

Product Datasheet

Cellular and GNSS Screw Mount

Key Features

Cable 1: Cellular

- 824-960 MHz
- 1710-2170 MHz

Cable 2: GPS/GLONASS/QZSS/Galileo

- 1575-1610 MHz

Screw Mount

Anti-Rotation Mechanism

Ground Plane Dependent

Customizable Cable and Connector

Dimensions Ø 146 x 31.5 mm

Certificates: IK09, IP67, IP69K



1. Antenna and electrical specifications

Cable 1

Parameters	Cellular Antenna	
Standards	2G and 3G	
Band (MHz)	850/900	1700/1800/1900/2100
Frequency (MHz)	824-960	1710-2170
Return Loss (dB)	~-9.3	~-12.5
VSWR	~2.1:1	~1.7:1
Efficiency (%)	~43	~38
Peak Gain (dBi)	~-1.8	~-2.3
Average Gain (dB)	~-3.7	~-4.3
Impedance (Ohm)	50	
Polarisation	Linear	
Radiation Pattern	Omni-Directional	
Max. Input Power (W)	25	
Connector Type	SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	LMR100 Standard (Other Cables Available)	

Cable 3

Parameters	GNSS Ceramic Active Antenna	
Standards	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1575	1602
Frequency (Mhz)	1575.42	1598-1606
Patch Size (mm)	25 x 25 x 4	
Passive Gain (dBi)	~-3.6	
Impedance (Ohms)	50	
Radiation Pattern	Hemispherical	
Voltage Range (V)	1.5 – 3.6	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.8 @ 2.7 V	
Current Consumption (mA)	9 @ 2.7 V	
Power Consumption (mW)	24.3 @ 2.7V	
Saw Filter Type	Pre-Filter	
Out of Band Rejection (dBc)	~-43	

ESD Protection (kV)	6
Connector Type	SMA-Male Standard (Other Connectors Available)
Cable Length	300 cm Standard (Any Cable Length Available)
Cable Type	LMR100 Standard (Other Cables Available)

Antenna Measurement Conditions:

Mounted on 30 x 30 cm Metal Plate

200 cm of LMR100 Cable

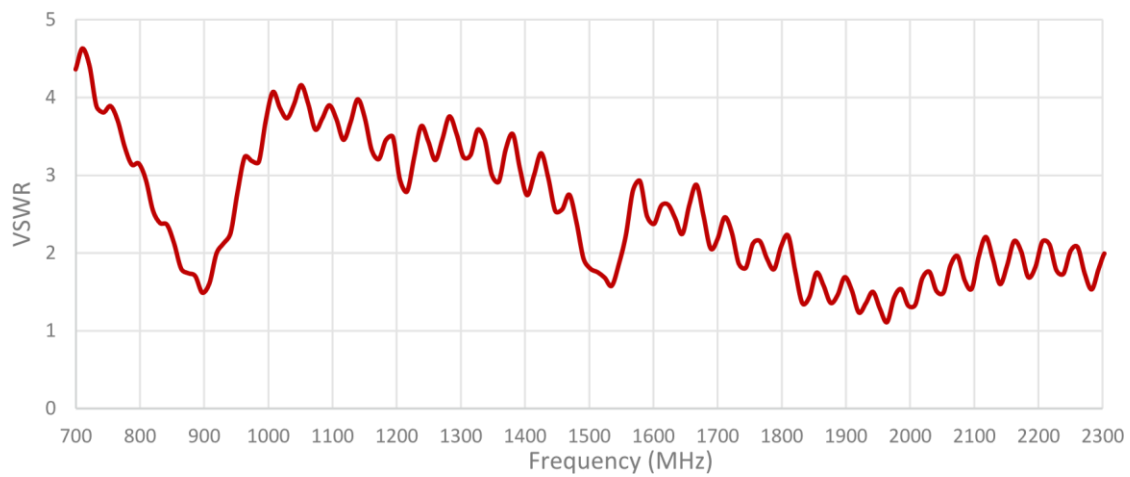
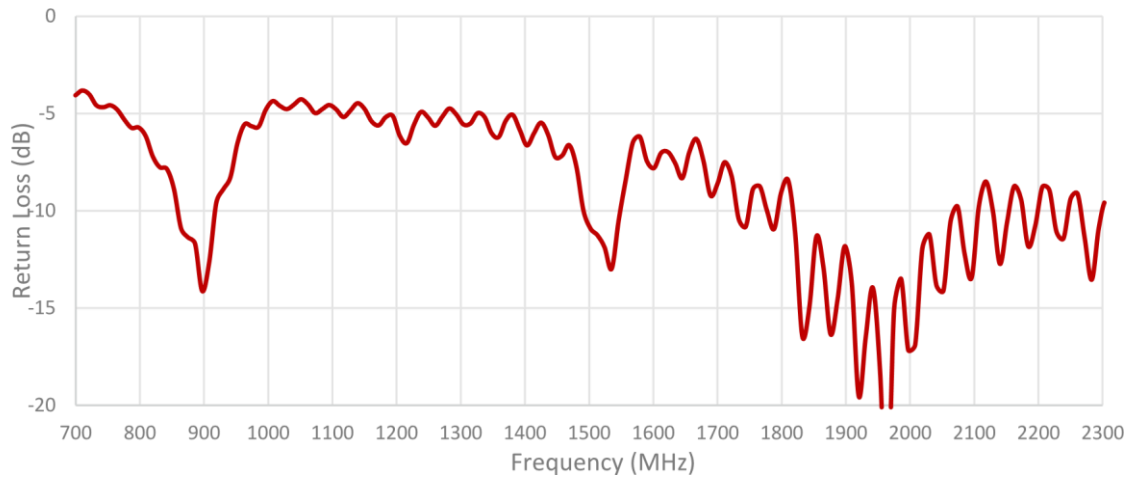
Measured in Certified CTIA 3D Anechoic Chamber

