

# 2J7584BG

## 5GNR and GPS/GLONASS Screw Mount

### Key Features

#### Cable 1: 5GNR

- 617-960 MHz
- 1427-2690 MHz
- 3300-5000 MHz
- 5150-5925 MHz

#### Cable 2: GPS/GLONASS

- 1575-1610 MHz

Screw Mount

High Performance

Ground Plane Dependent

Customizable Cable and Connector

Dimensions  $\varnothing 64 \times 81.4$  mm

Certificates IP67, IP69



## 1. Antenna and electrical specifications

Cable 1

Parameters	5GNR Antenna			
<b>Technologies</b>	5G, 4G, 3G and 2G			
<b>Standards</b>	5GNR/4GLTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G			
<b>Frequency (MHz)</b>	617-960	1427-2690	3300-5000	5150-5925
<b>Band (MHz)</b>	600, 700, 850, 900	1500, 1600, 1700, 1800, 1900, 2000, 2100, 2300, 2500, 2600	3300, 3500, 3600, 3700, 4500	5200, 5500, 5800
<b>5GNR Bands</b>	n5, n8, 12, n20, n28, n71, n81, n82, n83,	n1, n2, n3, n7, n25, n34, n38, n39, n40, n41, n50, n51, n66, n70, n74, n75, n76, n80, n84, n86	n77, n78, n79	
<b>4GLTE Bands</b>	B5, B6, B8, B12, B13, B14, B17, B18, B19, B20, B26, B27, B28, B29, B44, B67, B68, B71, B85	B1, B2, B3, B4, B7, B9, B10, B11, B21, B23, B24, B25, B30, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B45, B50, B51, B65, B66, B69, B70, B74, B75, B76	B22, B42, B43, B48, B49, B52	B46, B47, B252, B255
<b>3GCELL Bands</b>	B5, B6, B8, B12, B13, B14, B19, B20, B26	B1, B2, B3, B4, B7, B9, B10, B11, B21, B25, B32, B33, B34, B35, B36, B37, B38, B39, B40	B22	
<b>2GCELL Bands</b>	710, 750, 810T, 850, 900P, 900E, 900R	1800DCS, 1900PCS		
<b>CDMACELL Bands</b>	BC0, BC2, BC3, BC7, BC9, BC10, BC12, BC18, BC19	BC1, BC4, BC6, BC8, BC13, BC14, BC15, BC16, BC20, BC21		
<b>Return Loss (dB)</b>	~-8.4	~-13.6	~-11.7	~-8.1
<b>VSWR</b>	~3.1:1	~1.7:1	~1.8:1	~2.5:1
<b>Efficiency (%)</b>	~50.8	~60.8	~35.3	~25.7
<b>Peak Gain (dBi)</b>	~1.1	~3.6	~1.9	~1.2
<b>Average Gain (dB)</b>	~-3.4	~-2.3	~-4.9	~-6.3
<b>Impedance (Ohm)</b>	50			
<b>Polarisation</b>	Linear			
<b>Radiation Pattern</b>	Omni-Directional			
<b>Max. Input Power (W)</b>	35			
<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>	LL100 Standard (Other Cables Available)			

