

2J6939BGF

868/915 MHz ISM and GNSS Screw Mount

Key Features

Cable 1: 868/915 MHz ISM

- 863-870 MHz
- 902-928 MHz

Cable 2: GPS/GLONASS/QZSS/Galileo

- 1575-1606 MHz

Screw Mount

Anti-Rotation Mechanism

Low Profile

Pre-Filtered GNSS

Ground Plane Independent

Customizable Cable and Connector

Dimensions 80 × 74 × 25.6 mm

Certificates: IP67, IP69



1. Antenna and electrical specifications

Cable 1

Parameters	868/915 MHz ISM Antenna	
Standards	ZigBee, ISM, SigFox, LoRa	
Band (MHz)	868	915
Frequency (MHz)	863-870	902-928
Return Loss (dB)	~-10.5	~-12.1
VSWR	~1.9:1	~1.7:1
Efficiency (%)	~52.4	~54.8
Peak Gain (dBi)	~2.7	~2.4
Average Gain (dB)	~-2.8	~-2.6
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	D302 Standard (Other Cables Available)	

Cable 2

Parameters	GPS/GLONASS Antenna	
Standard	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1575	1602
Frequency(MHz)	1575.42	1598-1606
Patch Size (mm)	25 × 25 × 4	
Return Loss (dB)	<=-15.0 dB	
VSWR	<=1.4:1 dB	
Impedance	50	
Radiation Pattern	Hemispherical	
Polarization	RHCP	
Saw Filter	Pre-filter	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.5 Typ	
Voltage (V)	1.5 - 3.6	
Current (mA)	9 Typ	
Power Consumption (mW)	24.3 Typ	
ESD Protection (kV)	2kV	
Connector Type	SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	D100 Standard (Other Cables Available)	

Antenna Measurement Conditions:

Mounted on Metal Plate of 30 x 30 cm

200 cm of Cable D302

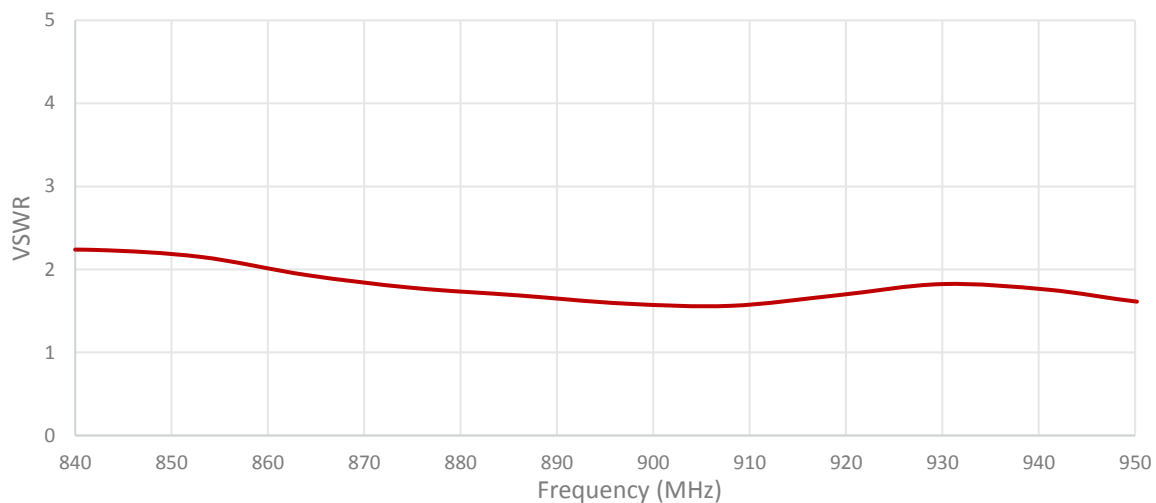
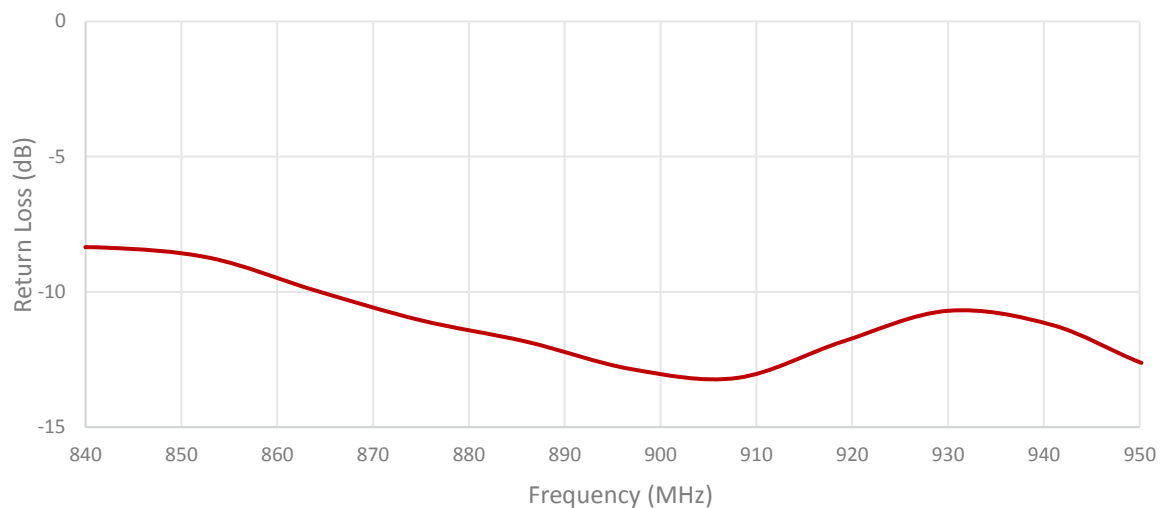
Measured in Certified CTIA 3D Anechoic Chamber

