

2J4700BGF-TH19

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

Low Profile

Ground Plane Independent

Customizable Cable and Connector

Dimensions $\varnothing 52 \times 17.5$ mm

Certificates: IP69K



Note: 19mm Thread is Default Option. See Drawing for other Thread Options available.



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) | ~-10.4 | ~-12.5 |
| VSWR | ~1.9:1 | ~1.7:1 |
| Efficiency (%) | ~20.6 | ~20.5 |
| Peak Gain (dBi) | ~-0.3 | ~-2.0 |
| Average Gain (dB) | ~-7.1 | ~-7.0 |
| Impedance (Ohm) | 50 | |
| Polarisation | Linear | |
| Radiation Pattern | Omni-Directional | |
| Max. Input Power (W) | 100 | |
| 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 | 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 | |
| Return Loss (dB) | <=-15.0 dB | |
| VSWR | <=1.4:1 dB | |
| Impedance (Ohms) | 50 | |
| Radiation Pattern | Hemispherical | |
| Polarization | RHCP | |
| Active Gain (dB) | 28dB @ 2.7V | |
| Noise Figure (dB) | 1.8 @ 2.7V | |
| Voltage Range (V) | 1.5 - 3.6 | |
| Current Consumption (mA) | 9 @ 2.7V | |
| Saw Filter Type | Pre-Filter | |
| Out of Band Rejection (dB) | ~43 | |
| ESD Protection (kV) | 6 | |
| 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 Ground Plane of 30x30 cm

200 cm of RG174 Cable

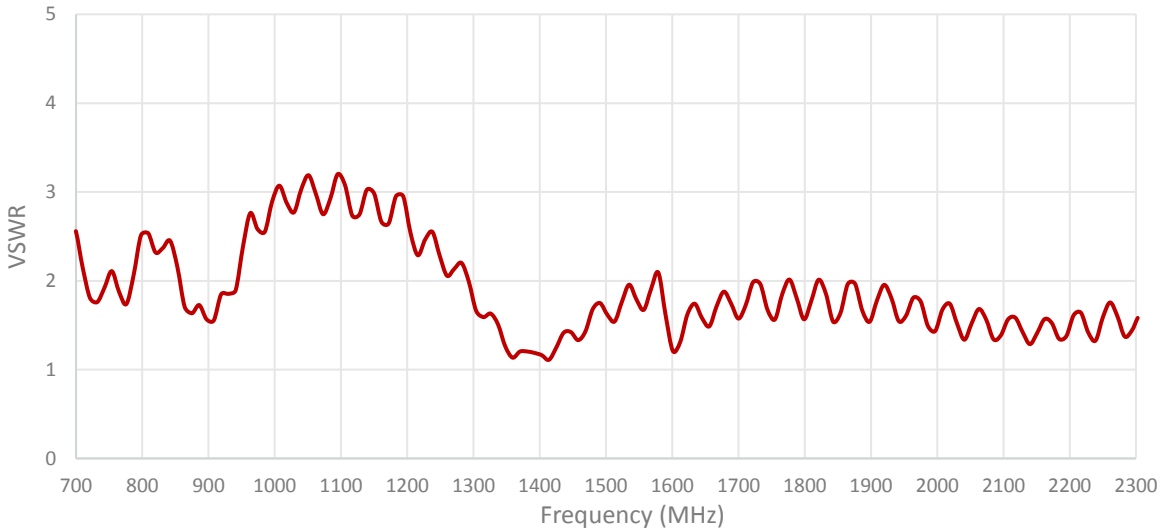
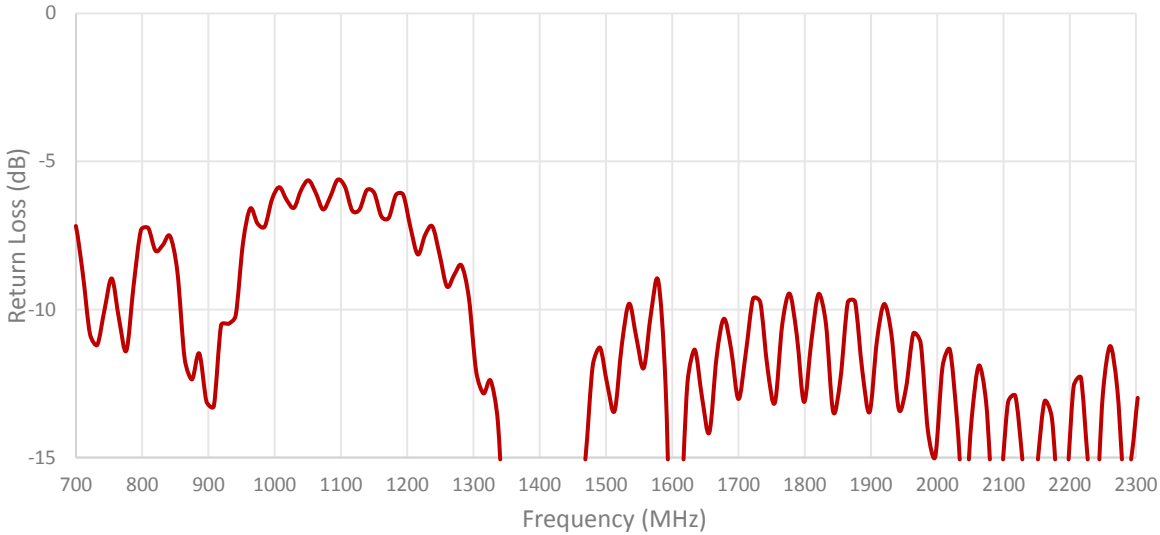
Measured in Certified CTIA 3D Anechoic Chamber

