

# 2J6700BGF

## CELLULAR and GNSS Screw Mount

### Key Features

**Cable 1: CELLULAR**

- 824-960 MHz
- 1710-2170 MHz

**Cable 2: GPS/GLONASS/QZSS/Galileo**

- 1575-1606 MHz

Screw Mount

Anti-Rotation Mechanism

Ground Plane Independent

Customizable Cable and Connector

Certificates: IP67, IP69K, IK10

Dimensions  $\varnothing$  77.3 x 37.8 mm



## 1. Antenna and electrical specifications

Cable 1

Parameters	CELLULAR Antenna	
<b>Standards</b>	2G/3G	
<b>Band (MHz)</b>	850/900	1700/1800/1900/2100
<b>Frequency (MHz)</b>	824-960	1710-2170
<b>Return Loss (dB)</b>	~-7.0	~-9.0
<b>VSWR</b>	~2.8:1	~2.1:1
<b>Efficiency (%)</b>	~19.5	~14.1
<b>Peak Gain (dBi)</b>	~-3.2	~-2.1
<b>Average Gain (dB)</b>	~-8.0	~-8.6
<b>Impedance (Ohm)</b>	50	
<b>Polarisation</b>	Linear	
<b>Radiation Pattern</b>	Omni-Directional	
<b>Max. Input Power (W)</b>	25	
<b>Connector Type</b>	SMA-Male (Other Connectors Available)	
<b>Cable Length</b>	300 cm (Any Cable Length Available)	
<b>Cable Type</b>	RG174 (Other Cables Available)	

Cable 2

Parameters	GPS/GLONASS Antenna	
<b>Standard</b>	GPS/QZSS/Galileo	GLONASS
<b>Band (MHz)</b>	1575	1602
<b>Frequency (MHz)</b>	1575.42	1598-1606
<b>Patch Size (mm)</b>	25 x 25 x 4	
<b>Return Loss (dB)</b>	<=-15.0 dB	
<b>VSWR</b>	<=1.4:1 dB	
<b>Impedance</b>	50	
<b>Radiation Pattern</b>	Hemispherical	
<b>Polarization</b>	RHCP	
<b>Saw Filter</b>	Pre-Filter	
<b>Active Gain (dB)</b>	23 @ 3 V / 24 @ 5 V	
<b>Noise Figure (dB)</b>	1.5 Typ	
<b>Voltage (V)</b>	2.7 - 5.5	
<b>Current (mA)</b>	15-25	
<b>Power Consumption (mW)</b>	40-137	
<b>Connector Type</b>	SMA-Male Standard (Other Connectors Available)	
<b>Cable Length</b>	300 cm Standard (Any Cable Length Available)	
<b>Cable Type</b>	RG174 Standard (Other Cables Available)	

