

AMC-ANT-2J4701BGF-THxx

GNSS screw mount antenna

Features

- GPS/GLONASS/QZSS/Galileo
 - 1575 - 1606MHz
- Screw mount
- Pre-filter
- Ground plane independent
- Screw mount
- Certificates: IP69K
- Dimensions: Ø 52 x 17.5mm
- Thread length options – 19mm (-TH19) (default) or 8.5mm (-TH8.5) or 30mm (-TH30)
- Customisable cable length and connector



1. Antenna and electrical specifications

Passive Parameters	GNSS antenna	
Standards	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1575	1602
Frequency (MHz)	1575.42	1598 - 1606
Return Loss (dB)	<=-20	<=-15
VSWR	<=1.2:1dB	<=1.4dB
Efficiency (%)	~65	~68
Peak gain (dBiC)	~3.6	~3.9
Average Gain (dB)	~1.8	~-1.6
Impedance (Ohms)	50	
Radiation Pattern	Hemispherical	



Active Parameters	GNSS antenna	
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	
Impedance (Ohms)	50	
VSWR	<1.4:1	
Polarisation	RHCP	
SAW Filter	Pre filter	
Radiation Pattern	Hemispherical	
Voltage Range (V)	1.5 – 3.6	
Active Gain (dB)	28 @ 2.7V	
Noise Figure (dB)	1.8 @ 2.7V	
Current Consumption (mA)	9 @ 2.7V	
Out of Band Rejection (dB)	~43	
ESD Protection	6	
Connector Type	SMA male standard (other connectors available)	
Cable Length	3 metres standard (other lengths available)	
Cable Type	RG174 standard (other cables available)	

Antenna measurement conditions:

- Mounted on 30 x 30 x 0.25cm ABS plate
- 2 metres of RG174 cable
- Measured in certified CTIA 3D anechoic chamber



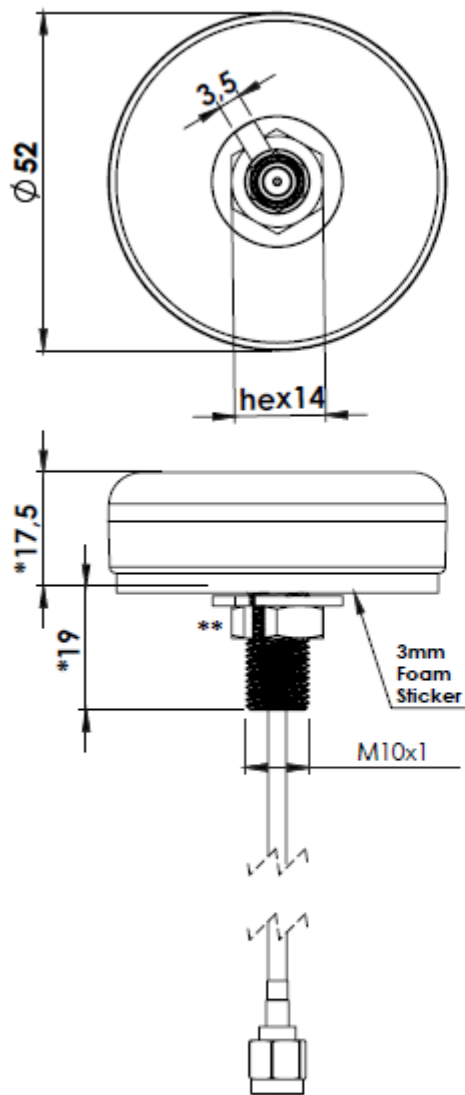
2. Mechanical and environmental specifications

Mounting Type	Screw mount
Dimensions (mm)	Ø 52 x 17.5
Max. Tighten Torque (Nm)	4
Radome Type	ASA
Radome Colour	Black
Antenna Base	ASA
Operating Temperature (°C)	-40 to +85
Storage Temperature (°C)	-40 to +85
Certificates	IP69K
Substance Compliance	RoHS



