antenna conceptor

Product Datasheet

2J6300MPGF

Cellular and GPS/GLONASS Magnetic/Adhesive Mount

Key Features

Cable 1: Cellular
- 824-960 MHz
- 1710-2170 MHz

Cable 2: GPS/GLONASS/QZSS/Galileo
- 1575-1610 MHz

Magnetic/Adhesive Mount
Ground Plane Independent
Customizable Cable and Connector
Dimensions ø 52.5 × 13.1/14.3 mm
Certificates: IP67

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)	~-10.8	~-10.1
VSWR	~1.9:1	~2.1:1
Efficiency (%)	~33.4	~9.8
Peak Gain (dBi)	~1.2	~-3.1
Average Gain (dB)	~-4.9	~-11.6
Impendance (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	RG174 Standard (Other Cables Available)	

Cable 2

Parameters	GPS/GLONASS Antenna	
Standard	GPS / GLONASS	
Band (MHz)	1575	1602
Frequency(MHz)	1575.42	1598-1610
Return Loss (dB)	<-14	
VSWR	<1.5:1	
Impedance	50	
Radiation Pattern	Hemispherical	
Polarization	RHCP	
Saw Filter	Pre-Filter	
Active Gain (dB)	26 @ 3V	
Noise Figure (dB)	1.2	
Voltage (V)	2.7 – 5.5	
Current (mA)	15 - 25	
Power Consumption (mW)	40 - 137	
Connector Type	SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	RG174 Standard (Other Cables Available)	

Antenna Measurement Conditions:

Mounted on 30 x 30 cm Metal Plate

200 cm of RG174100 Cable

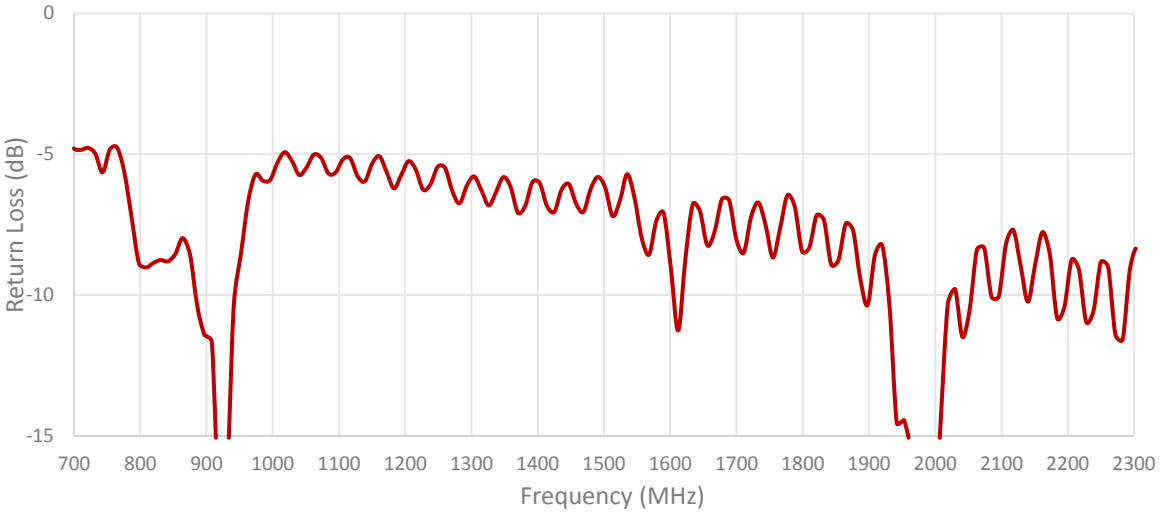
Measured in Certified CTIA 3D Anechoic Chamber