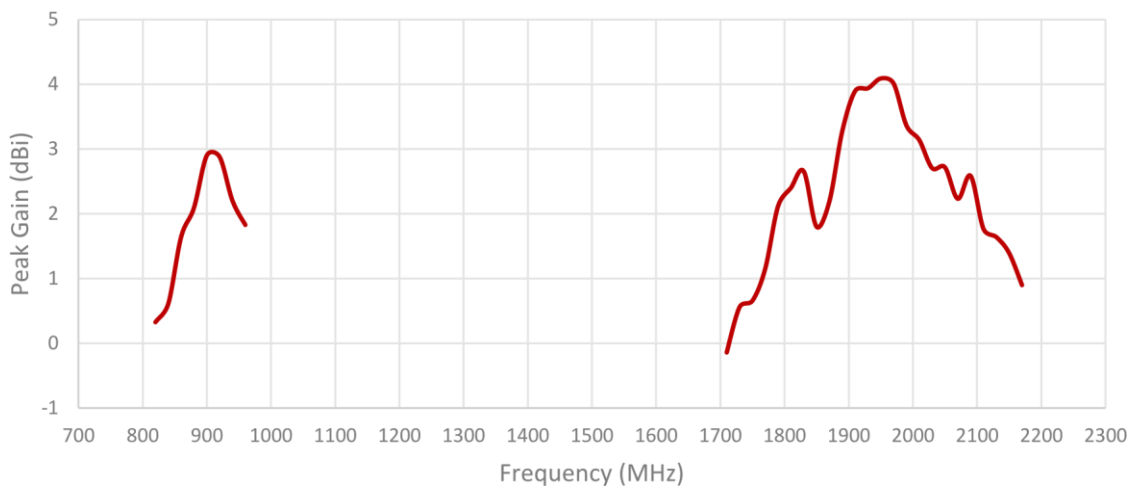
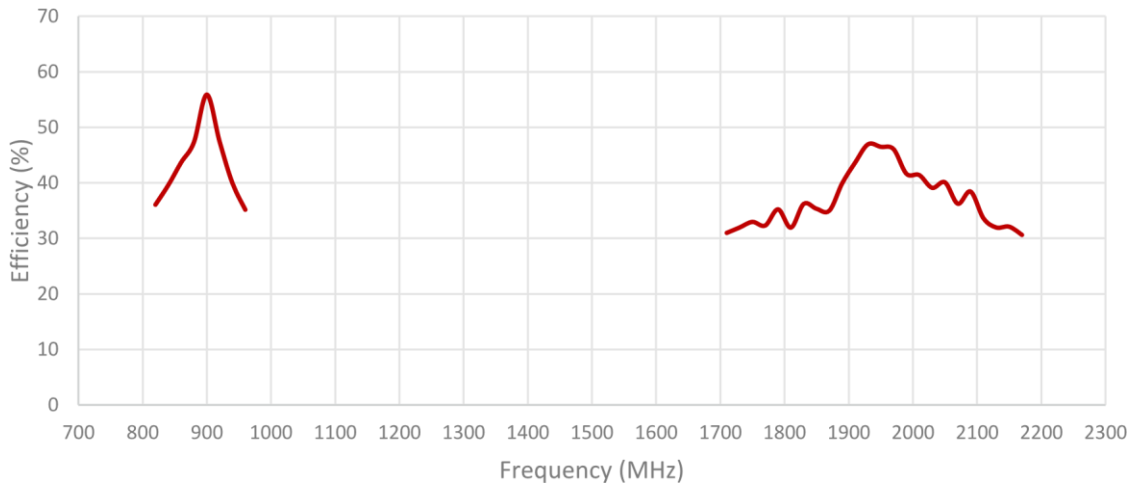
2. Mechanical and environmental specifications