**Antenna Measurement Conditions:**

Mounted on 30 x 30 Metal Plate

100 cm of Cable D302

Measured in Certified CTIA 3D Anechoic Chamber

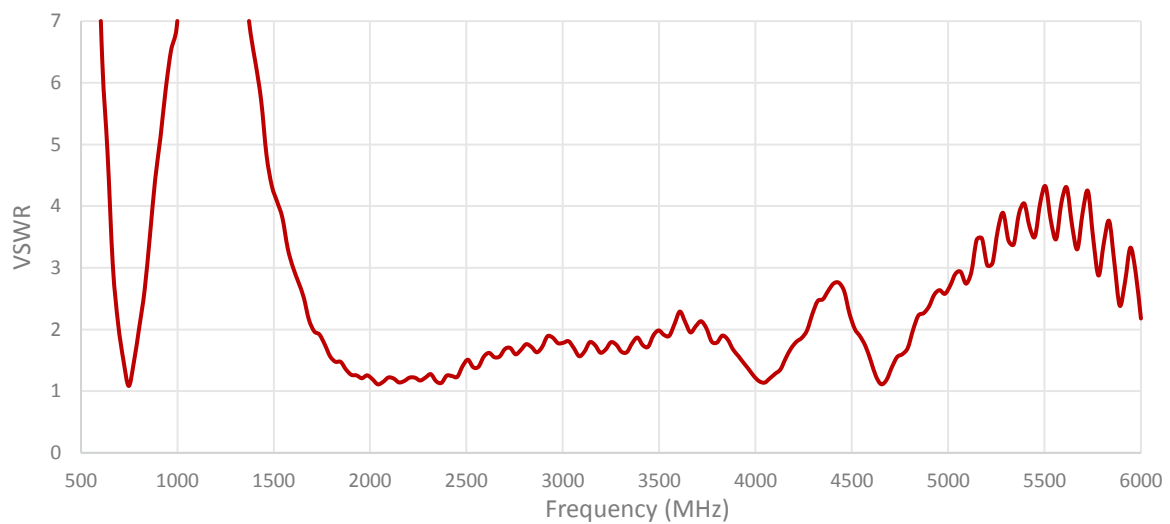
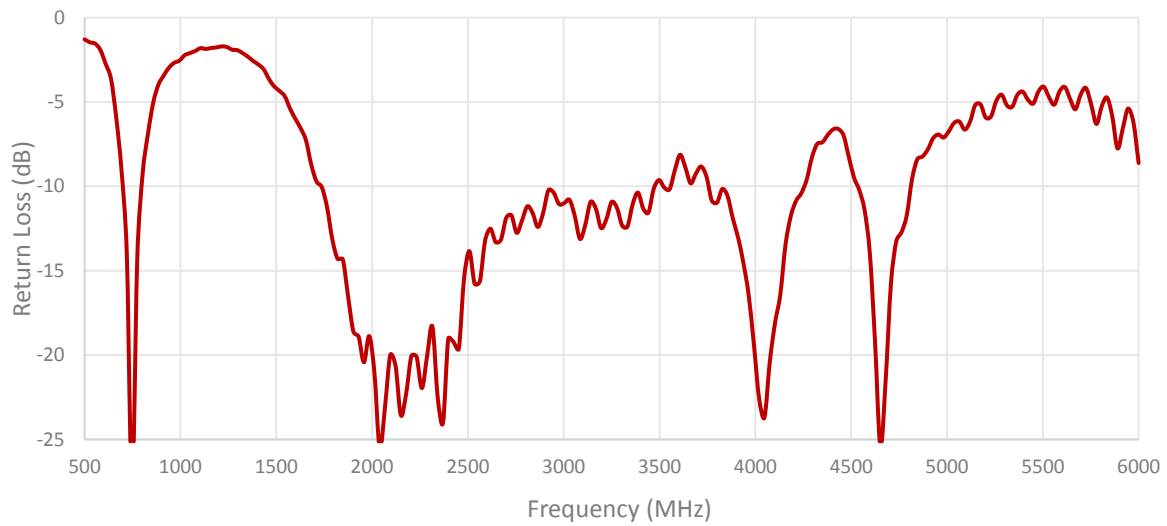
Cable 2