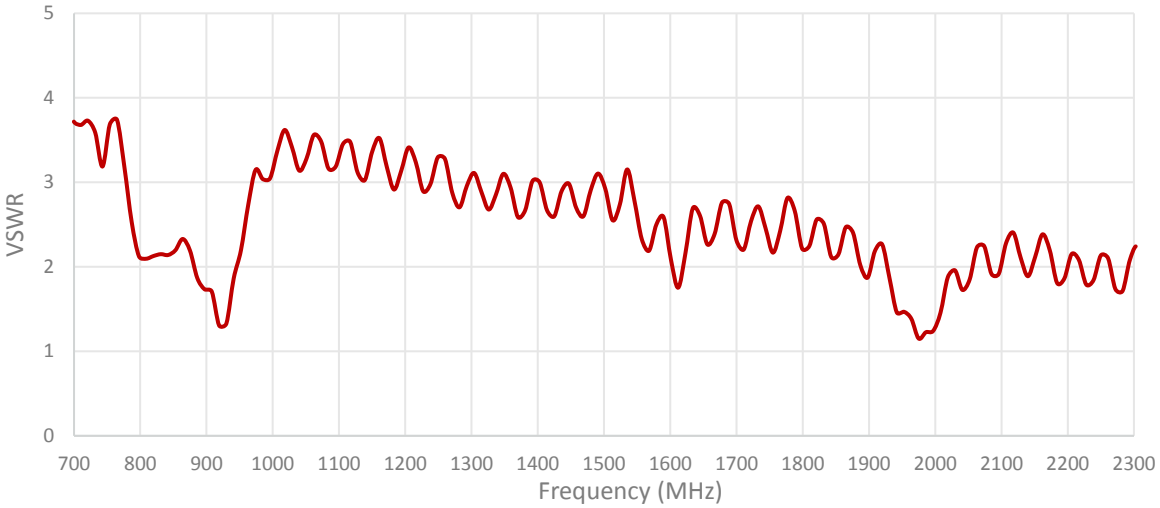
2. Mechanical and environmental specifications

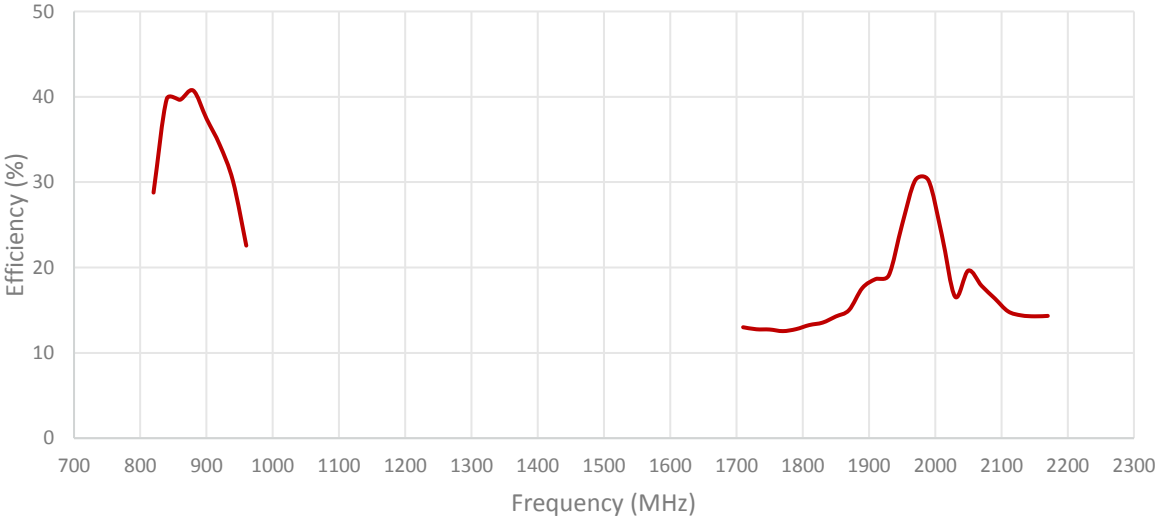
Specifications	2J6300MPGF
Mounting Type	Magnetic Mount
Dimensions (mm)	Ø 52.5 × 13.1/14.3
Radome	ASA
Radome color	Black
Antenna Base	ASA
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67

