

2J7807BG

433 MHz ISM and GPS/GLONASS Screw Mount

Key Features

Cable 1: 433 MHz ISM

- 433-435 MHz

Cable 2: GPS/GLONASS

- 1575-1610 MHz

Screw Mount

Ground Plane Dependent

Customizable Cable and Connector

Dimensions 186.5 x 63 mm

Certificates: IP67, IP69K



1. Antenna and electrical specifications

Cable 1

Parameters	433 MHz ISM Antenna
Standards	ISM, LoRa
Band (MHz)	433 MHz
Frequency (MHz)	433-435
Return Loss (dB)	~11.2
VSWR	~1.7:1
Efficiency (%)	~51
Peak Gain (dBi)	~-0.4
Average Gain (dB)	~-2.9
Impedance (Ohm)	50
Polarisation	Linear
Radiation Pattern	Omni-Directional
Max. Input Power (W)	50
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)	<-20		
VSWR	<1.2:1		
Impedance	50		
Radiation Pattern	Hemispherical		
Polarization	RHCP		
Saw Filter	No Filter		
Active Gain (dB)	26 @ 3V / 27dB @ 5V		
Noise Figure (dB)	1.5		
Voltage (V)	2.7 – 5.5		
Current (mA)	15 - 25		
Power Consumption (mW)	40 - 137		
Connector Type	Most RF Connectors (SMA-Male Standard)		
Cable Length	Any Cable Length (200cm Standard)		
Cable Type	Other Cables Available (RG174 Standard)		

Antenna Measurement Conditions:

Mounted on 30 x 30 cm Metal Plate

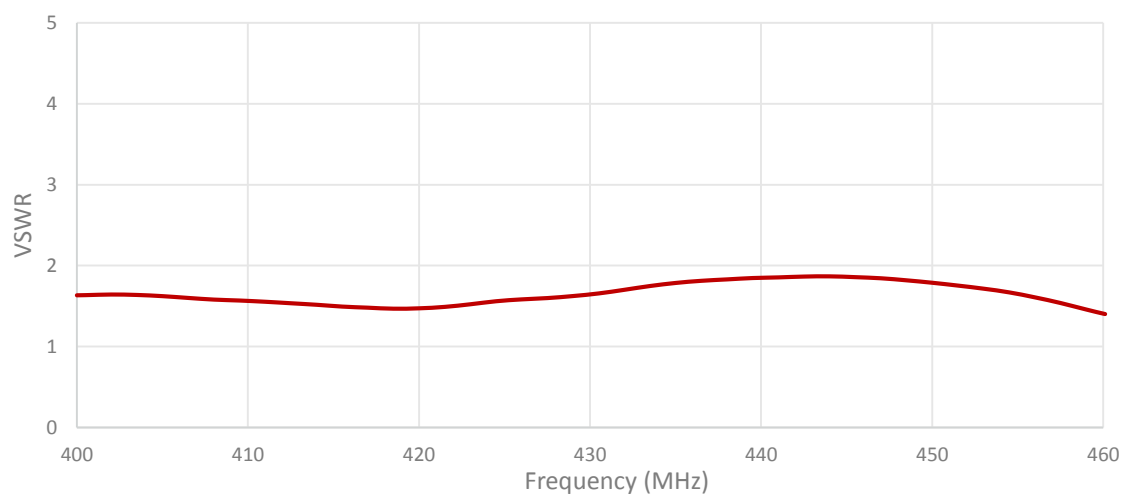
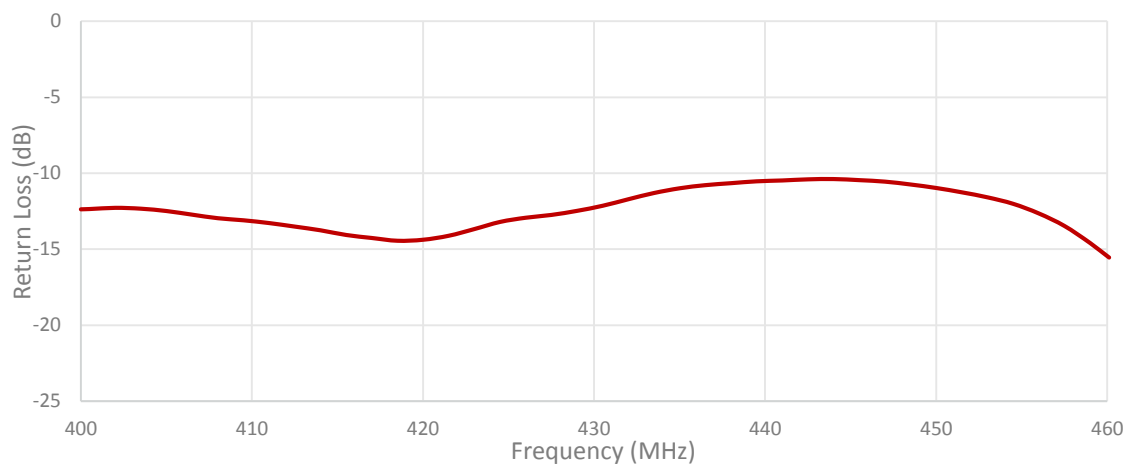
200cm of RG174 Cable