**Antenna Measurement Conditions:**

Mounted on 30 x 30 cm Ground Plane

200 cm RG174 Cable

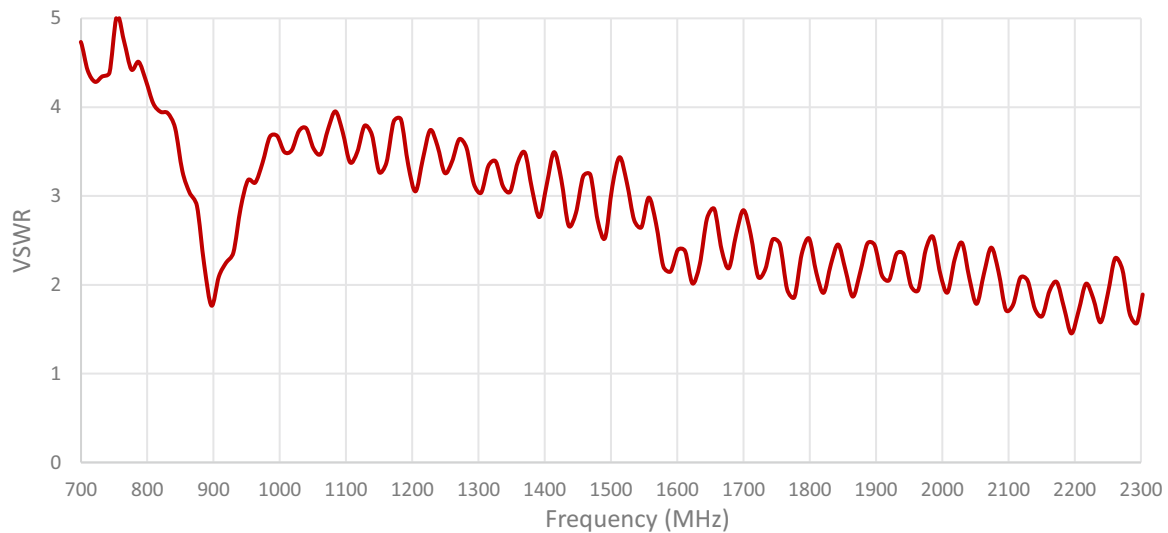
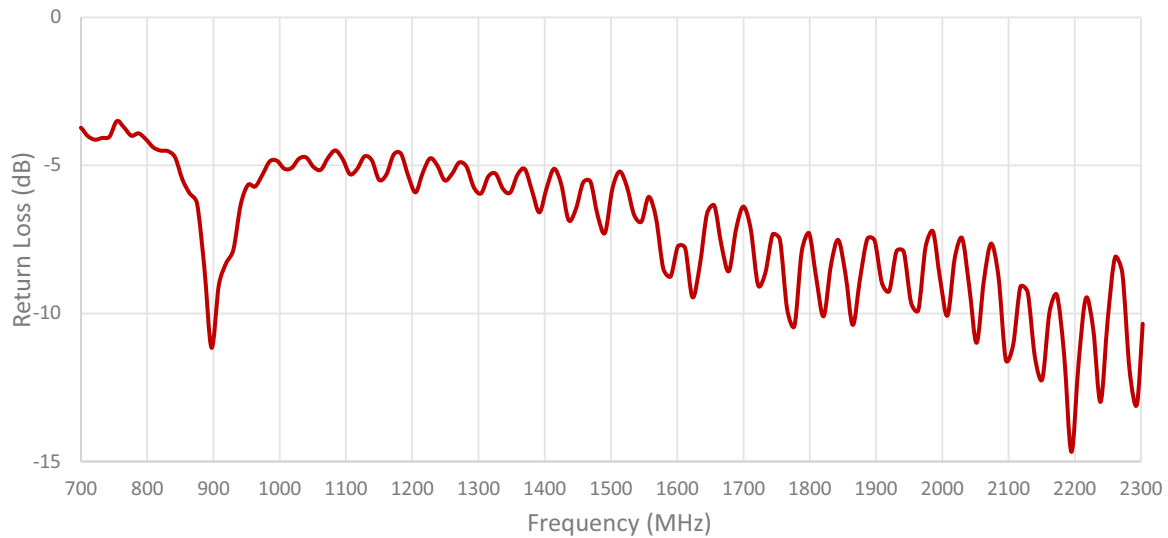
Measured in Certified CTIA 3D Anechoic Chamber

