



MEA-1575-TM-TNC

Gps timing antenna

Part #: 100-00167-01



Description

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 is 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.

Electrical Specifications

| Parameter | Specification |
|-----------------------|--|
| Frequency Range | 1559 to 1606 MHz |
| Gain | 5dBi @ 100mm Zenith |
| V.S.W.R | < 1.5:1 |
| Radiation | Omni-Directional |
| Polarization | R.H.C.P. |
| Gain with LNA | 40dBi |
| Impedance | 50 Ω |
| Out-of-Band Rejection | < 1500 MHz: > 50 dB > 1650 MHz: > 50 dB |

Mechanical Specifications

| Parameter | Specification |
|-------------------------|---|
| Antenna Dimensions | Φ 66.5mmx76.4 mm |
| Weight | 0.6 kg |
| Operating Temperature | -45 °C to +80 °C |
| Antenna Radome Material | UV Resistance ABS |
| Connector | TNC Female |
| IP Rating | IP 67 |
| Mount Type | Through hole/L-Bracket (not included) Pole mounting via clamp (included) |
| Pole Mount Dia. | 2.0 to 2.75 in. (50 to 70mm) |
| Antenna Color | WHITE |
| ROHS Compliant | RoHS 2011/65/EU |

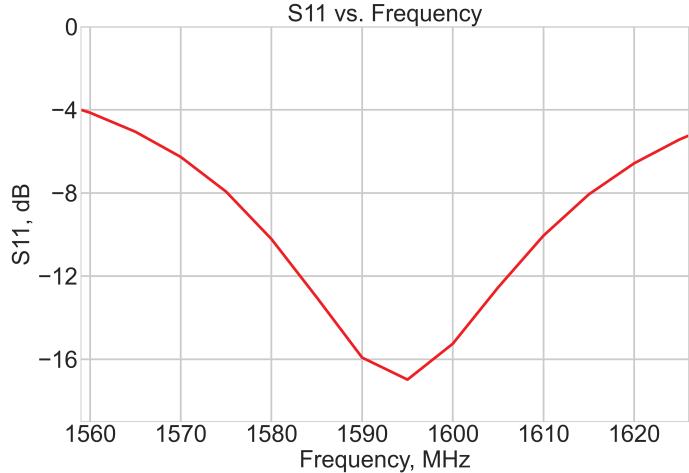
Features

- 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

Applications

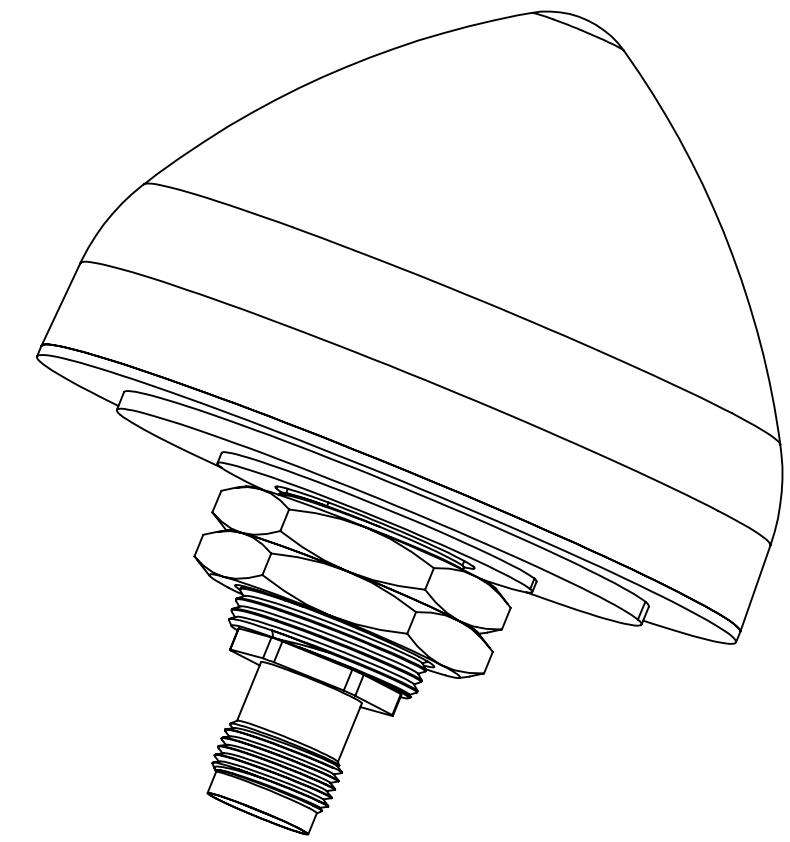
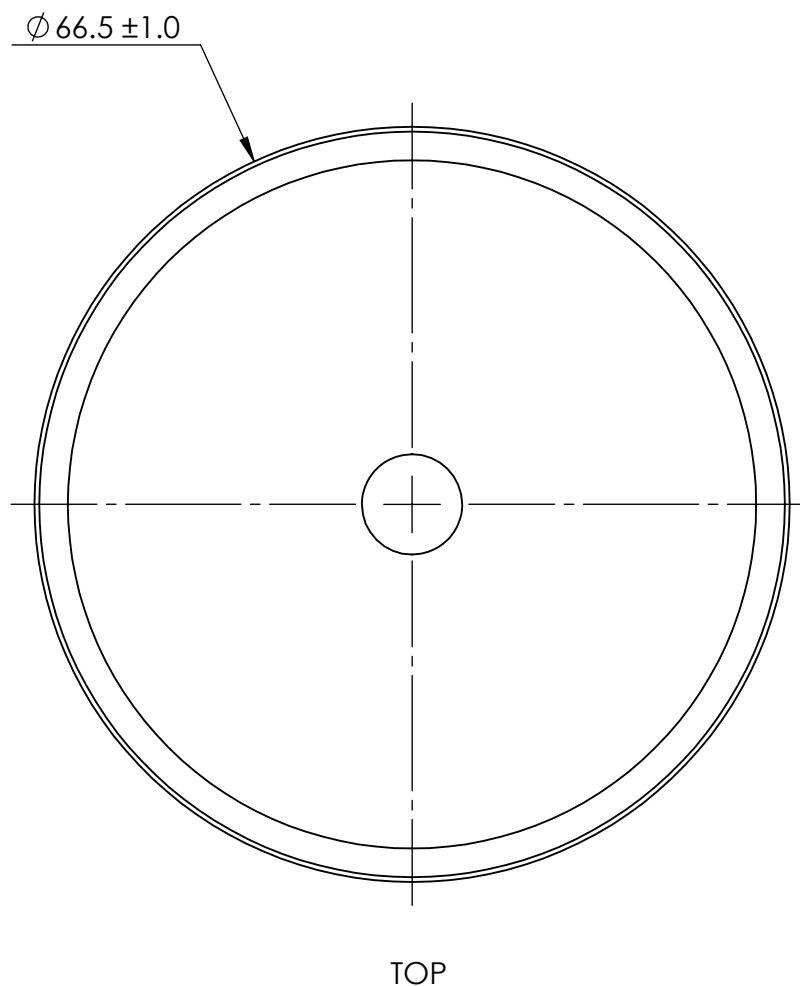
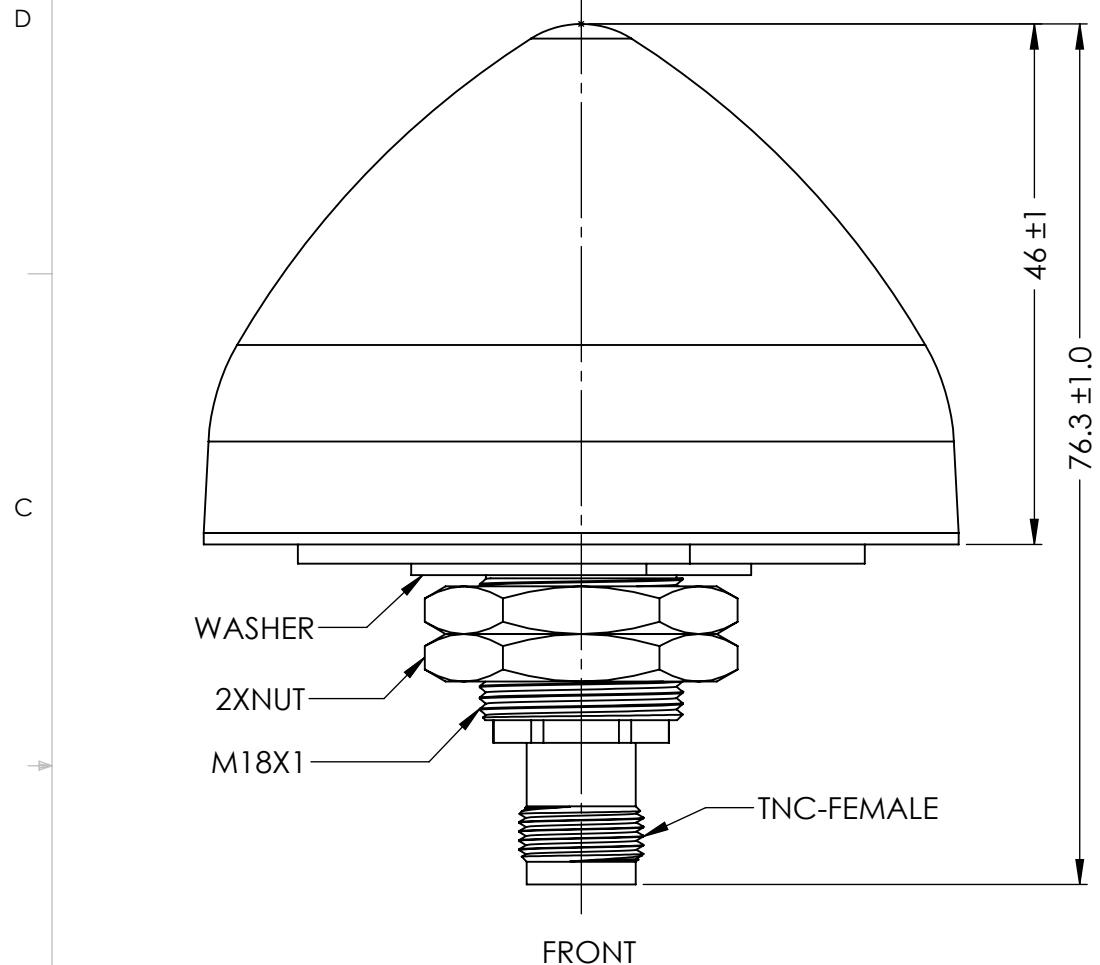
- Timing applications
- Military and security
- Utility electric grid synchronization
- Positive train control (PTC) networks
- Public safety communications
- Fixed installations

