

AMC-ANT-2J7C01MC3F

GNSS L1/L5 magnetic mount antenna

Features

- **GPS/GLONASS/QZSS/Galileo/BeiDou/SBAS/IRNSS/L1/L5**
 - 1176MHz & 1561 - 1606MHz
- High precision navigation
- Magnetic mount
- Low profile
- 28dB gain
- Pre-filter
- Low noise figure
- Low power consumption
- Ground plane independent
- Certificates: IP67, IP69
- Dimensions: \varnothing 54 x 21.5mm
- Customisable cable and connector



1. Antenna and electrical specifications

| Parameters | GNSS active antenna | |
|-----------------------------------|---|---|
| Technologies | GPS/Galileo/QZSS/GLONASS/BeiDou/SBAS/IRNSS/L1/L5 | |
| Bandwidth (MHz) | 1176 | 1561 - 1606 |
| Bands | L5 | L1 |
| Frequency (MHz) | 1176.45 | 1561.09, 1575.42, 1602.00 |
| Standards | GPS(L5), BeiDou(B2a), QZSS(L5), Galileo(E5a), IRNSS(L5) | GPS(L1C), GLONASS(L1OF), BeiDou(B1), QZSS(L1C), Galileo(E1), SBAS(L1) |
| Return loss (dB) | ~-12.8 | ~-12.6 |
| VSWR | ~1.8:1 | ~1.6:1 |
| Efficiency (%) | ~70.6 | ~78.6 |
| Passive peak gain (dBi) | ~5.1 | ~5.2 |
| Average gain (dB) | ~-1.4 | ~-1.0 |
| Impedance (Ohms) | 50 | |
| Radiation pattern | Hemispherical | |
| Axial ratio (dB) | 3dB max | |
| Polarisation | RHCP | |
| Voltage range | 1.5 - 6 | |
| Active gain (dB) | 28 @ 3V | |
| Noise figure (dB) | 1.6 @ 3V | |
| Current consumption (mA) | 16 @ 3V | |
| Power consumption (mW) | 48 @ 3V | |
| SAW filter type | Pre-filter | |
| Out of Band rejection (dB) | ~40 | |
| ESD protection (kV) | 2 | |
| Connector type | SMA male standard (other connectors available) | |
| Cable length | 3 metres standard (other lengths available) | |
| Cable type | LMR100 (other types available) | |



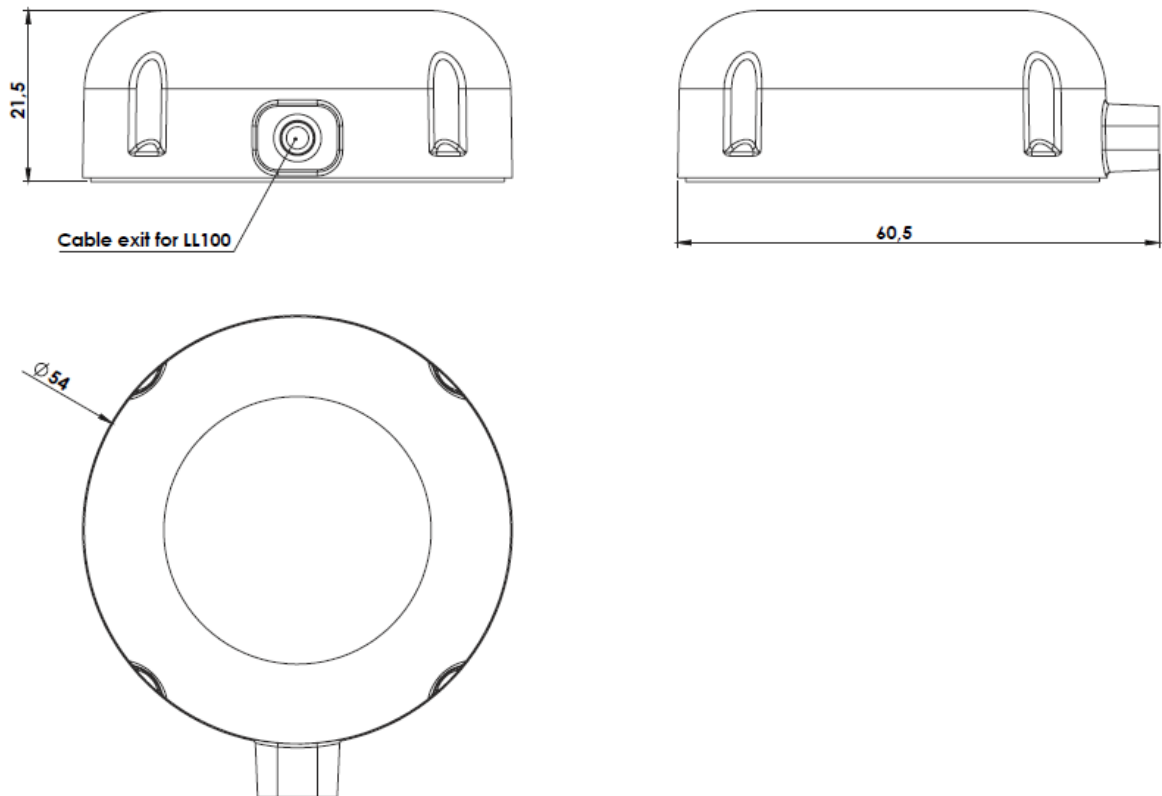
Antenna measurement conditions:

- Mounted on ground plane of 30 x 30cm
- 30cm of LMR100 cable
- Measured in certified CTIA 3D anechoic chamber

2. Mechanical and environmental specifications

| | |
|-----------------------------------|------------------------|
| Mounting type | Magnetic mount |
| Dimensions (mm) | ∅ 54 x 21.5 |
| Radome type | ASA UV Stable |
| Radome colour | Black (White optional) |
| Operating temperature (°C) | -40 to +85 |
| Storage temperature (°C) | -40 to +85 |
| Certificates | IP67, IP69 |
| Substance compliance | RoHS |

3. Antenna drawings



4. Antenna parameters

Cable 1: GNSS/L1L5

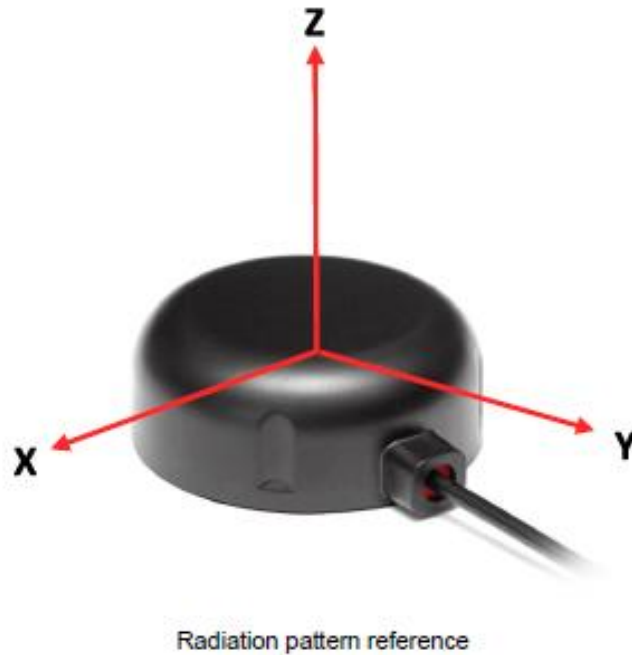
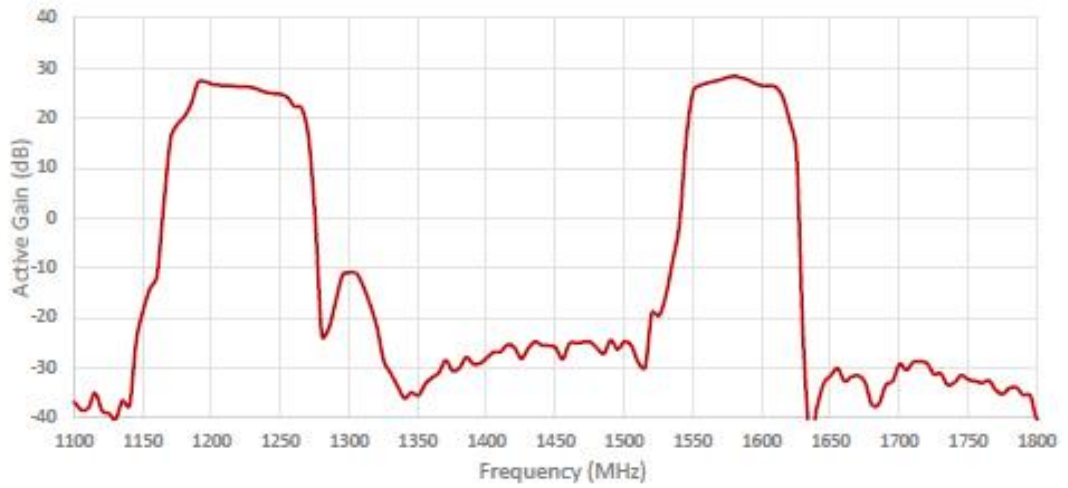
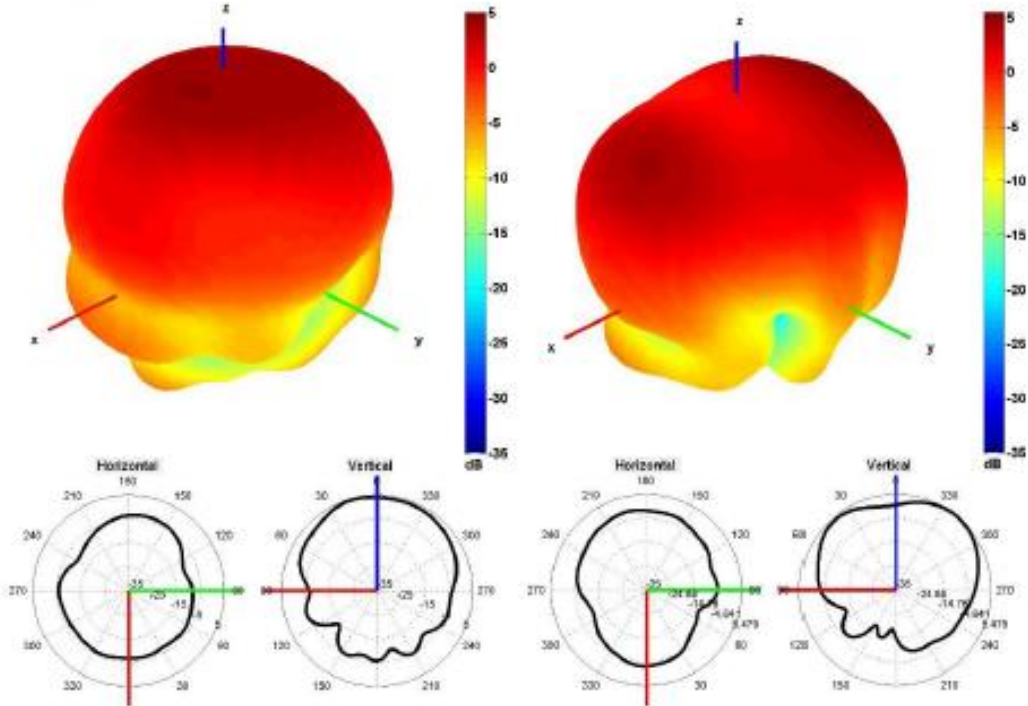
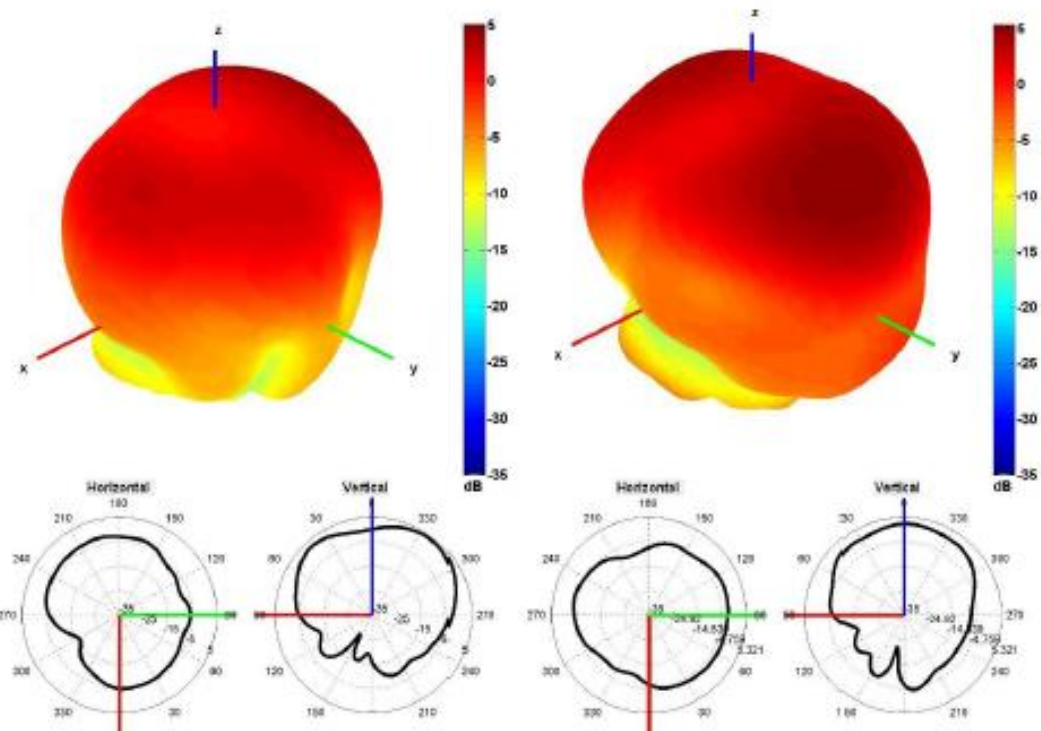


Table 1: GNSS/L1L5



1176 AND 1561 MHz Radiation pattern



1575 AND 1602 MHz Radiation pattern