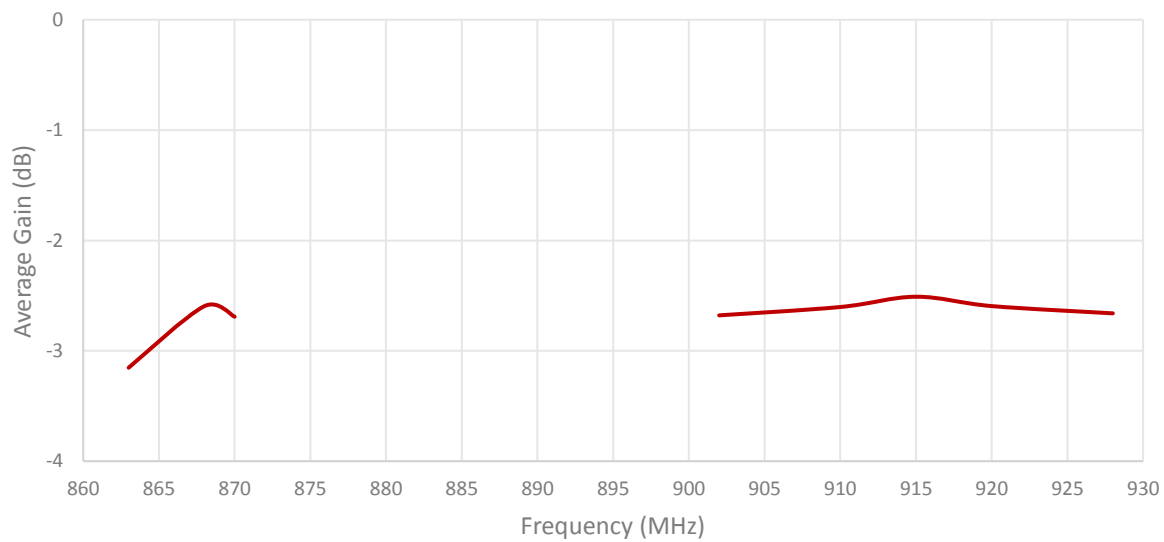
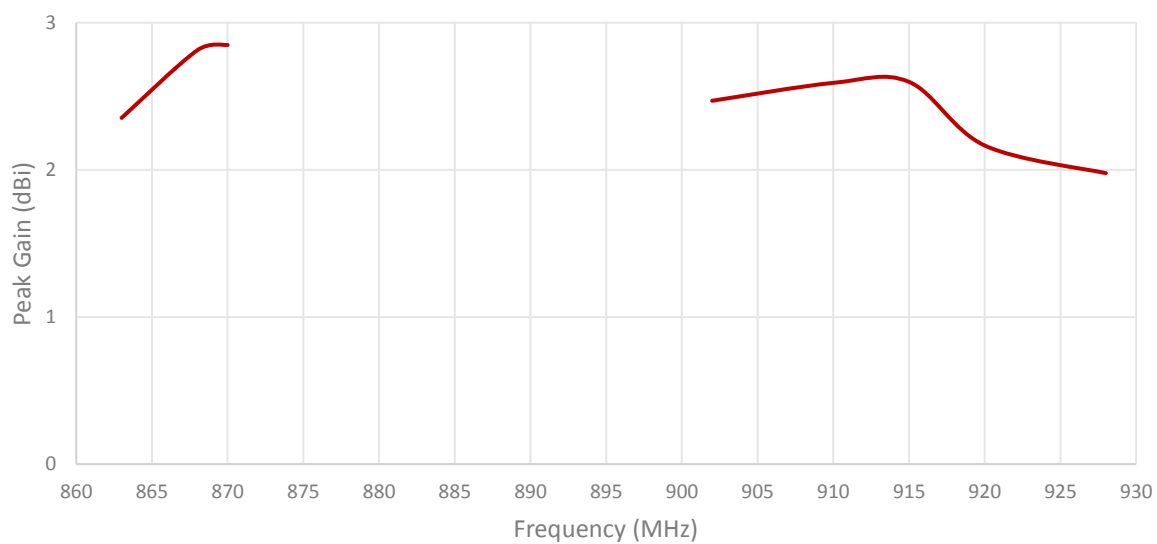
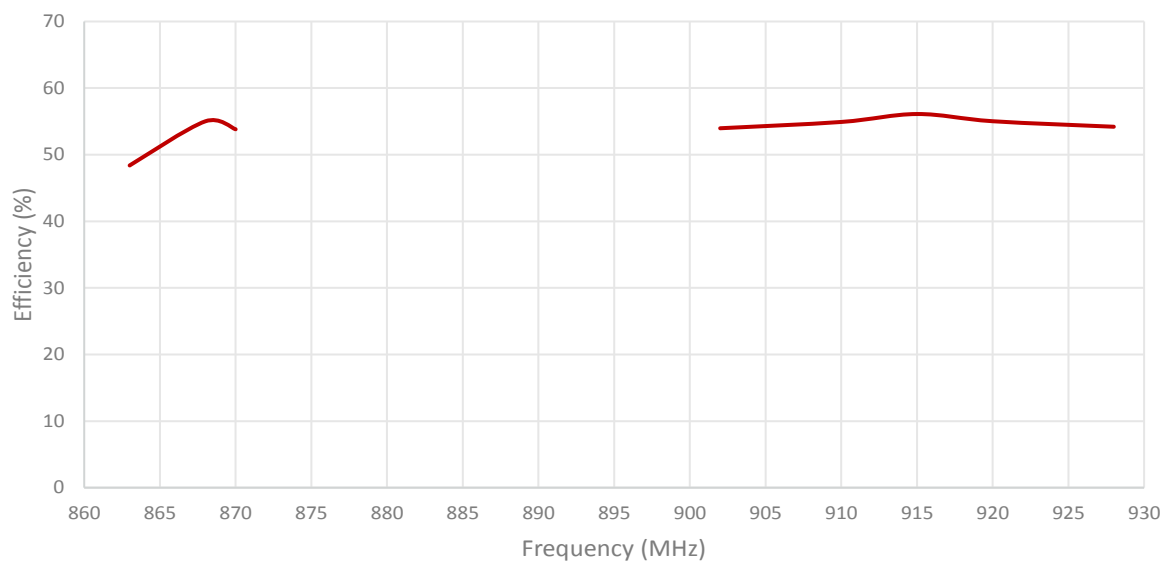
2. Mechanical and environmental specifications