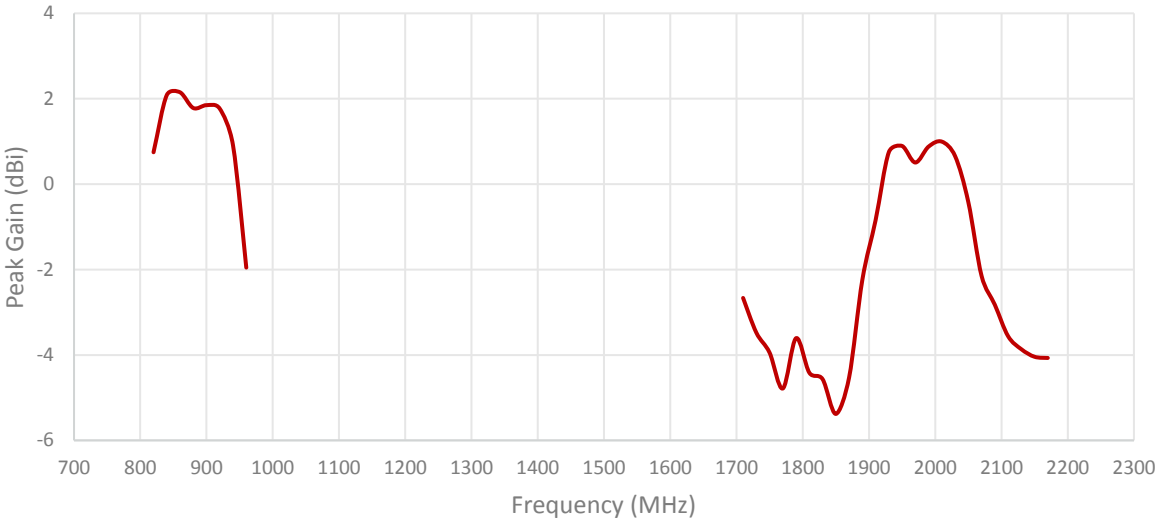
3. Antenna parameters

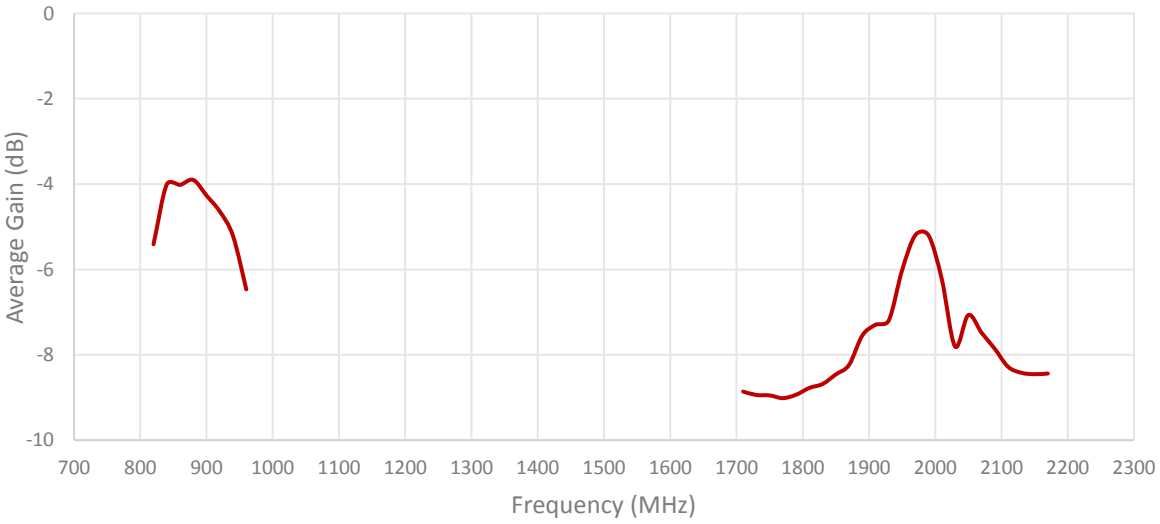
Cable 1: Cellular

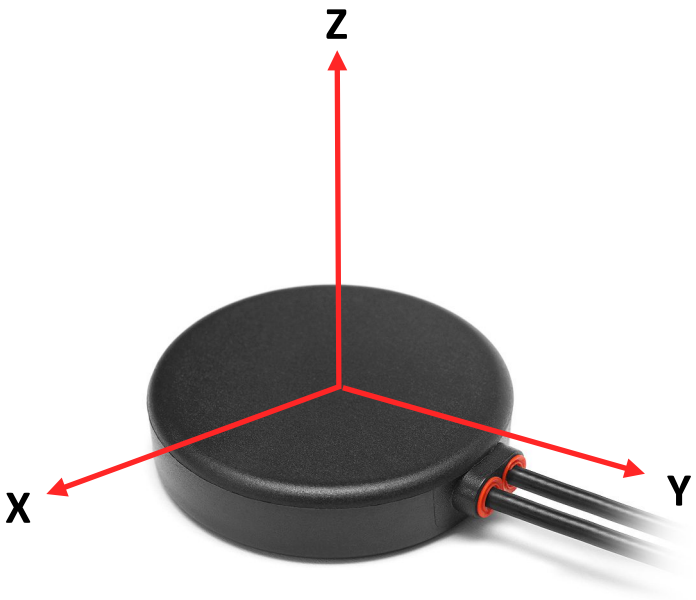





50
40
30
20
10
0
Efficiency (%)