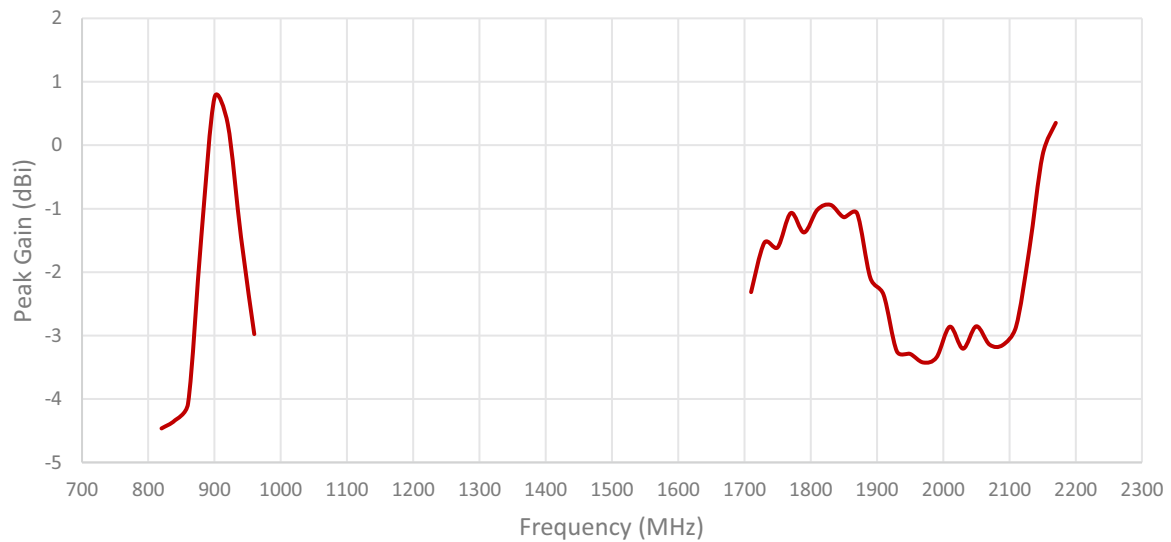
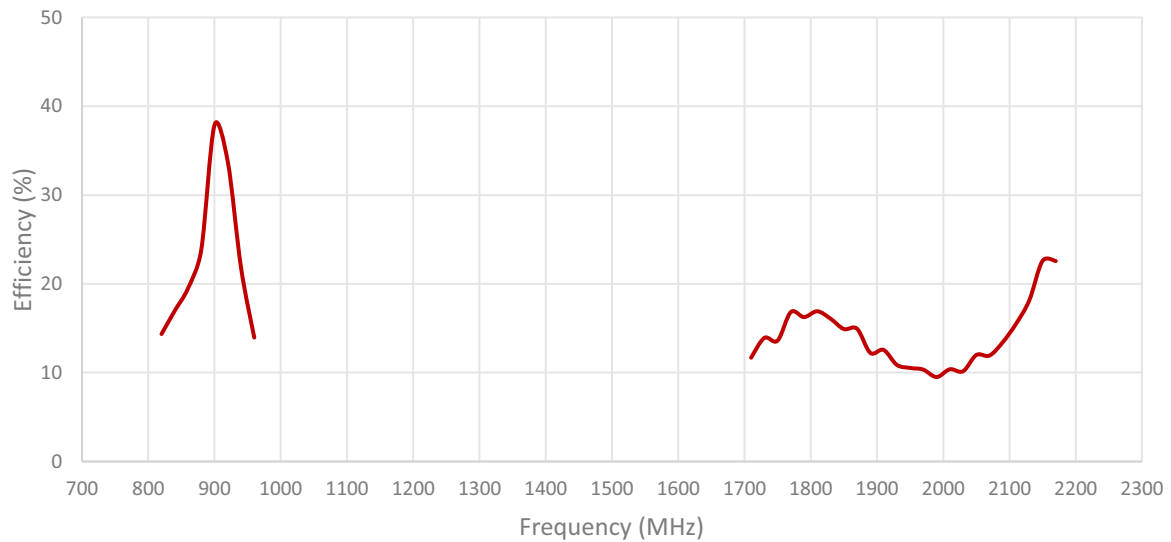
## 2. Mechanical and environmental specifications