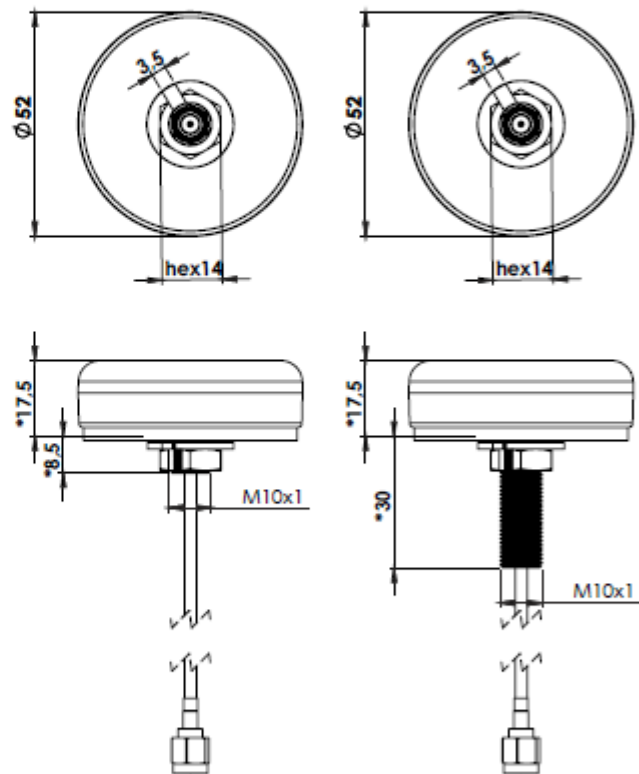
3. Antenna drawings

Default Thread Option



2J4701BGF-TH19
19 mm Thread
Default Option

Other Thread Options available



2J4701BGF-TH8,5
8,5 mm Thread

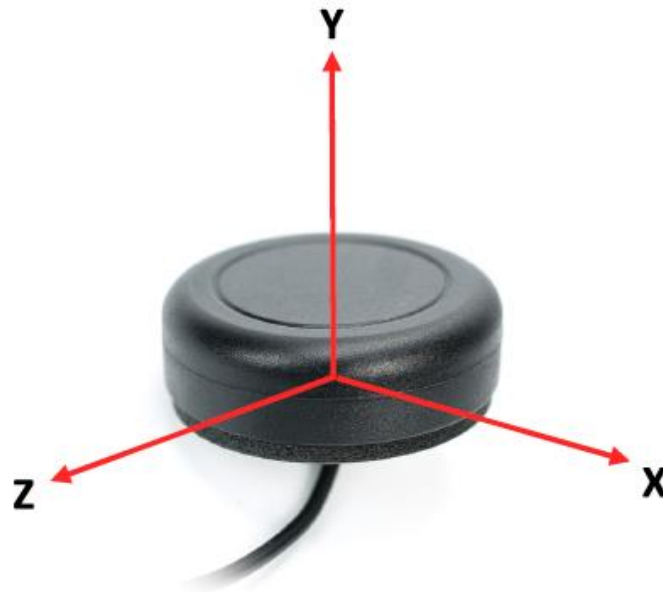
2J4701BGF-TH30
30 mm Thread

*Dimensions after mounting

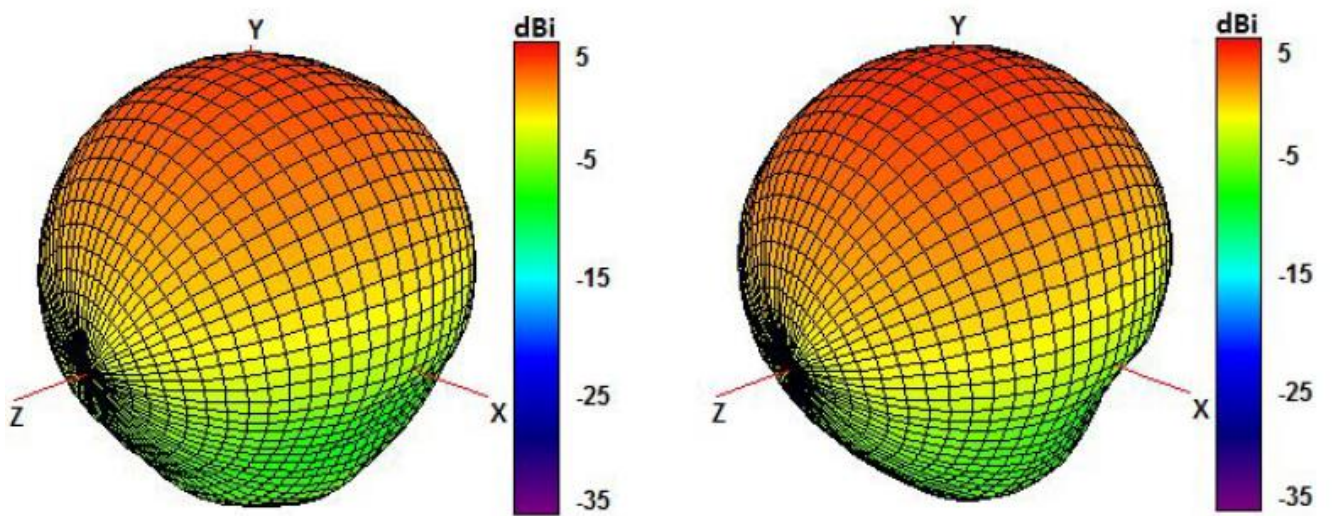
**Max. Torque= 4 Nm



4. Antenna Parameters



Radiation pattern reference



1575 MHz and 1600 MHz Radiation pattern

