antenna conceptor

Product Datasheet

2J8407BG

TETRA/UHF and GPS/GLONASS Screw Mount

Key Features

Cable 1: TETRA/UHF
- 380-470 MHz

Cable 2: GPS/GLONASS
- 1575-1610 MHZ

Screw Mount
Anti-Rotation Mounting
Ground Plane Dependent
Customizable Cable and Connector
Dimensions: 99 × 60 × 154 mm
Certificates: IP67, IP69

1. Antenna and electrical specifications

Cable 1

Parameters	TETRA/UHF Antenna
Standards	TETRA/UHF
Band (MHz)	400 MHz
Frequency (MHz)	380-470
Return Loss (dB)	~-9.7
VSWR	~2.5:1
Efficiency (%)	~56.5
Peak Gain (dBi)	~2.0
Average Gain (dB)	~-2.6
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	<1.2:1	
Impedance	50	
Radiation Pattern	Hemispherical	
Polarization	RHCP	
Saw Filter	Pre-Filter	
Active Gain (dB)	26 @ 3V / 27dB @ 5V	
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

200cm of RG174 Cable

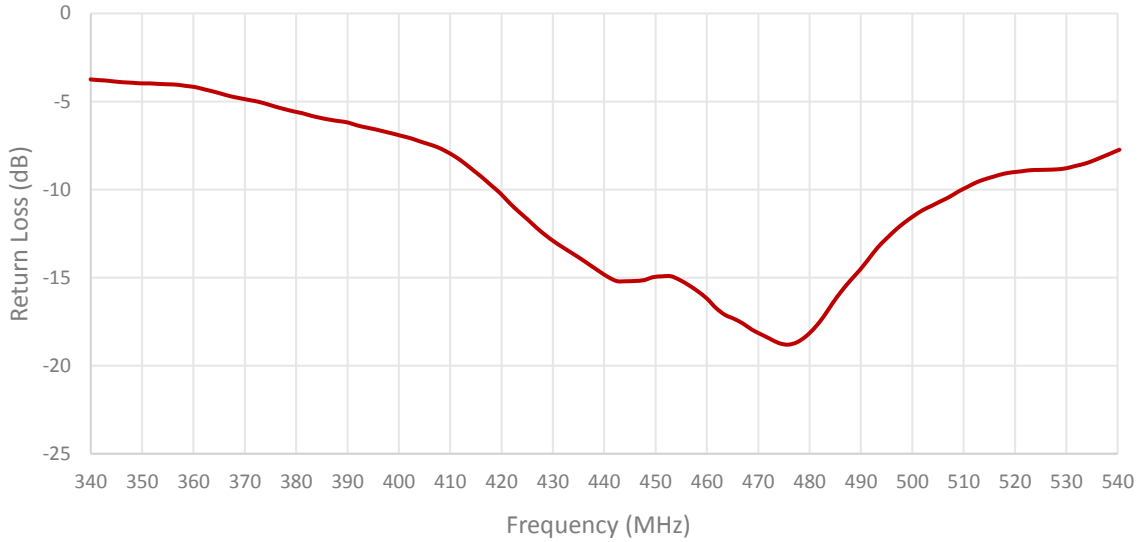
Measured in Certified CTIA 3D Anechoic Chamber

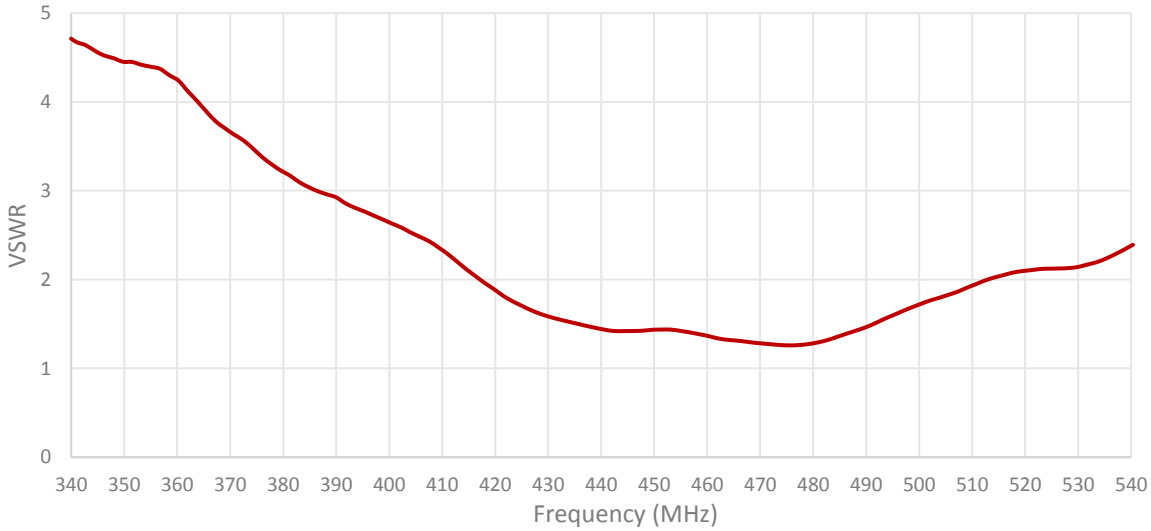
2. Mechanical and environmental specifications