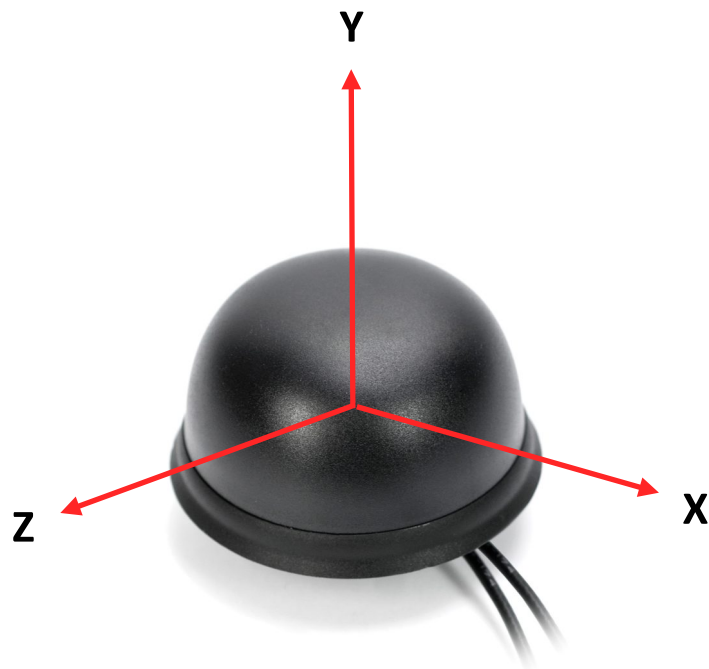
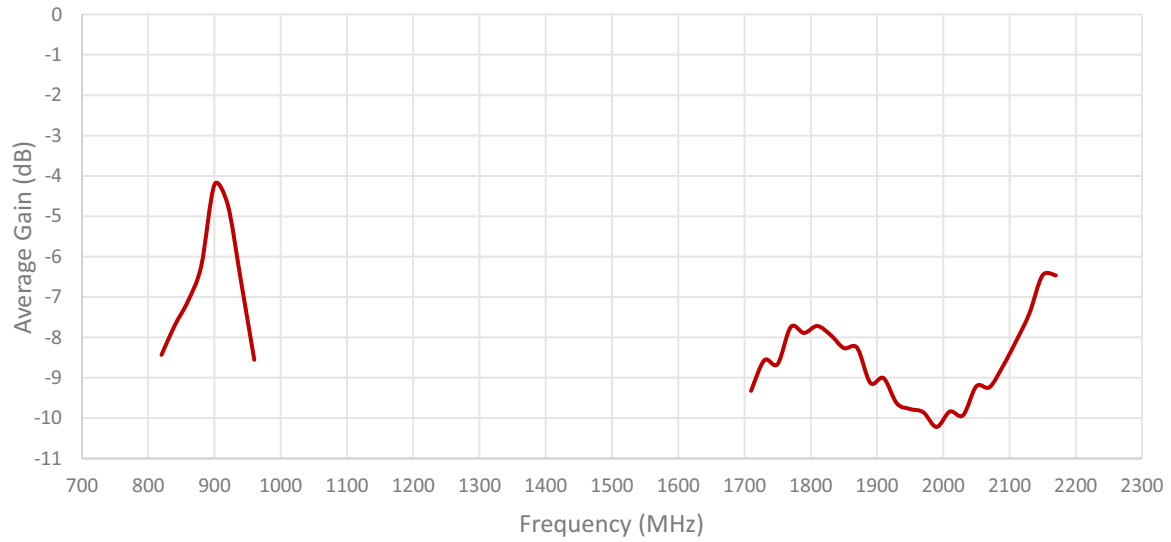
Specifications	2J6700BGF
<b>Mounting Type</b>	Screw Mount
<b>Dimensions (mm)</b>	Ø 77.3 x 37.8
<b>Rec. Tighten Torque (Nm)</b>	6 Nm
<b>Radome</b>	ASA
<b>Radome color</b>	Black
<b>Antenna Base</b>	Zamak
<b>Gasket</b>	TPE
<b>Operating Temperature (C)</b>	-40 to +85
<b>Storage Temperature (C)</b>	-40 to +85
<b>Substance Compliance</b>	RoHS
<b>Certificates</b>	IP67, IP69K, IK10