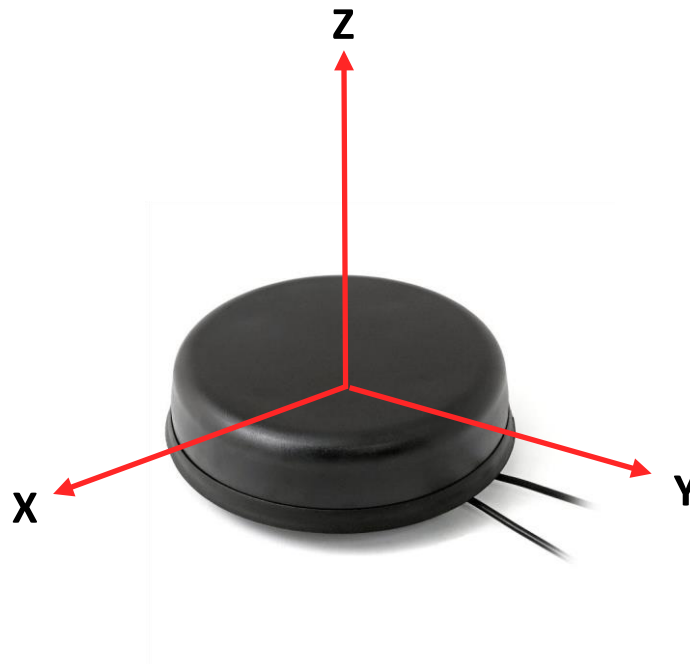
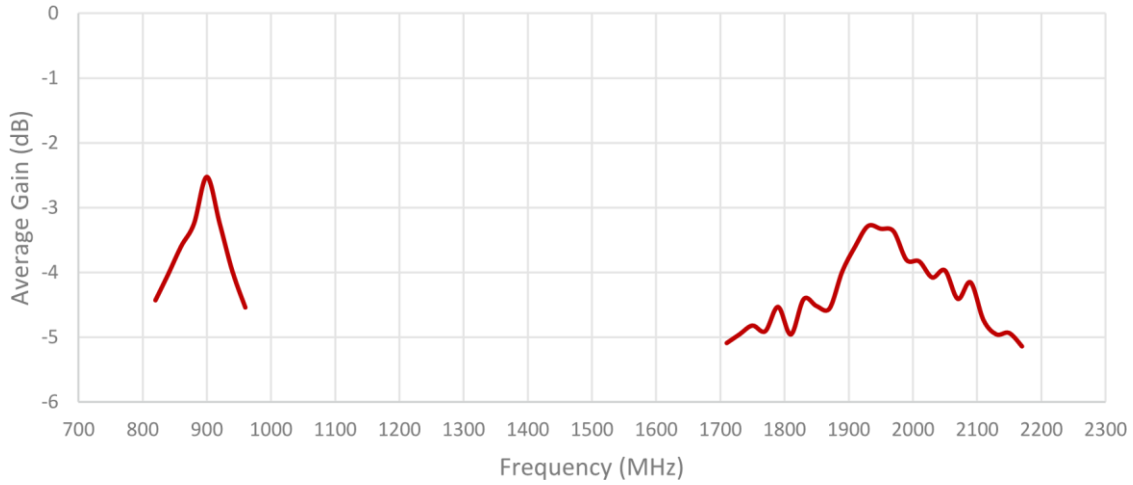
Mounting Type	Screw Mount
Dimensions (mm)	Ø 146 x 31.5
Radome	ABS
Radome color	Black
Antenna Base	Zamak
Gasket	TPE
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IK09, IP67, IP69K