S11 vs. Frequency



8 7 6 5 4 3 2 1

| DRAWING REVISION HISTORY | | | |
|--------------------------|-----------------|------------|----|
| REV | DESCRIPTION | DATE | BY |
| A | INITIAL RELEASE | 2021-03-15 | QZ |



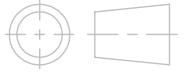
NOTES:

1. FREQUENCY: 1575.42~1602 MHz
2. POLARIZATION: RHCP
3. GAIN: 5 dBi @100MM ZENITH
4. VSWR: <1.5:1(TYPICAL)
5. IMPEDANCE: 50 OHM
6. AXIAL RATION: 4dB @90DEGREE
7. CONNECTOR: TNC-FEMALE
8. IP RATING: IP67
9. OPERATING TEMPERATURE: -45°C ~ +80°C

| ITEM 100-00167-01 REVISION HISTORY | | | |
|------------------------------------|-----------------|------------|----|
| REV | DESCRIPTION | DATE | BY |
| A | INITIAL RELEASE | 2021-03-15 | QZ |

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|---|-----------|------------|------------|
| UNLESS OTHERWISE SPECIFIED: | DRAWN | NAME | DATE |
| DIMENSIONS ARE IN MM | QZ | 2021-03-15 | |
| TOLERANCES: | CHECKED | ZX | 2021-03-18 |
| FRACTIONAL ± | ENG APPR. | NPC | 2021-03-23 |
| ANGULAR: MACH ± .5° BEND ± | MFG APPR. | | |
| ONE PLACE DECIMAL ± 1.0 | Q.A. | | |
| TWO PLACE DECIMAL ± .50 | | | |
| INTERPRET GEOMETRIC | | | |
| TOLERANCING PER: | | | |
|  | | | |
| THIRD ANGLE PROJECTION | | | |
| DO NOT SCALE DRAWING | | | |

CAD MAINTAINED.
CHANGES SHALL BE
INCORPORATED BY
THE DESIGN ACTIVITY.

MAXTENA, INC
100-00167-01
MEA-1575-TM-TNC

| SIZE | DWG. NO. | REV |
|------------------|--------------|--------------|
| B | 117-00415-01 | A |
| CAGE CODE: 5KQH7 | SCALE: NONE | SHEET 1 OF 1 |

8 7 6 5 4 3 2 1

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