## 3. Antenna parameters

Cable 1: CELLULAR

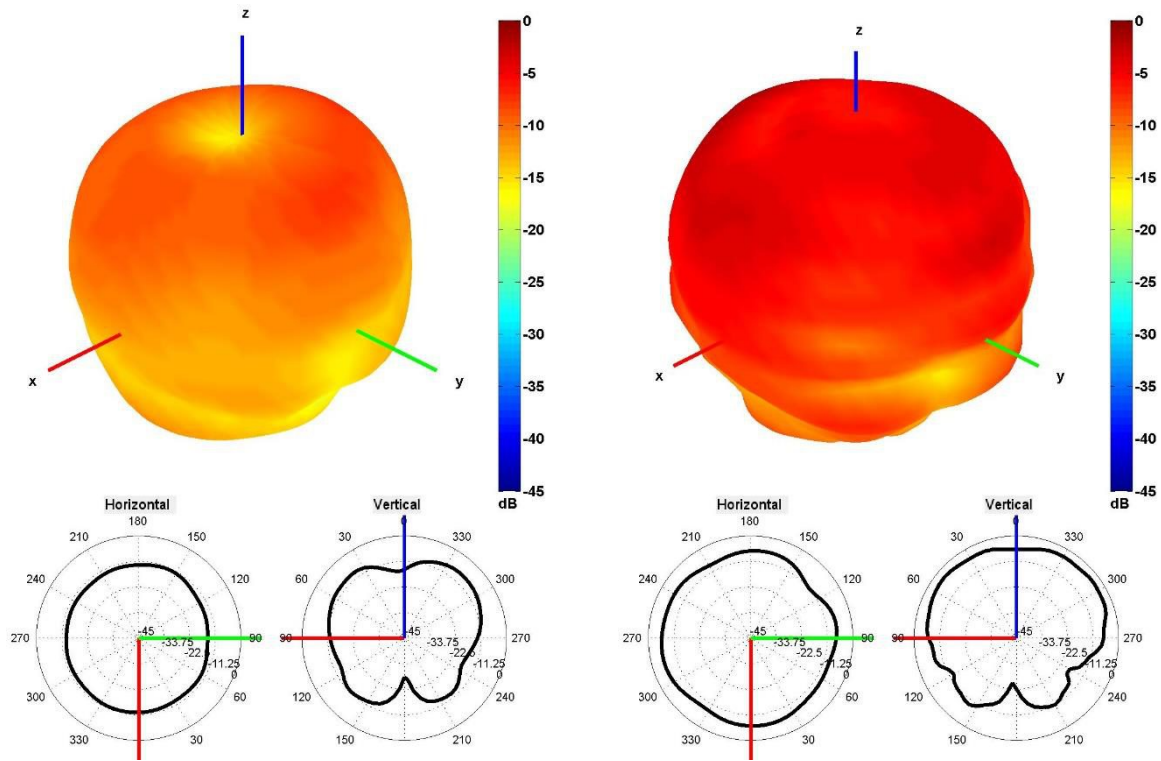




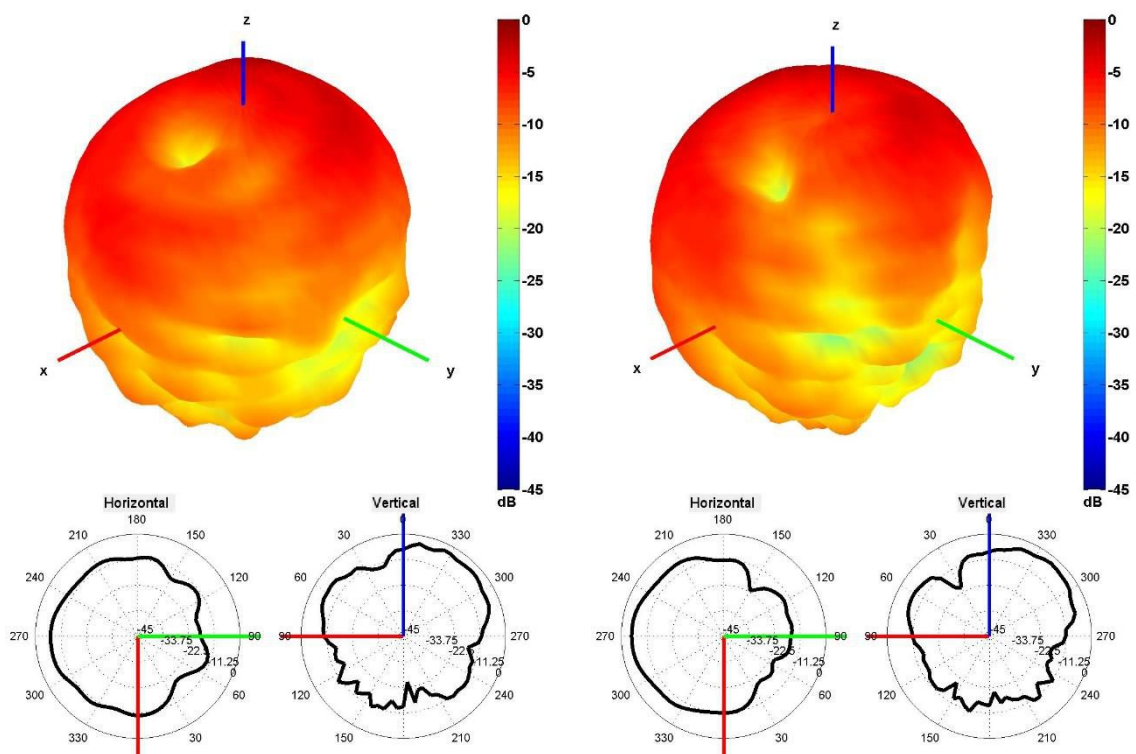


Radiation pattern reference

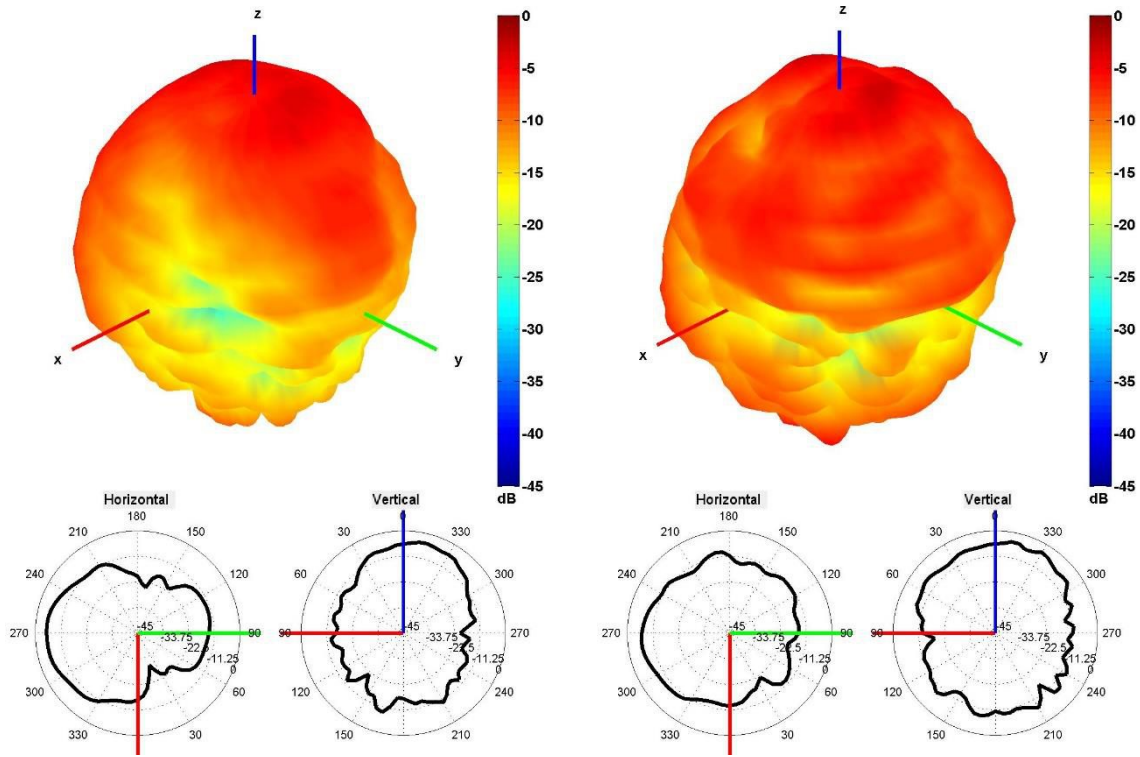
Table 1: Cellular