3. Antenna parameters

Table 1: Cellular

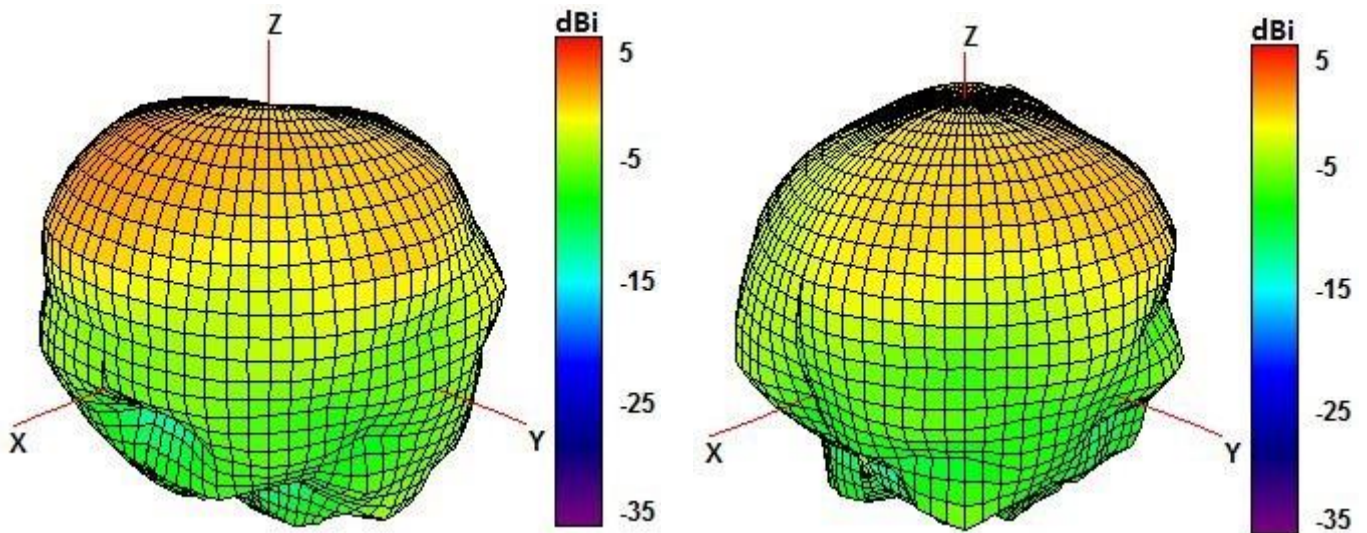




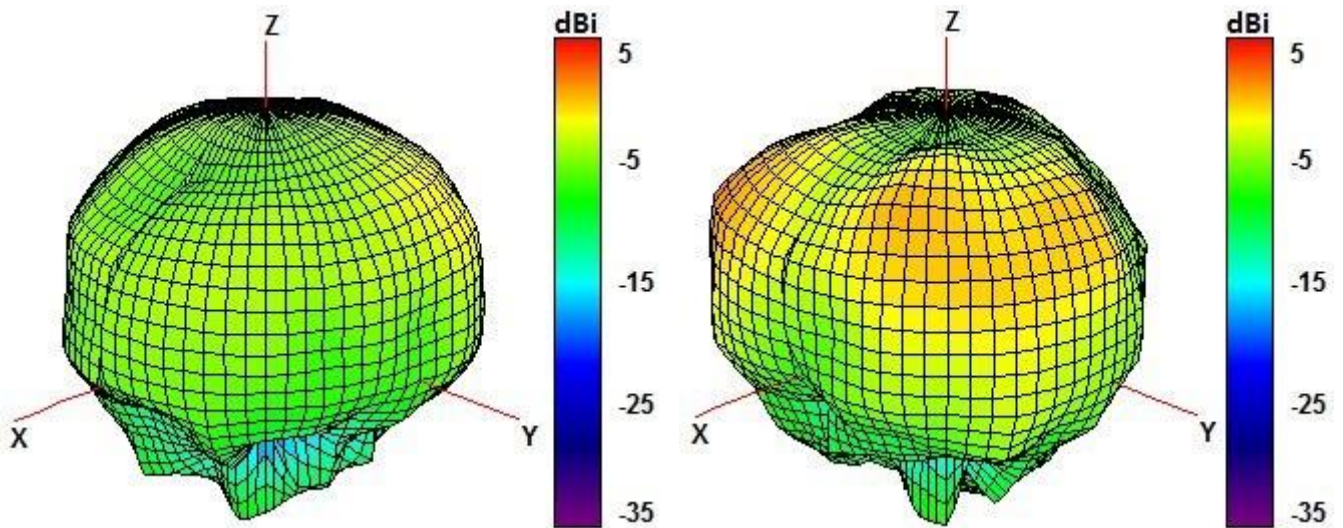


3. Radiation pattern reference