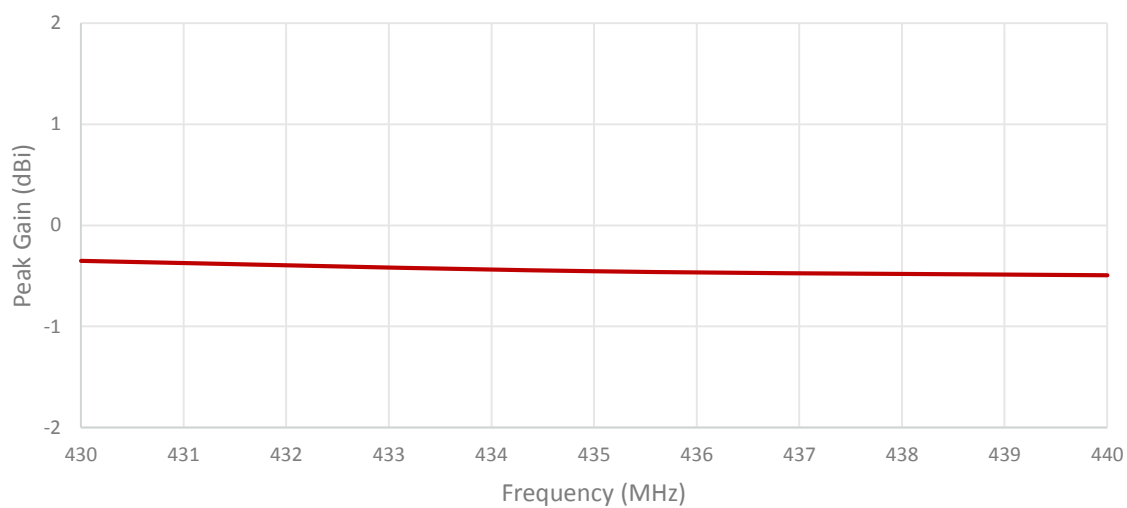
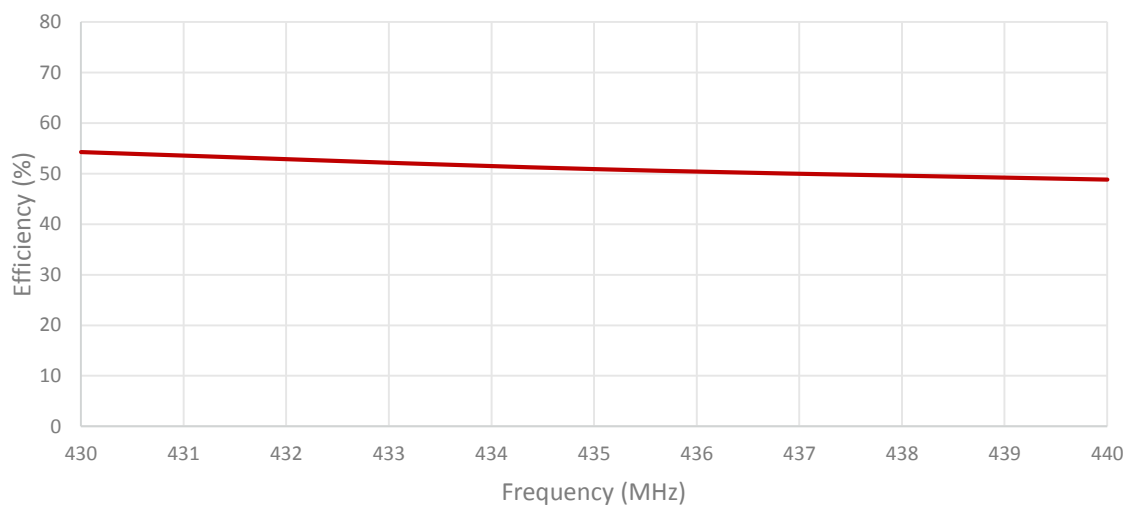
Measured in Certified CTIA 3D Anechoic Chamber