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
Frequency (MHz)

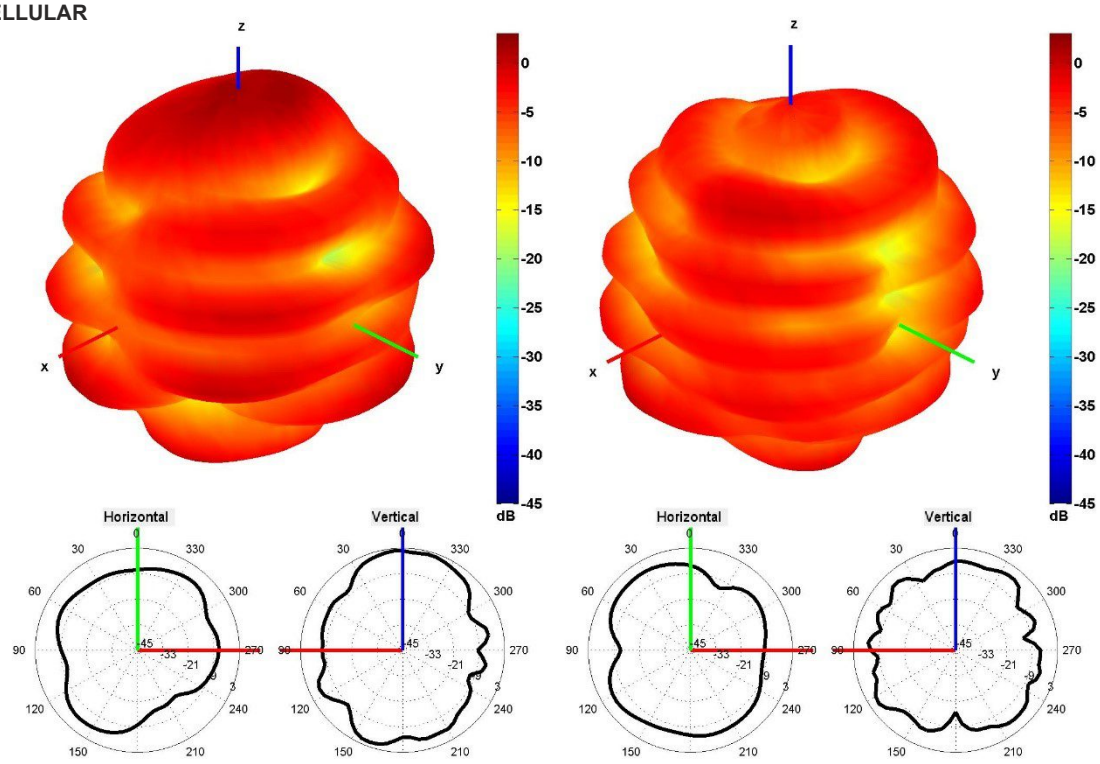

4
2
0
-2
-4
-6
Peak Gain (dBi)
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
Frequency (MHz)