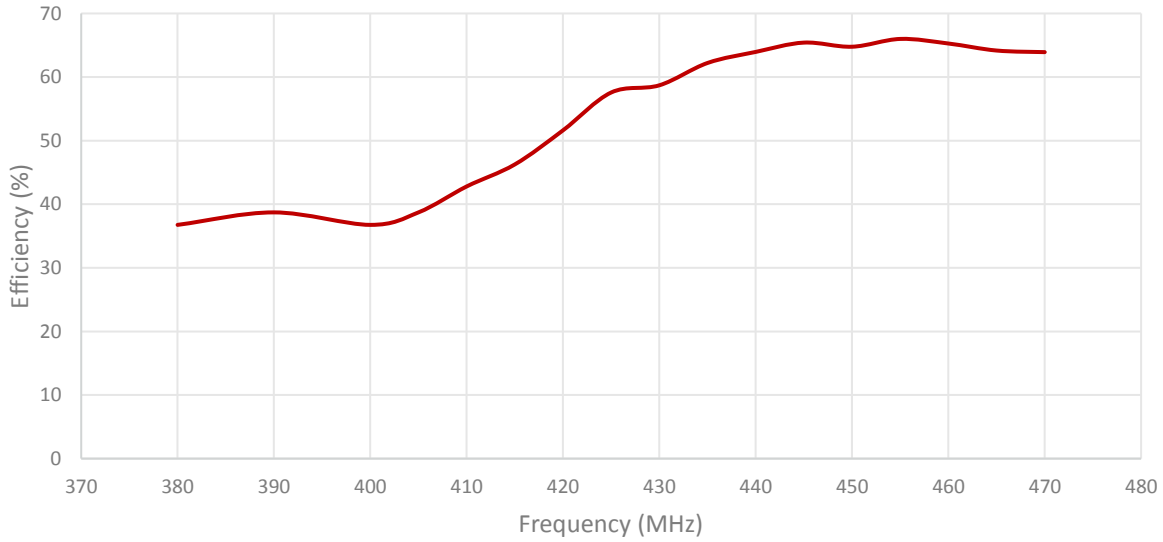
Specifications	2J8407BGF
Mounting Type	Screw Mount
Dimensions (mm)	99 × 60 × 154
Max. Tighten Torque (Nm)	6 Nm
Radome	ASA
Radome color	Black
Antenna Base	Zamak
Gasket	TPE
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IP69

