

AMC-ANT-2J6901BC3F

GNSS L1/L5 screw mount antenna

Features

- **GPS/GLONASS/QZSS/Galileo/BeiDou/SBAS/IRNSS/L1/L5**
 - 1176MHz & 1561 - 1606MHz
- High precision navigation
- Screw mount
- Low profile
- 28 dB gain
- Pre-filter
- Ground plane independent
- Low noise figure
- Low power consumption
- Anti-rotation mechanism
- Ground plane independent
- Certificates: IP67, IP69
- Dimensions: 80 x 74 x 25.6mm
- 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
Efficiency (%)	~60.6	~68.6
Passive Peak gain (dBi)	~3.1	~4.2
Average Gain (dB)	~-1.8	~-1.5
Impedance (Ohms)	50	
Radiation Pattern	Hemispherical	
Axial Ratio (dB)	3dB max	
Polarisation	RHCP	
Voltage Range	2.3 - 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)	

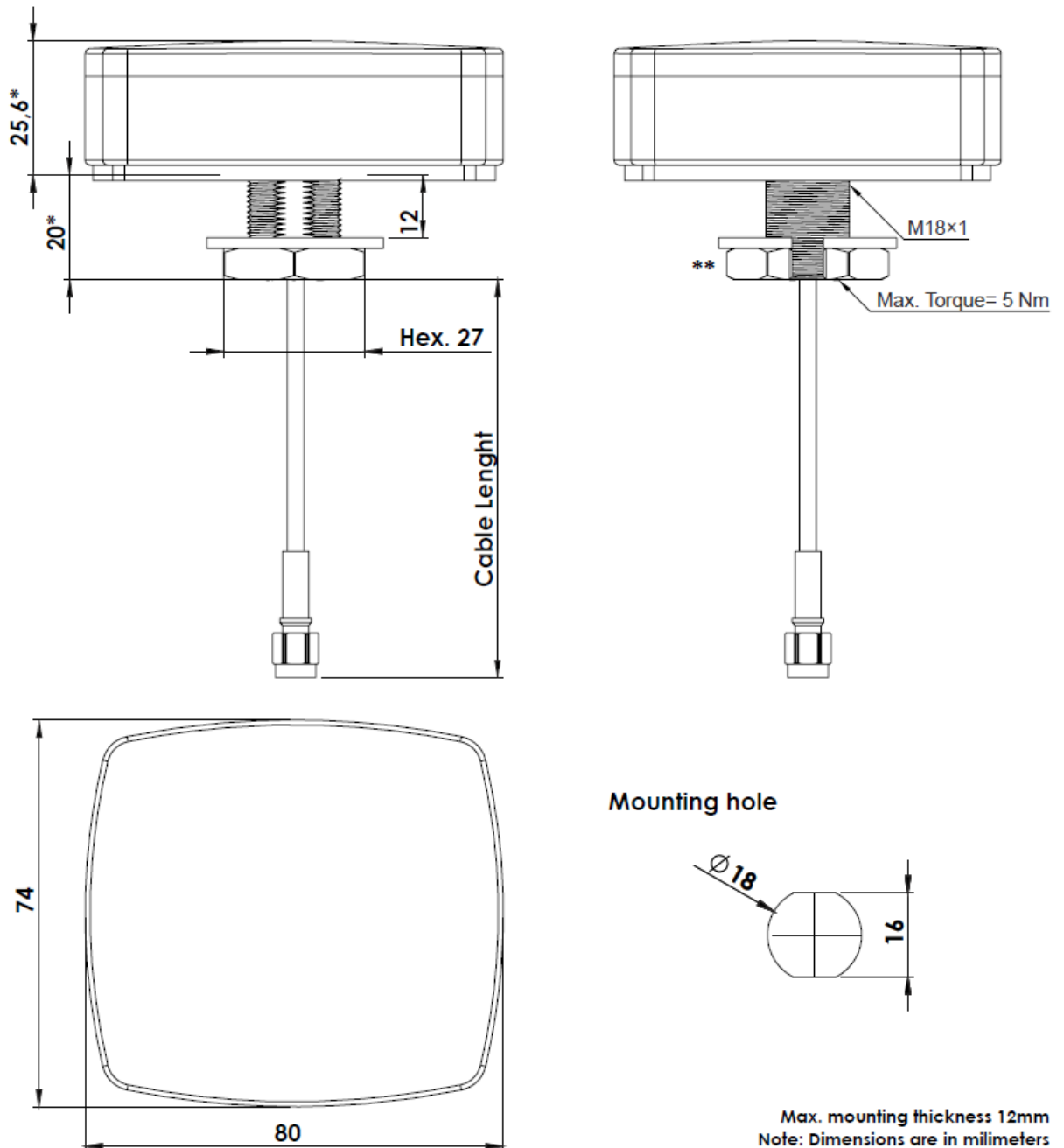
Antenna measurement conditions:

- Mounted on ground plane of 30 x 30cm
- 50cm of LMR100 cable
- Measured in certified CTIA 3D anechoic chamber