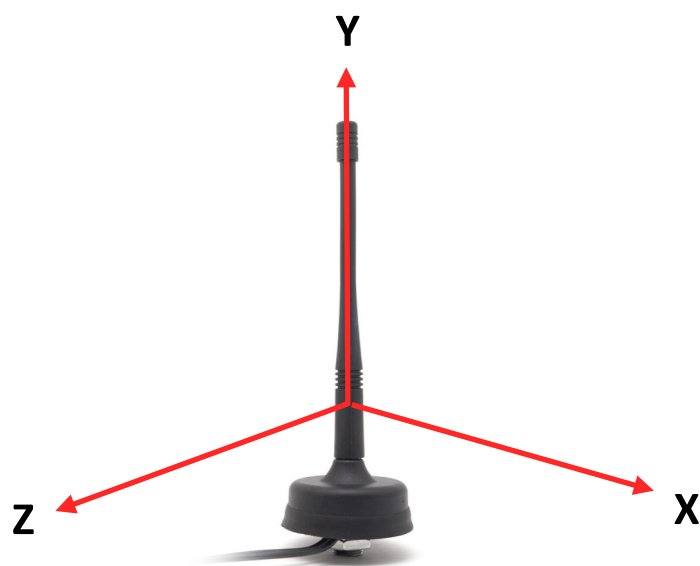
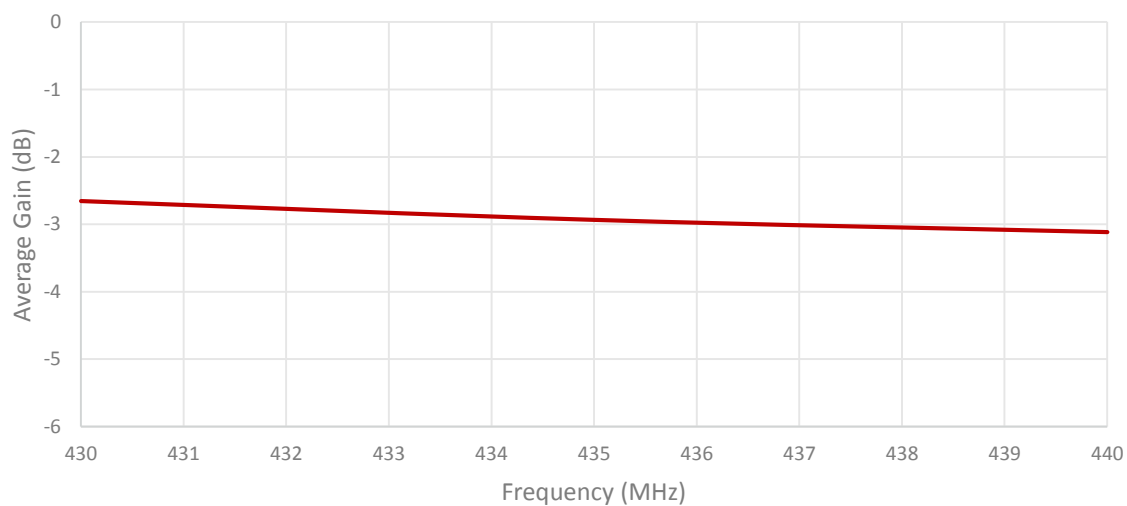
2. Mechanical and environmental specifications