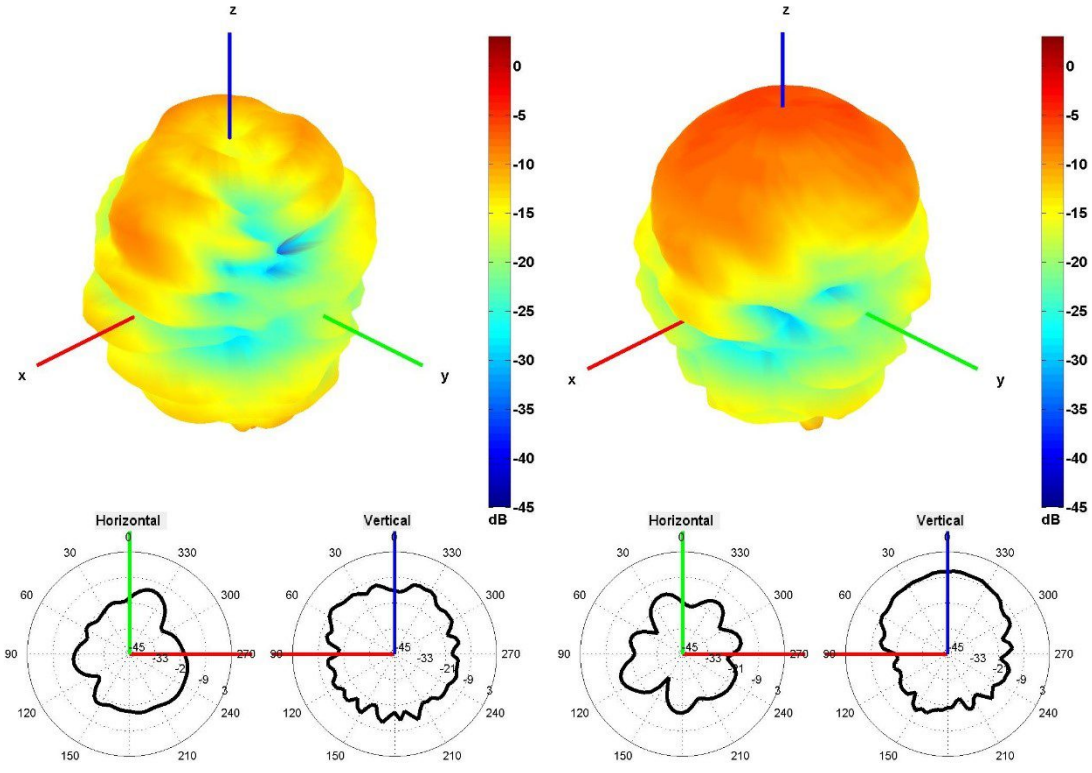


Radiation pattern reference

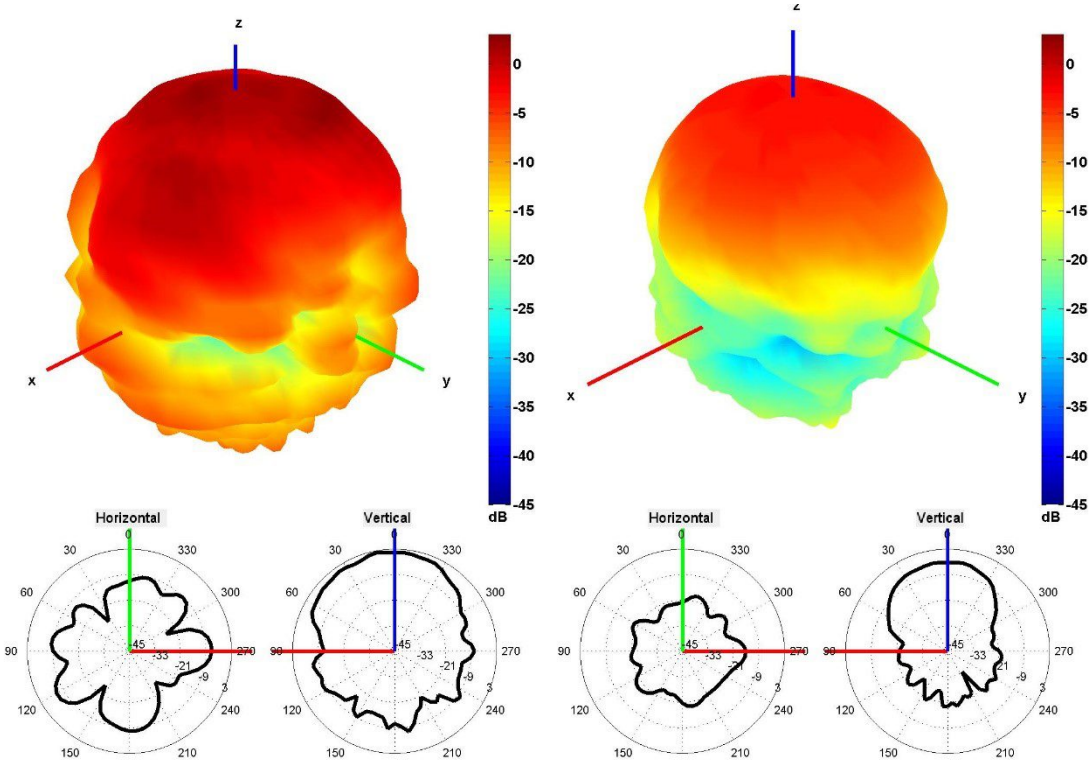
Cable 1: CELLULAR



850 and 940 MHz Radiation pattern

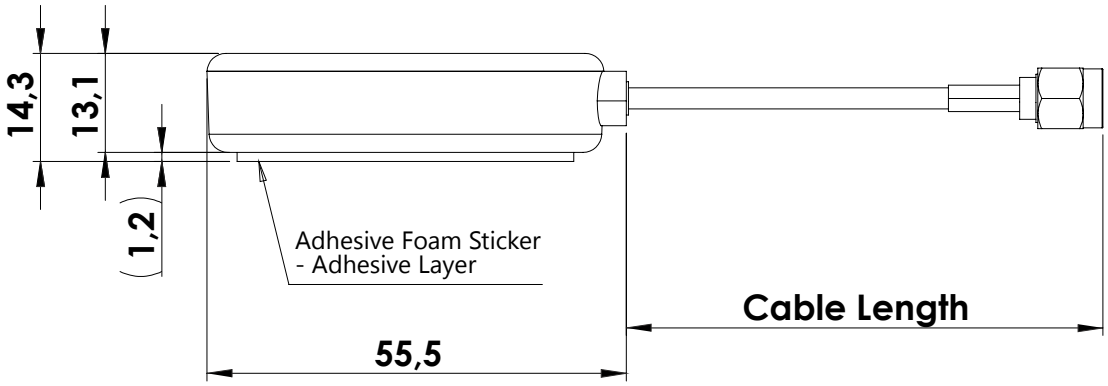