2. Mechanical and environmental specifications

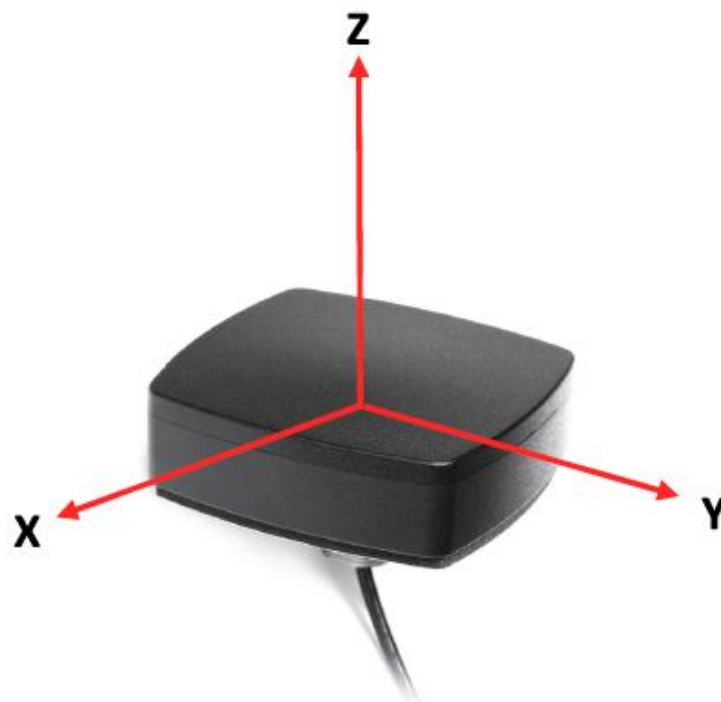
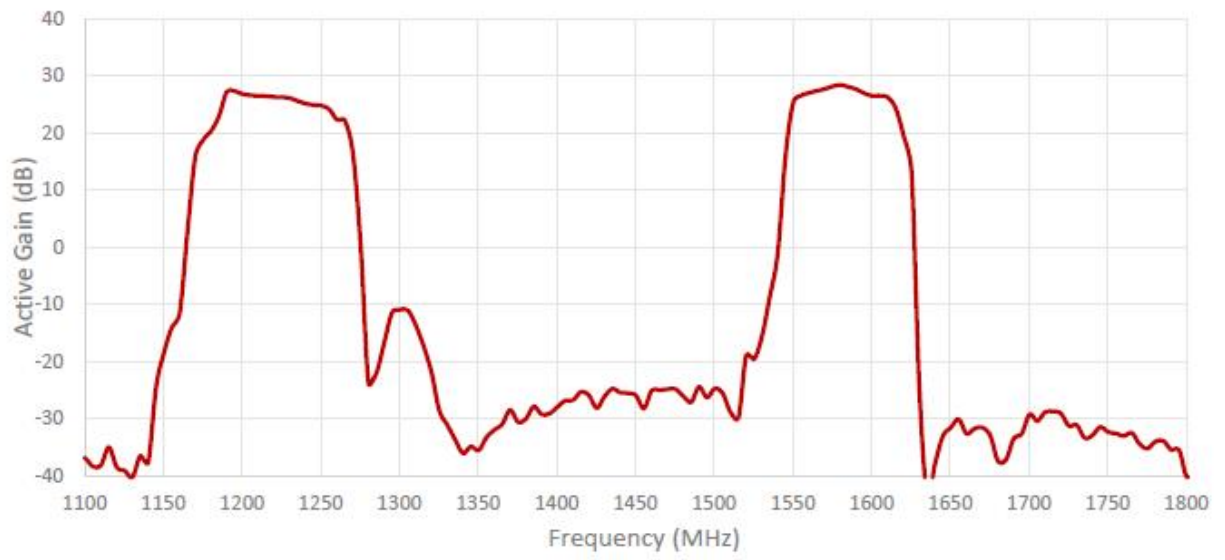
Mounting Type	Screw mount
Dimensions (mm)	80 x 74 x 25.6
Max. Tighten Torque	5
Radome Type	ASA UV Stable
Radome Colour	Black (White optional)
Operating Temperature (°C)	-40 to +85
Storage Temperature (°C)	-40 to +85
Certificates	IP67, IP69
Substance Compliance	RoHS