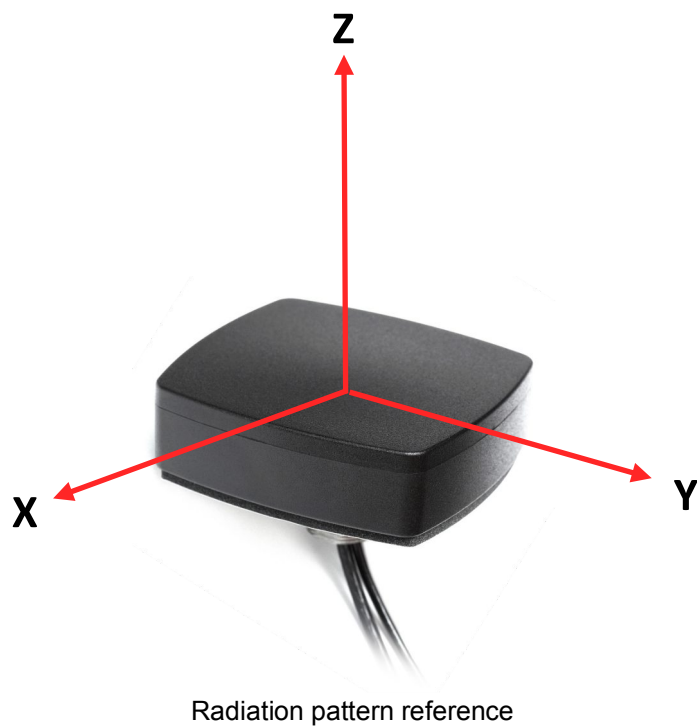
Specifications	2J6939BGF
Mounting Type	Screw Mount
Dimensions (mm)	80 × 74 × 25.6
Max. Tighten Torque (Nm)	5 Nm
Radome Type	ASA
Radome Color	Black, White
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IP69