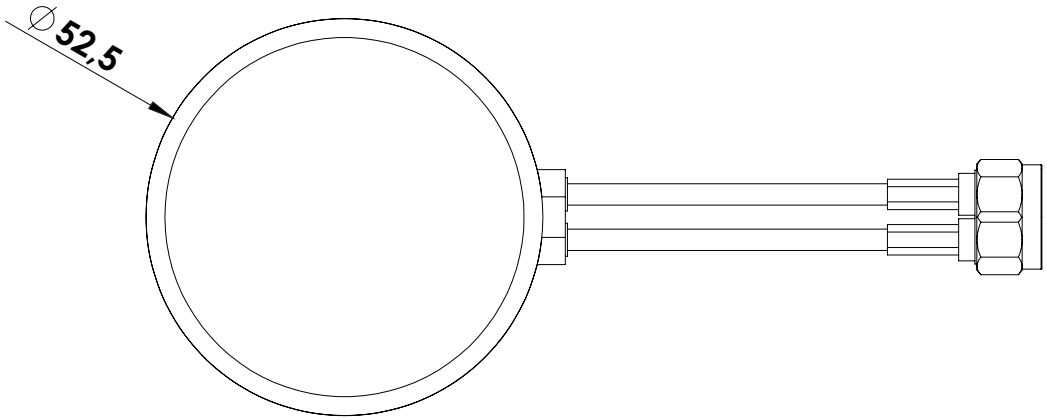
1750 and 1850 MHz Radiation pattern



1950 and 2100 MHz Radiation pattern

4. Antenna drawings





Note: Dimensions are in milimeters

5. Antenna Images