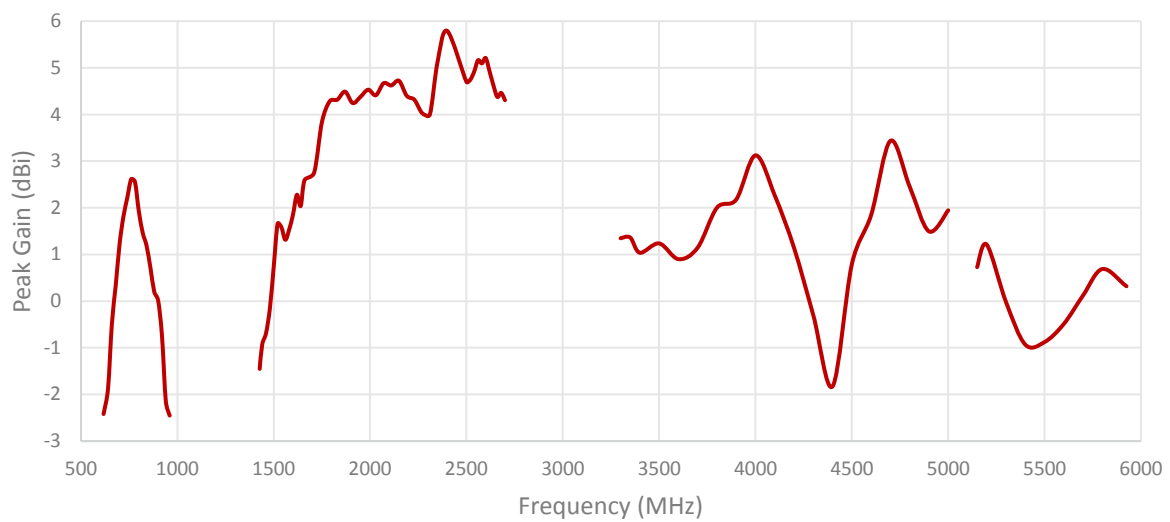
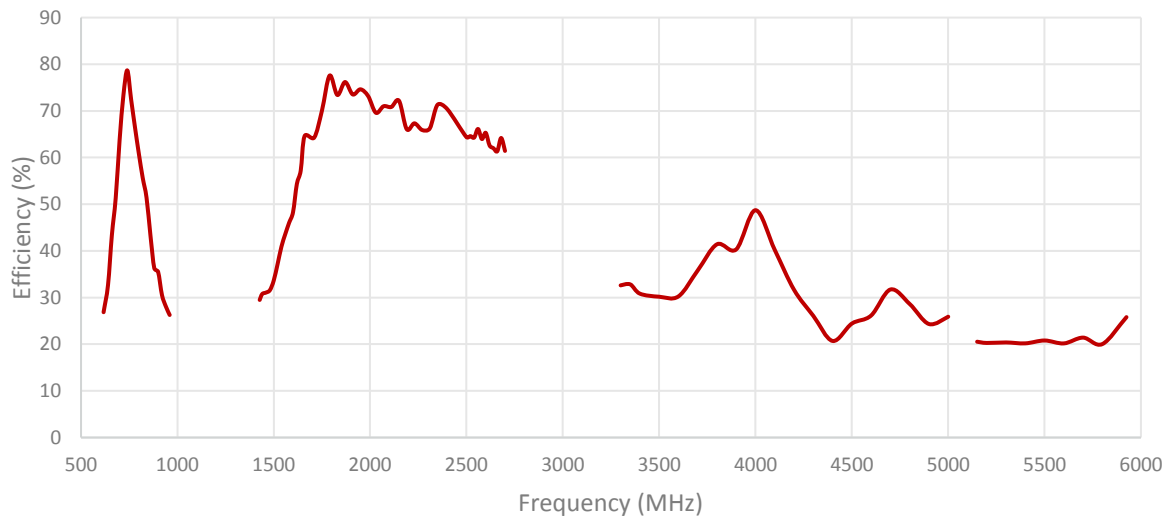
Parameters	GPS/GLONASS Antenna	
<b>Standard</b>	GPS / GLONASS	
<b>Band (MHz)</b>	1575	1602
<b>Frequency(MHz)</b>	1575.42	1598-1610
<b>Return Loss (dB)</b>	<-20	
<b>VSWR</b>	<1.2:1	
<b>Impedance</b>	50	
<b>Radiation Pattern</b>	Hemispherical	
<b>Polarization</b>	RHCP	
<b>Saw Filter</b>	No Filter	
<b>Active Gain (dB)</b>	26 @ 3V / 27dB @ 5V	
<b>Noise Figure (dB)</b>	1.5	
<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>	Most RF Connectors (SMA-Male Standard)	
<b>Cable Length</b>	Any Cable Length (200cm Standard)	
<b>Cable Type</b>	Other Cables Available (LL100 Standard)	