Specifications	2J7807BG
Mounting Type	Screw Mount
Dimensions (mm)	186.5 x 63
Max. Tighten Torque (Nm)	6 Nm
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	IP67, IP69K

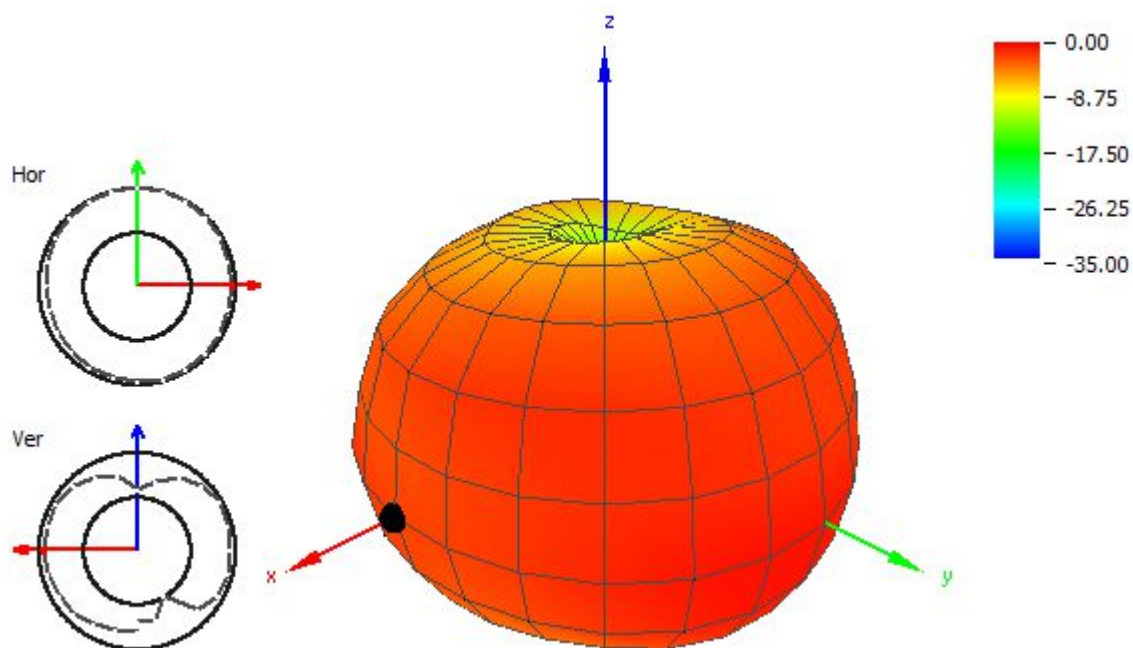
3. Antenna parameters





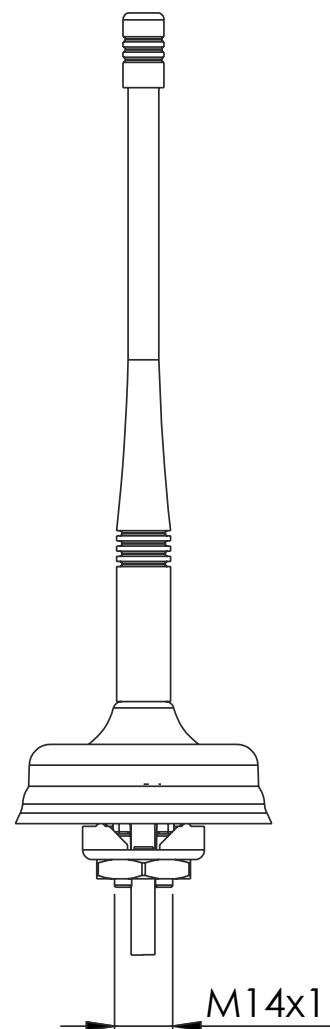