3. Antenna drawings



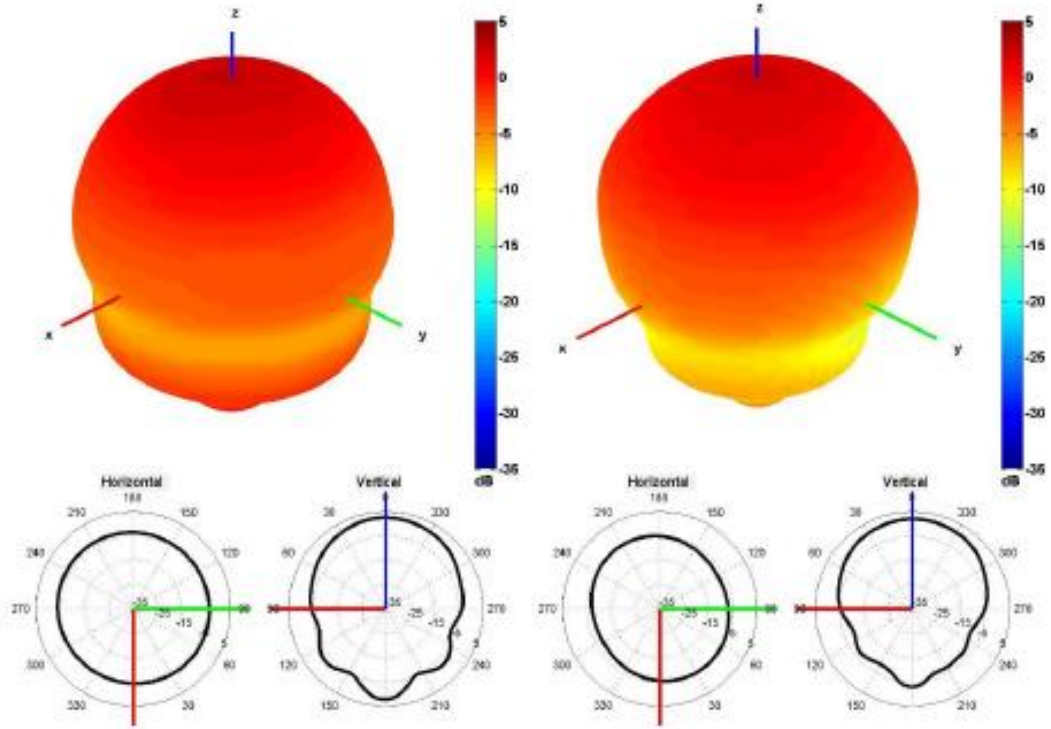
Max. mounting thickness 12mm
Note: Dimensions are in millimeters
*Dimensions are after mounting
**Max. Torque= 5 Nm

3. Antenna parameters

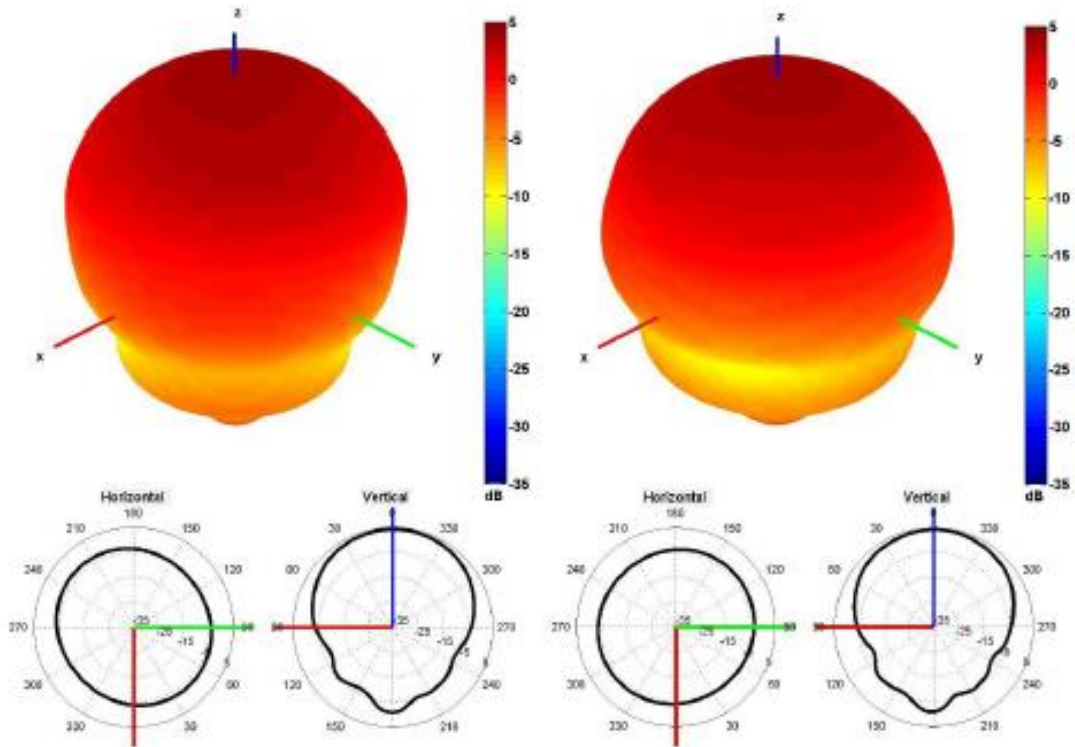


Radiation pattern reference

Cable 1: GNSS/L1L5



1176 AND 1561 MHz Radiation pattern



1575 AND 1602 MHz Radiation pattern