3. Antenna parameters

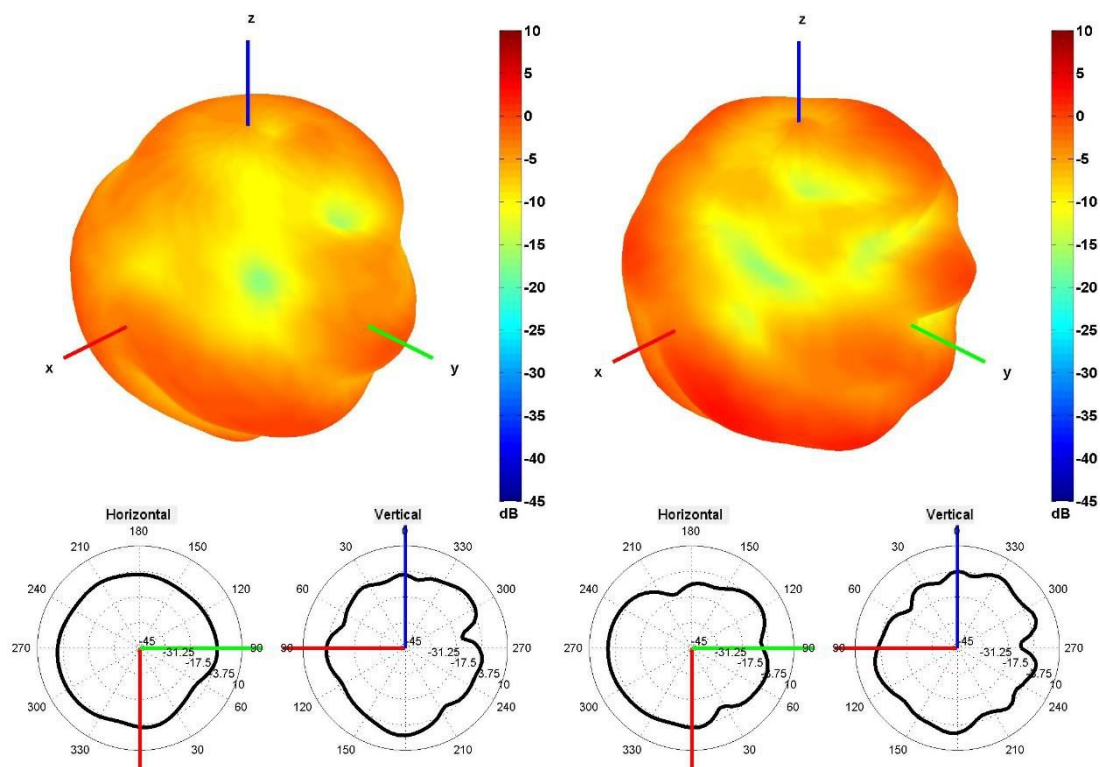
Cable 1: 868/915 MHz ISM





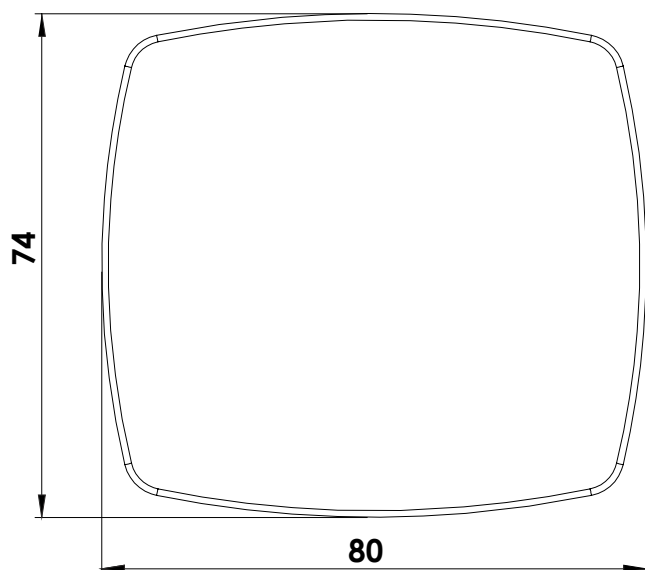
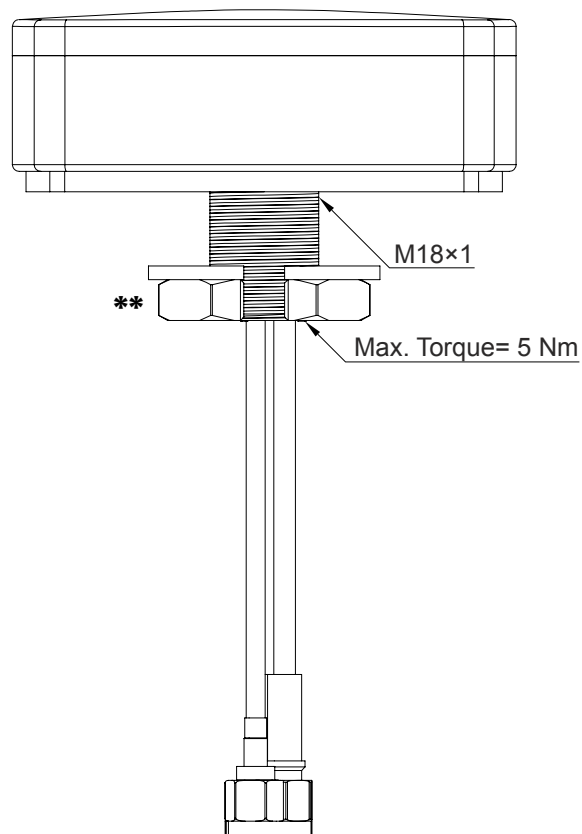
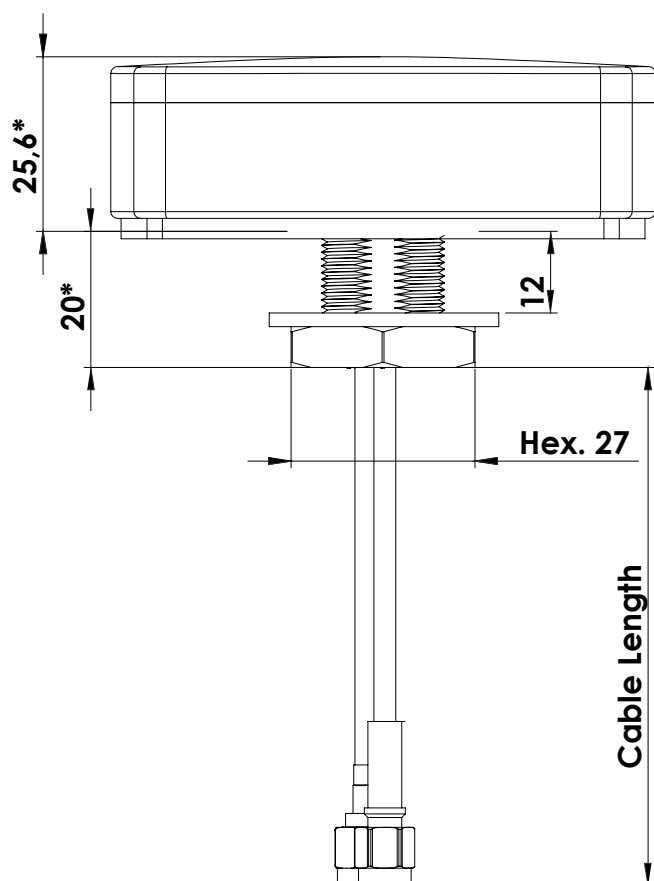


Cable 1: 868/915 MHz ISM

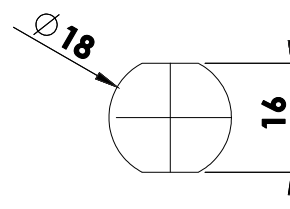


868 and 915 MHz Radiation pattern

4. Antenna drawings



Mounting hole



Max. mounting thickness 12mm
Note: Dimensions are in millimeters
*Dimensions are after mounting
**Max. Torque= 5 Nm

5. Antenna Images