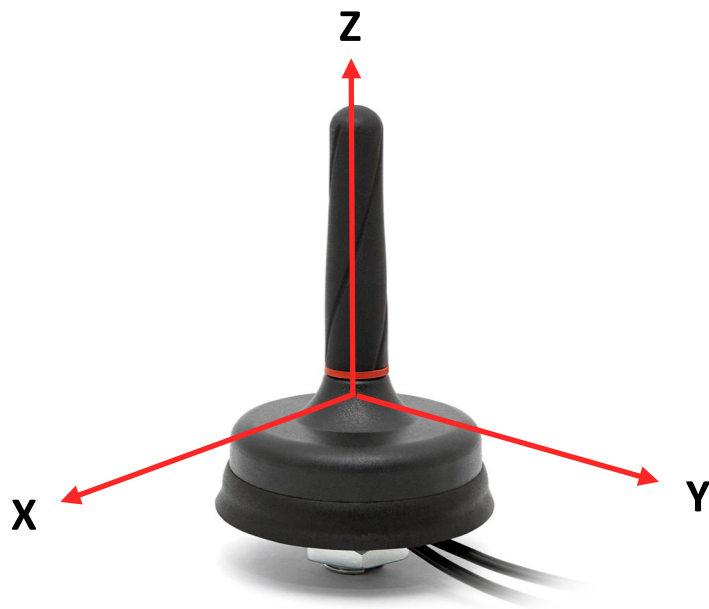
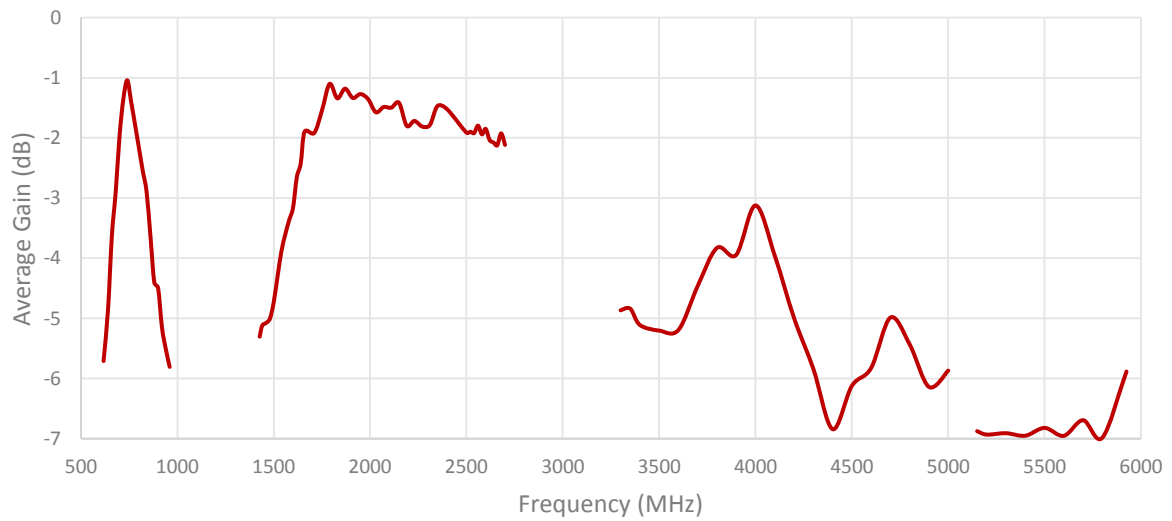
## 2. Mechanical and environmental specifications

Specifications	2J7584BG
<b>Mounting Type</b>	Screw Mount
<b>Dimensions (mm)</b>	Ø 64 × 81.4
<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, IP69

