

Datasheet for
RT-O-LTE-GN-1AA
Combined GNSS and LTE antenna.



This compact combined **cellular** and **GNSS** antenna supports the frequencies of **LTE/UMTS/GSM** and **GPS/GLONASS/GALILEO**. Comes with **SMA(male)** for **cellular** and **SMA(male)** for **GNSS**.

Electrical Characteristics

Dielectric (GNSS) Antenna

| Item | Specifications | Post Environmental Tolerance |
|-----------------------|------------------------------------|------------------------------|
| Center Frequency (CF) | L1: 1575.42 MHz L2: 1602.00 MHz | ± 1 MHz ± 1 MHz |
| Band Width | CF ± 5 MHz | - |
| V.S.W.R | < 1.5 | - |
| Gain (Zenith) | 2 dBic (max) | - |
| Polarization | RHCP | - |
| Impedance | 50 Ω | - |

Cellular Antenna

| Item | Specifications | Post Environmental Tolerance |
|-----------------|---|------------------------------|
| Frequency range | 698 MHz ~ 960 MHz / 1710 MHz ~ 2690 MHz | - |
| V.S.W.R (5m) | < 2.0 | - |
| Gain (Zenith) | 2 dBi | - |
| Impedance | 50 Ω | - |
| Polarization | Linear | - |

LNA/Filter

| Item | Specifications | Post Environmental Tolerance |
|--------------|----------------|------------------------------|
| Gain | 28 ± 2 dB | ± 2 dB |
| Noise Figure | < 1.5 dB | - |
| V.S.W.R | < 2.0 | - |
| DC Voltage | 2.2 ~ 5 V | |
| DC Current | 5 ~ 15 mA | |

Mechanical Specifications

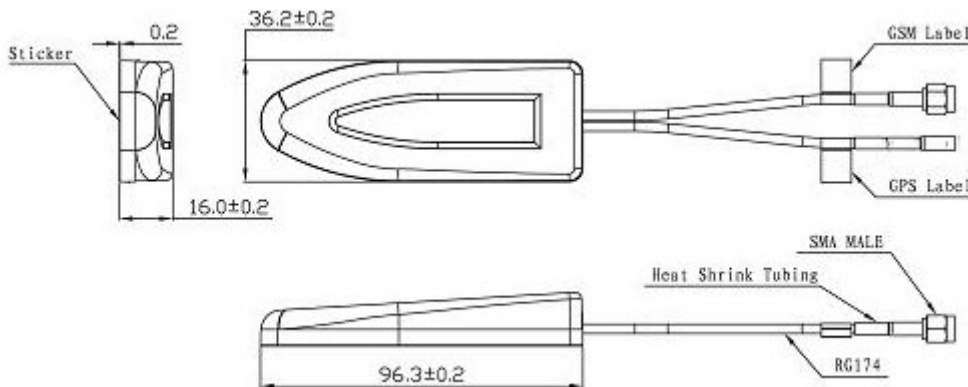
| Item | Specifications |
|-----------------|---|
| Cable | RG174, 3 meters |
| Material | ABS |
| Connector | SMA male for GNSS / SMA male for Cellular |
| Plastic Housing | Black. |
| Mounting | Adhesive Sticker |

Environmental Specifications

| Item | Specifications |
|-----------------------------|---|
| Relative Humidity Range | Up to 95 % RH |
| Operating Temperature Range | -40 °C ~ +85 °C |
| Vibration | 10 to 55 Hz with 1.5 mm amplitude 2 hours |
| Environmentally Friendly | ROHS Compliant |

Dimensions (Unit : mm)

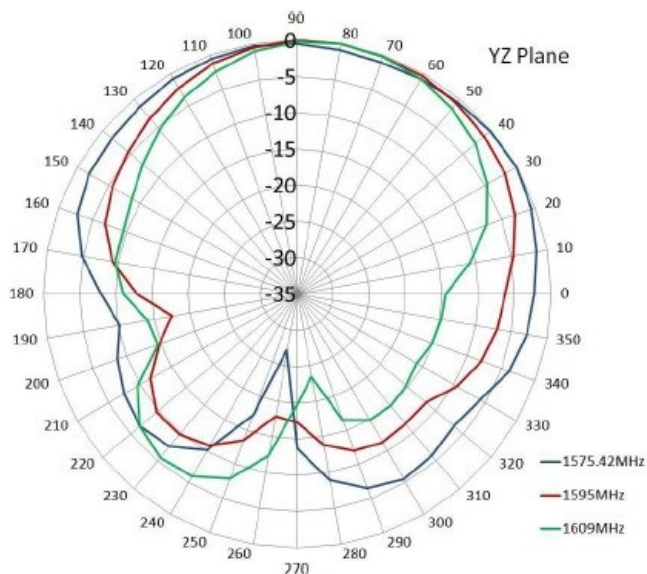
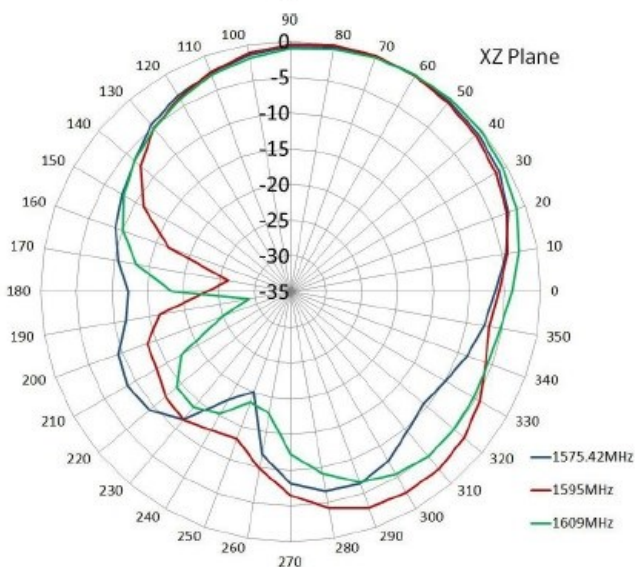
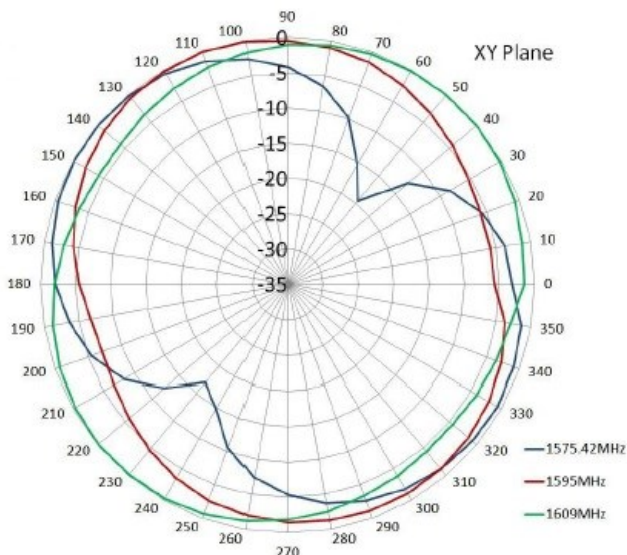
Size 96.3mm x 36.2mm x 16 mm



Installation

The upper side of the antenna – opposite to the adhesive side - must face the sky.
For indoor use only.

Radiation Pattern
GNSS Antenna



Cellular Antenna

