~ -10.1   | ~ -11.0   | ~ -14.9   |
| VSWR                | ~ 2.3:1  | ~ 2.1:1   | ~ 2.0:1   | ~ 1.5:1   |
| Efficiency (%)      | ~ 47.1   | ~ 44.9    | ~ 24.2    | ~ 21.5    |
| Peak Gain (dB)      | ~ 2.9  | ~ 2.1     | ~ 0.5     | ~ -1.0    |
| Average Gain (dB)   | ~ -3.5   | ~ -3.7    | ~ -6.2    | ~ -6.8    |
| Impedance (Ω)       | 50   |           |           |           |
| Polarization        | Linear   |           |           |           |
| Radiation Pattern   | Omni-Directional   |           |           |           |
| Max Input Power (W) | 25   |           |           |           |
| Connector Type      | SMA-Male (other connectors available)                            |           |           |           |
| Cable Length        | 200 cm (custom length available)                                 |           |           |           |
| Cable Type          | LL100 (other cable type available)                               |           |           |           |

### Features

- 5G NR & GPS/GLONASS/QZSS/Galileo frequency coverage
- Easy mounting: screw mount
- Ground plane independent
- Customizable cable and connector
- Low profile Ø 50 x 50.8 mm
- IP67 & IP69

### Applications

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

## Electrical Specifications

Cable 2 - GPS GLONASS Antenna

| Parameter              | Specification                         |           |
|------------------------|---------------------------------------|-----------|
| Standards              | GPS/QZSS/Galileo                      | GLONASS   |
| Band (MHz)             | 1575                                  | 1602      |
| Frequency (MHz)        | 1575.42                               | 1598-1606 |
| Patch Size (mm)        | 25 x 25 x 4                           |           |
| Return Loss (dB)       | <= -15.0 dB                           |           |
| VSWR                   | <= 1.4:1 dB                           |           |
| Impedance              | 50                                    |           |
| Radiation Pattern      | Hemispherical                         |           |
| Polarization           | RHCP                                  |           |
| Saw Filter             | Pre-filter                            |           |
| Active Gain (dB)       | 28 @ 2.7 V                            |           |
| Noise Figure (dB)      | 1.5 Typ                               |           |
| Voltage (V)            | 1.5 - 3.6                             |           |
| Current (mA)           | 9 Typ                                 |           |
| Power Consumption (mW) | 24.3 Typ                              |           |
| ESD Protection         | 2kV                                   |           |
| Connector Type         | SMA-Male (other connectors available) |           |
| Cable Length (m)       | 200 cm (custom length available)      |           |
| Cable Type             | LL100 (other cable type available)    |           |

## Antenna Measurement Conditions:

Mounted on metal plate of 30 x 30 cm  
100 cm of cable LL100  
Measured in certified CTIA 3D anechoic chamber

## Mechanical and Environmental Specifications

| Parameter                 | Specification     |
|---------------------------|-------------------|
| Mounting Type             | Screw Mount       |
| Dimensions (mm)           | 54 x 54 x 50      |
| Weight (g)                | 125               |
| Radome Type               | PC/ABS UV Stable  |
| Radome Color              | Black             |
| Antenna Base              | Zamak             |
| Gasket                    | Double Sided Foam |
| Operating Temperature (C) | -40 to +85°       |
| Storage Temperature (C)   | -40 to +85°       |
| Protection                | IP67, IP69K       |
| Substance Compliance      | RoHS              |

# Radiation Performance

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