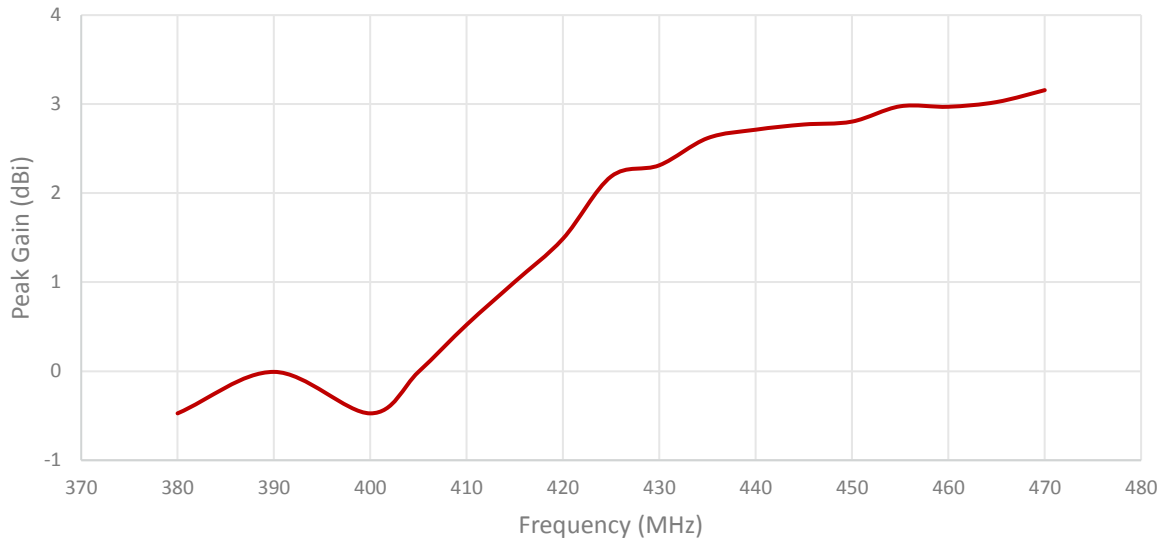
3. Antenna parameters

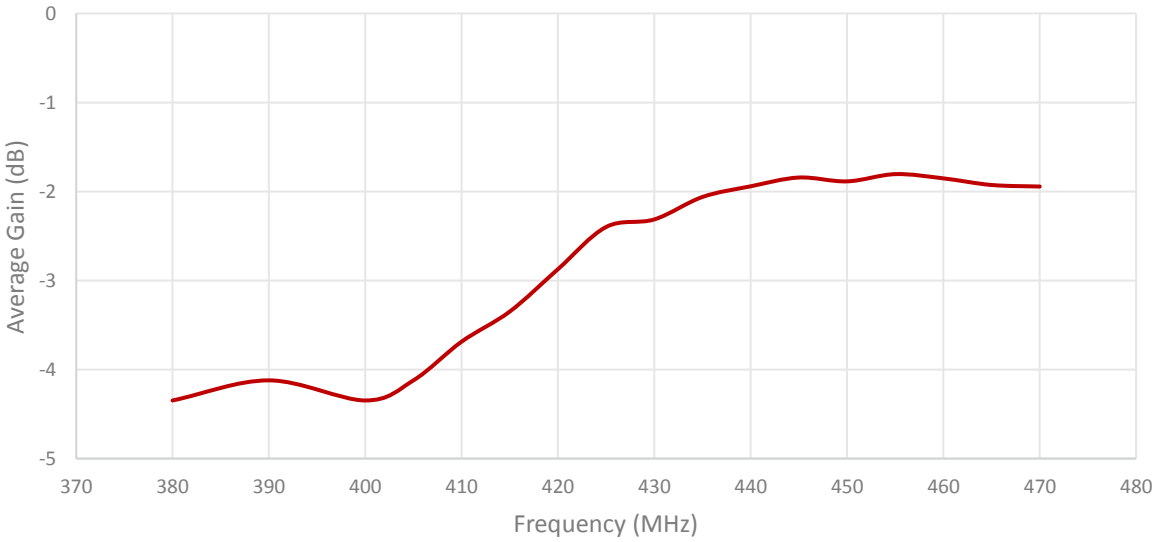
Cable 1: TETRA/UHF

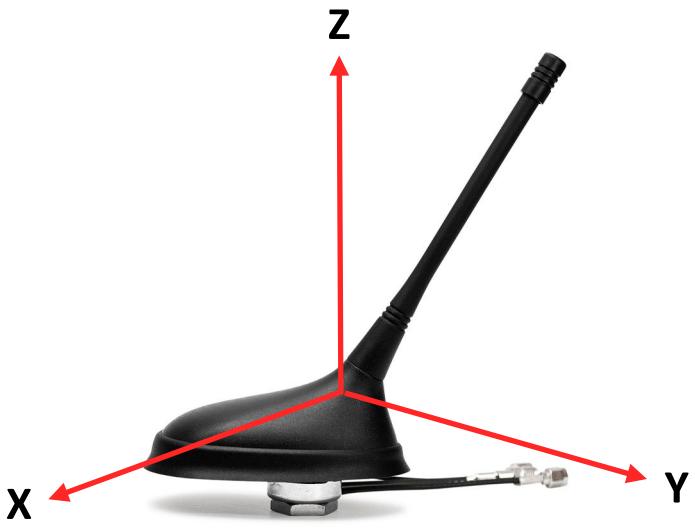





70
60
50
40
30
20
10
0
Efficiency (%)
370
380
390
400
410
420
430
440
450
460
470
480
Frequency (MHz)

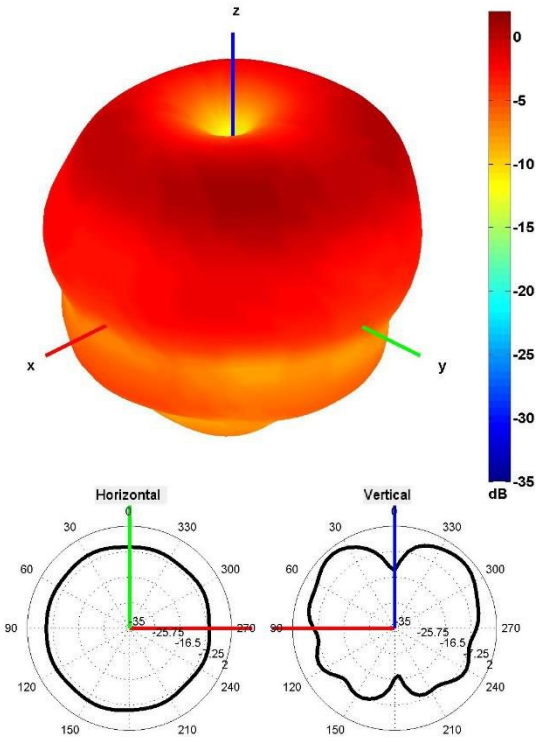

4
3
2
1
0
-1
Peak Gain (dBi)
370
380
390
400
410
420
430
440
450
460
470
480
Frequency (MHz)