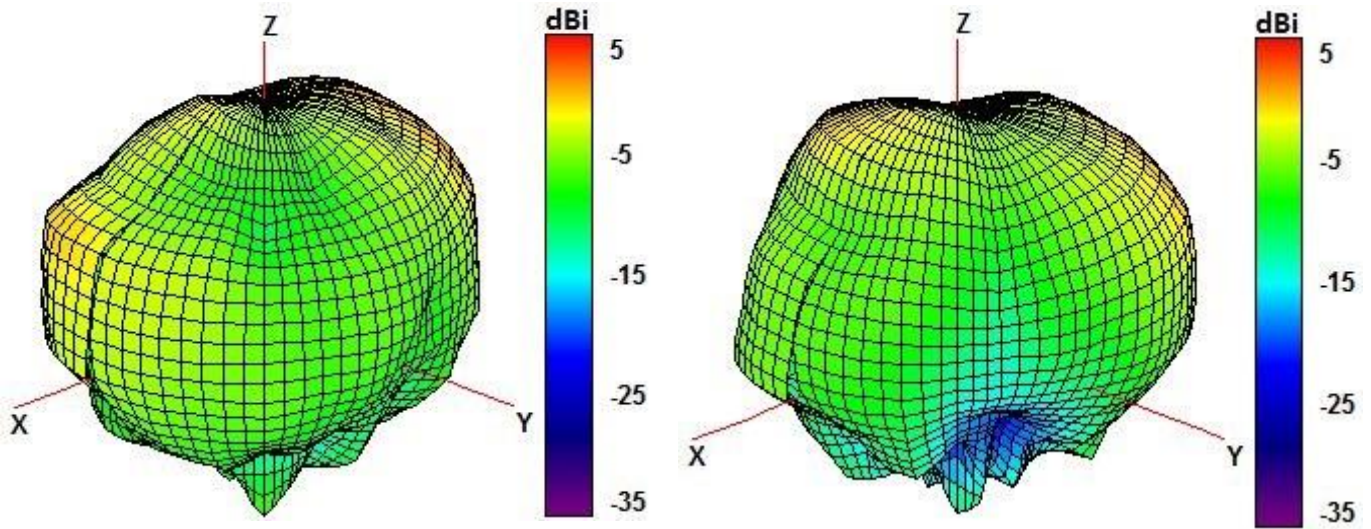
Cable 1: Cellular



850 and 940 MHz Radiation pattern

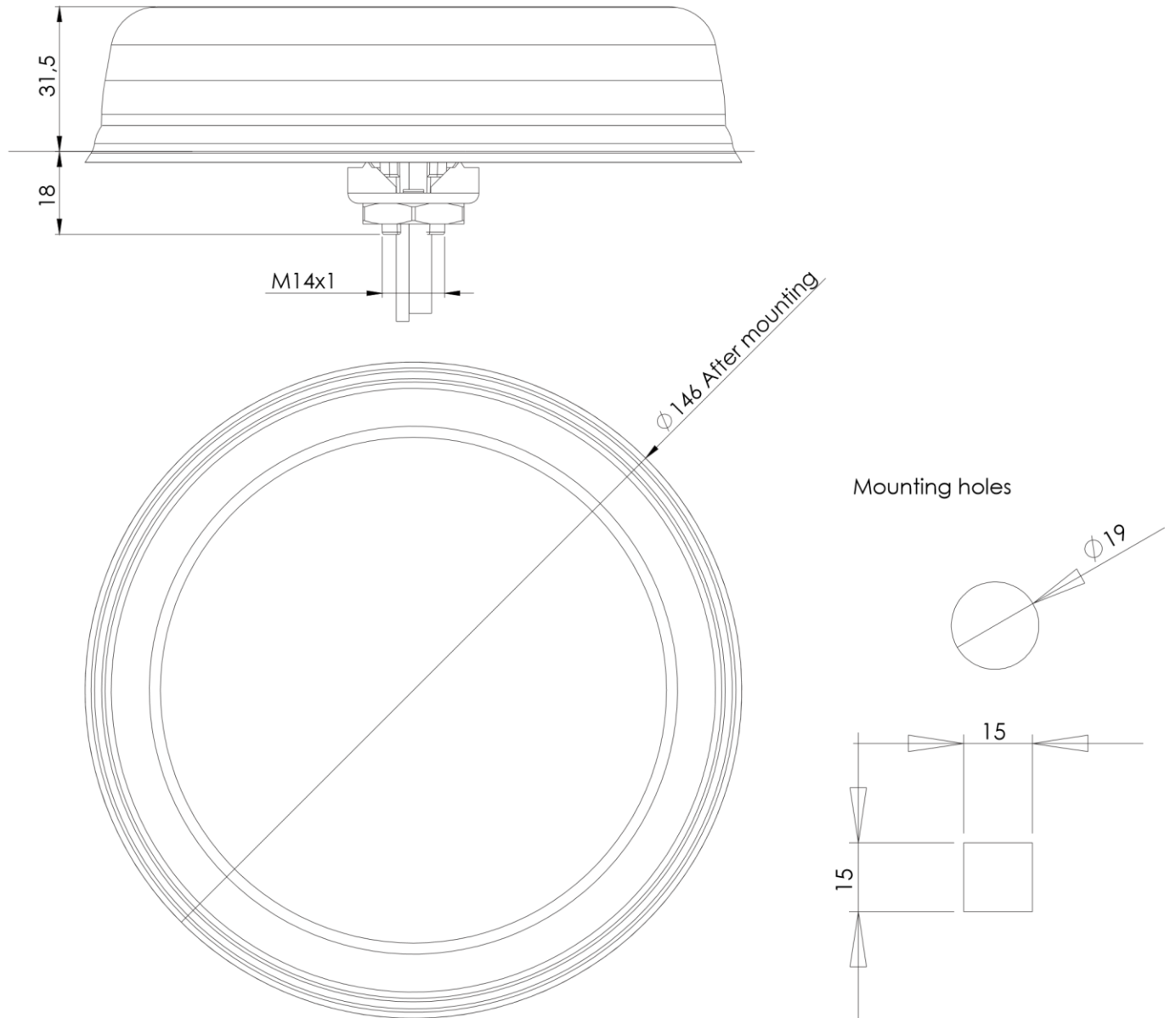


1750 and 1850 MHz Radiation pattern



1950 and 2100 MHz Radiation pattern

4. Antenna Drawings



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5. Antenna Images



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