850 and 940 MHz Radiation pattern

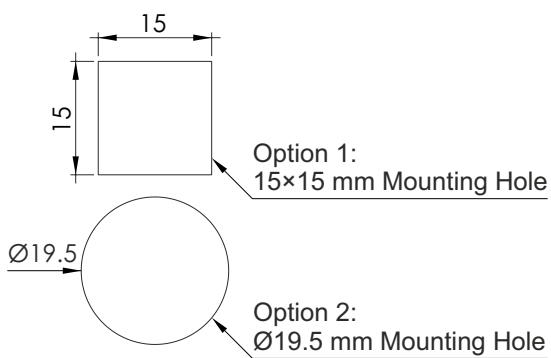
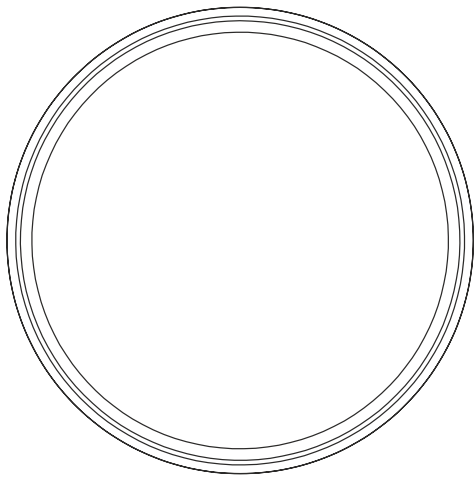
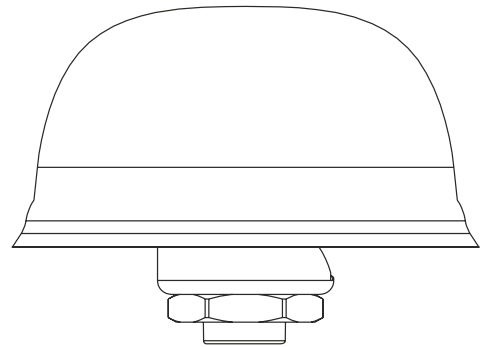
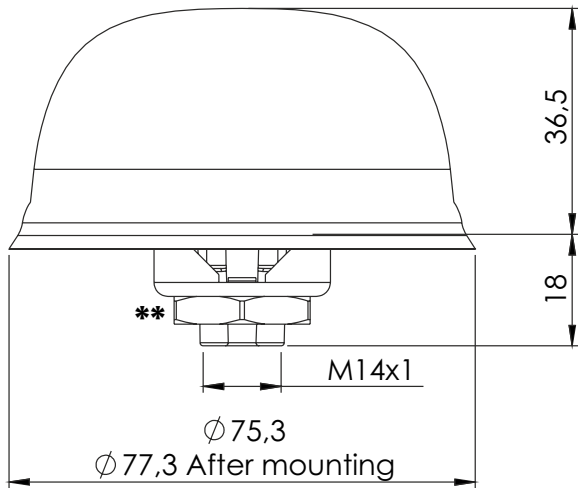


1750 and 1850 MHz Radiation pattern



1950 and 2100 MHz Radiation pattern

## 4. Antenna drawings



Note: Dimensions are in millimeters  
\*Dimensions are after mounting  
\*\*Rec. Torque= 6 Nm

## 5. Antenna Images