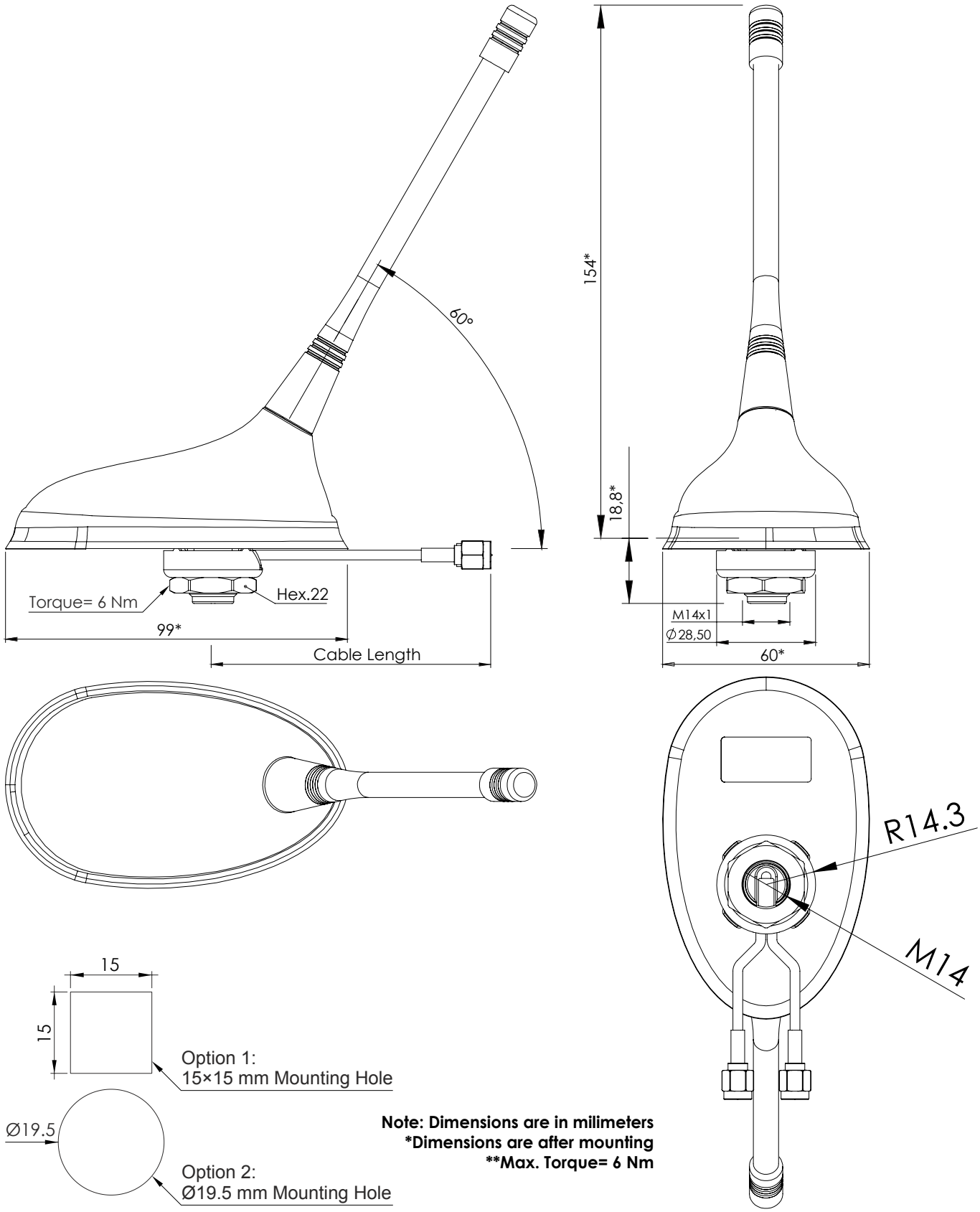
Radiation pattern reference

Cable 1: TETRA/UHF



430 MHz Radiation pattern

4. Antenna drawings



Note: Dimensions are in milimeters
***Dimensions are after mounting**
****Max. Torque= 6 Nm**

5. Antenna Images