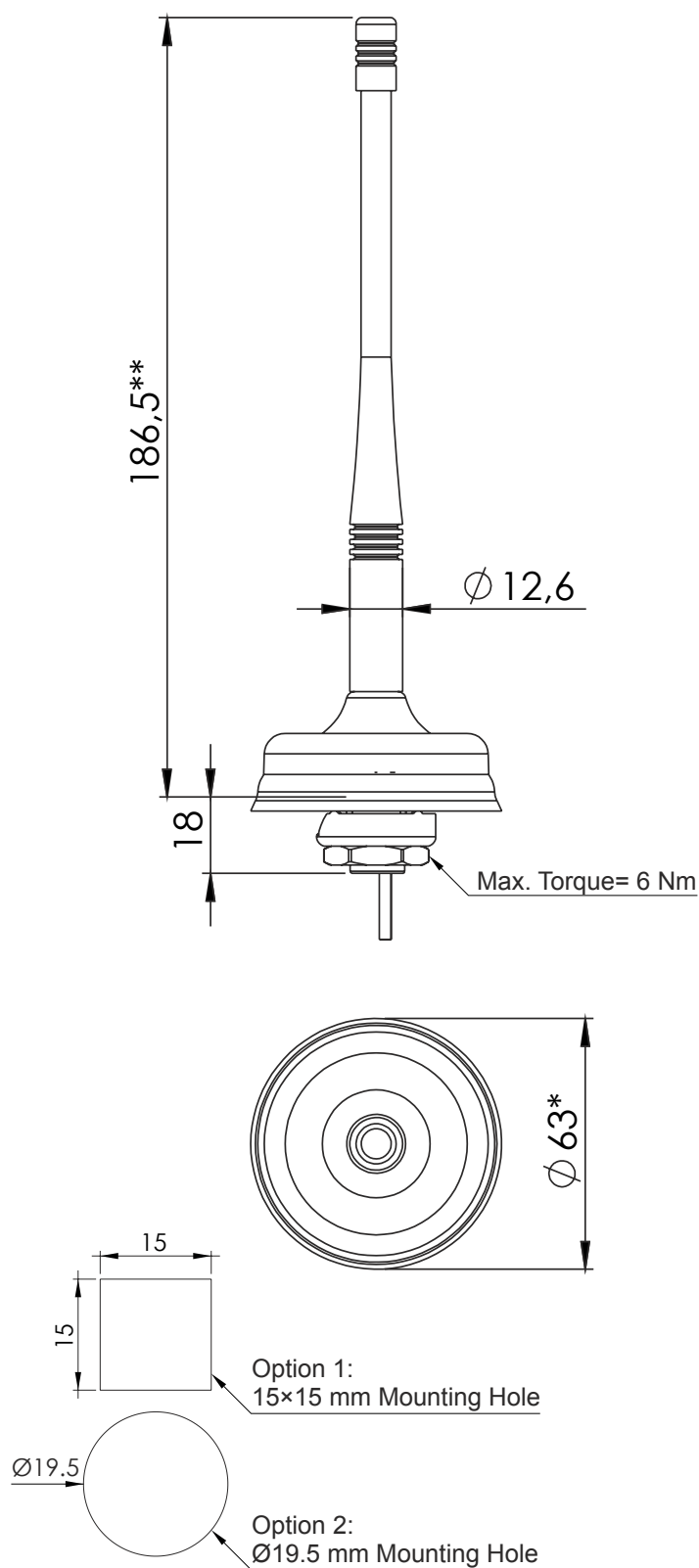


Radiation pattern reference



433 MHz Radiation pattern

4. Antenna drawings



Note: Dimensions are in millimeters
***Dimensions are after mounting**
**** Length depends on frequency after mounting**
*****Max. Torque= 6 Nm**

5. Antenna Images