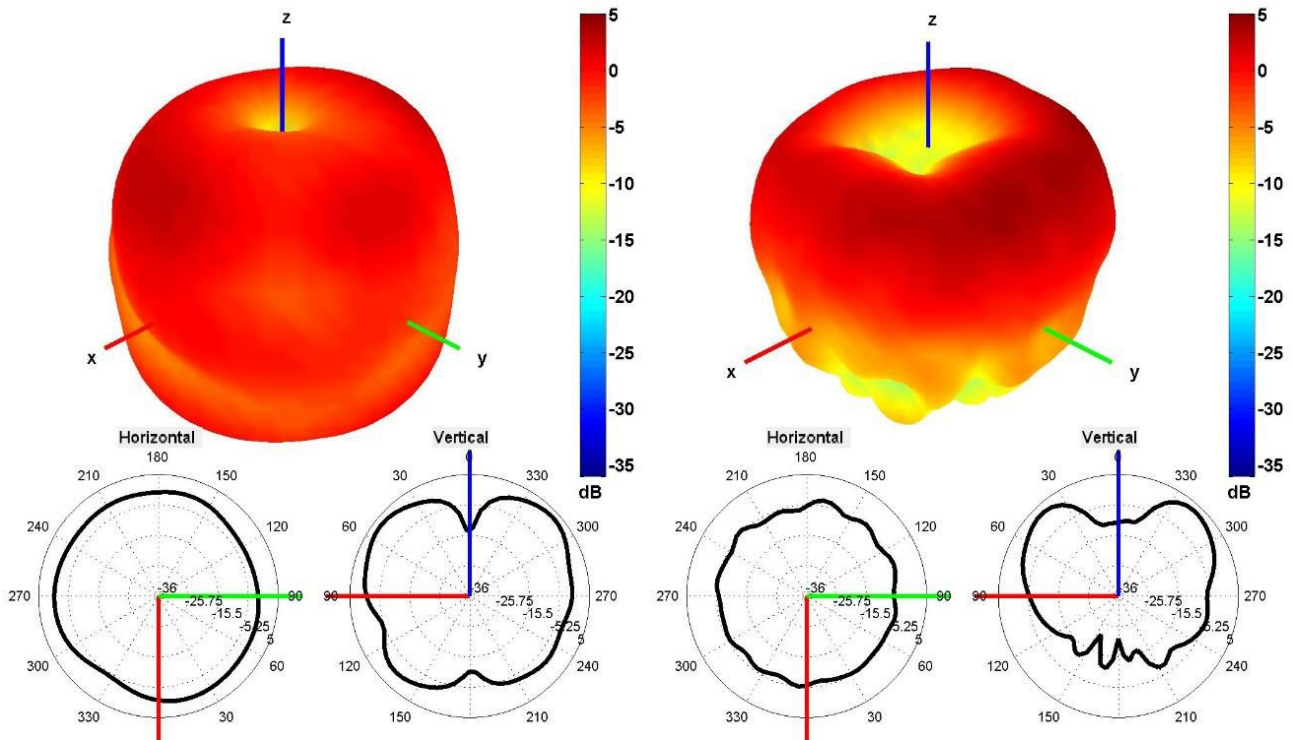
## 3. Antenna parameters



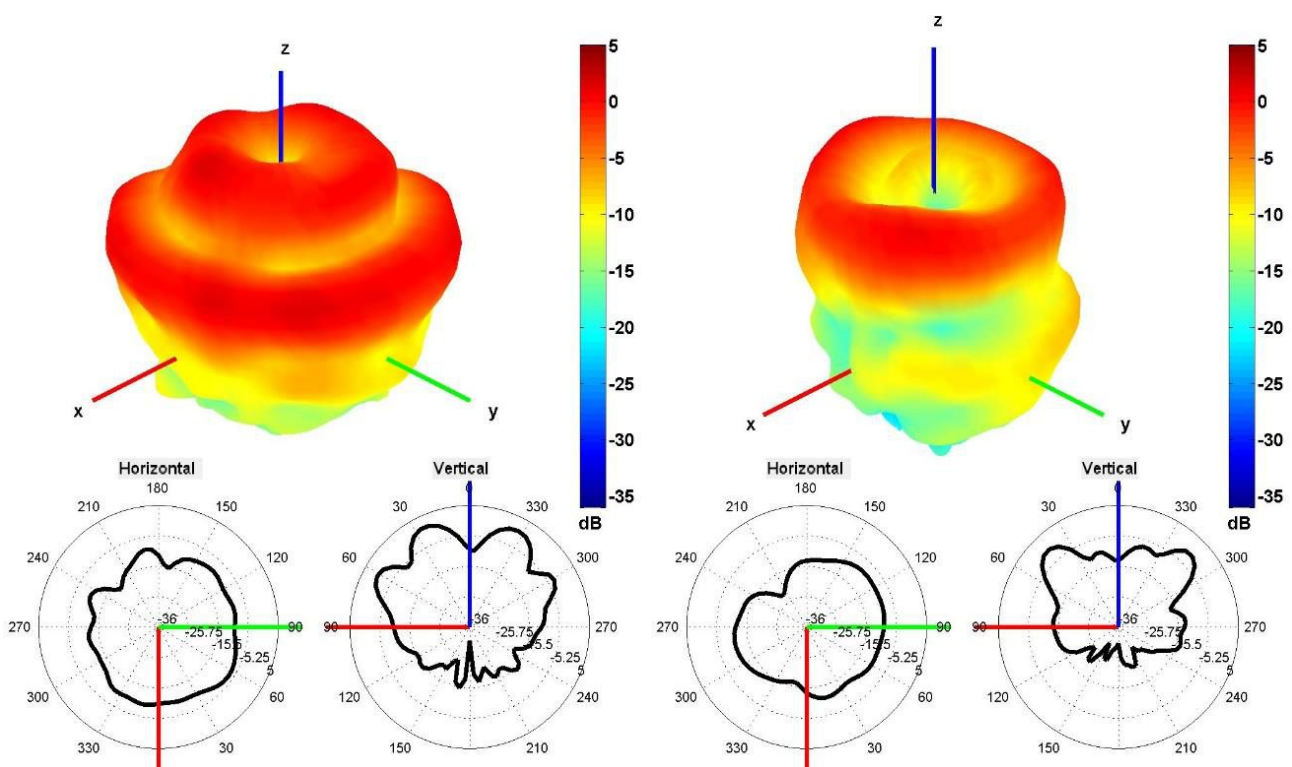




Radiation pattern reference

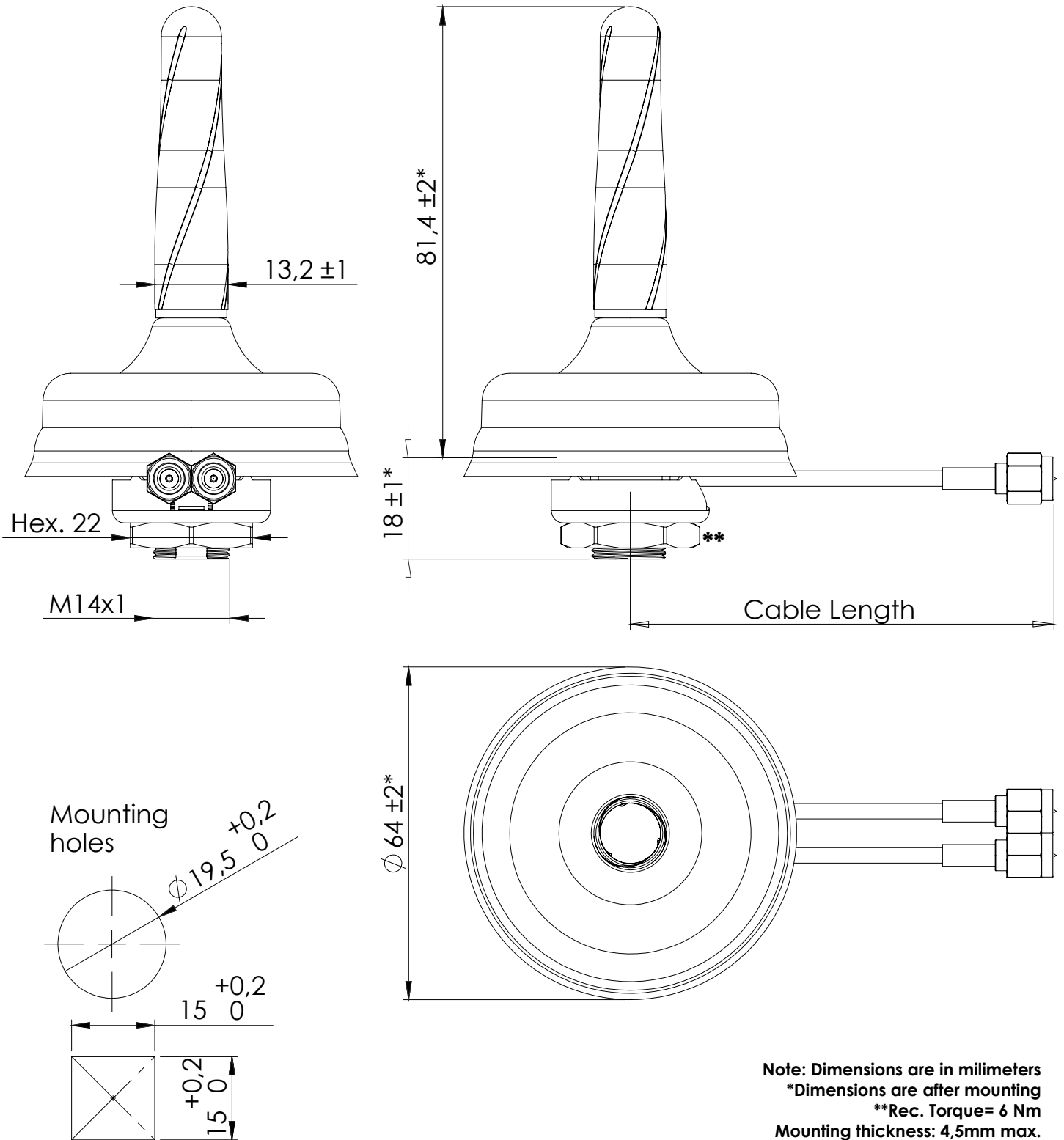


740 and 2500 MHz Radiation pattern



4500 and 5500 MHz Radiation pattern

## 4. Antenna drawings



**Note:** Dimensions are in millimeters  
**\*Dimensions are after mounting**  
**\*\*Rec. Torque= 6 Nm**  
**Mounting thickness: 4,5mm max.**  
**Wrench size: Hex 22mm**



## 5. Antenna Images