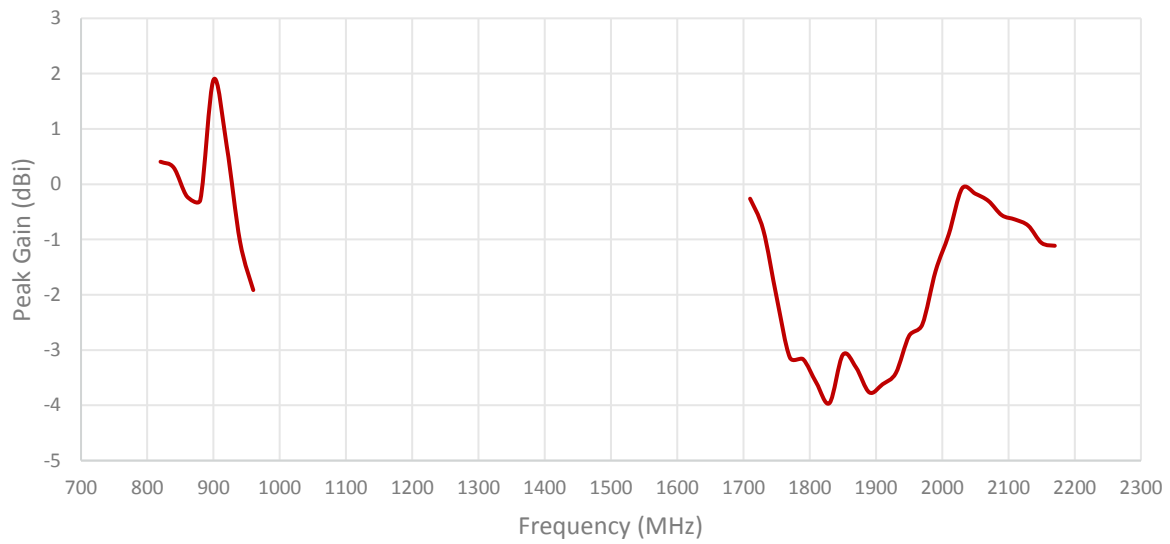
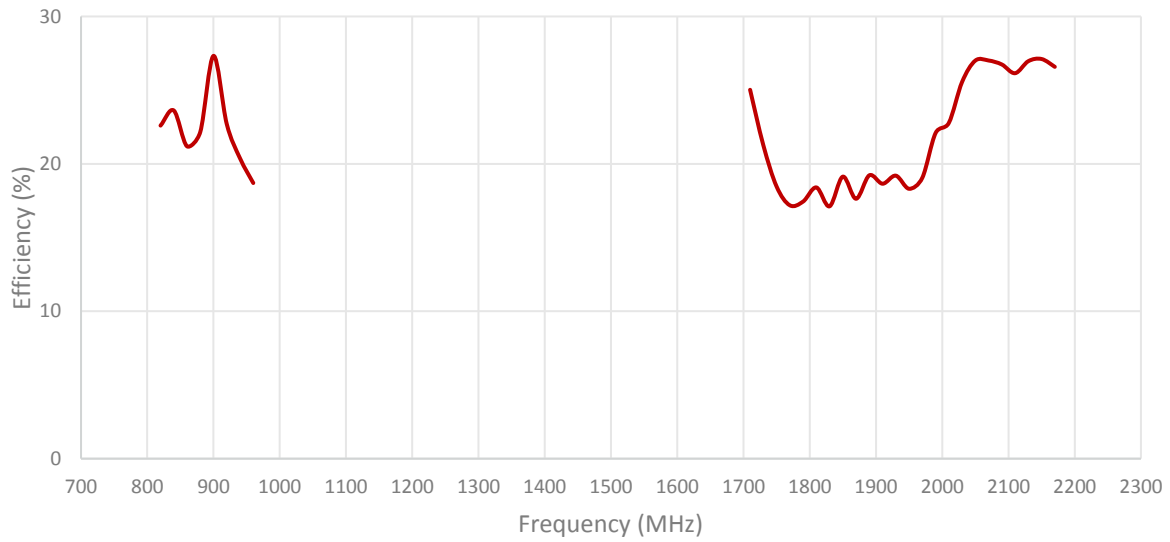
2. Mechanical and environmental specifications

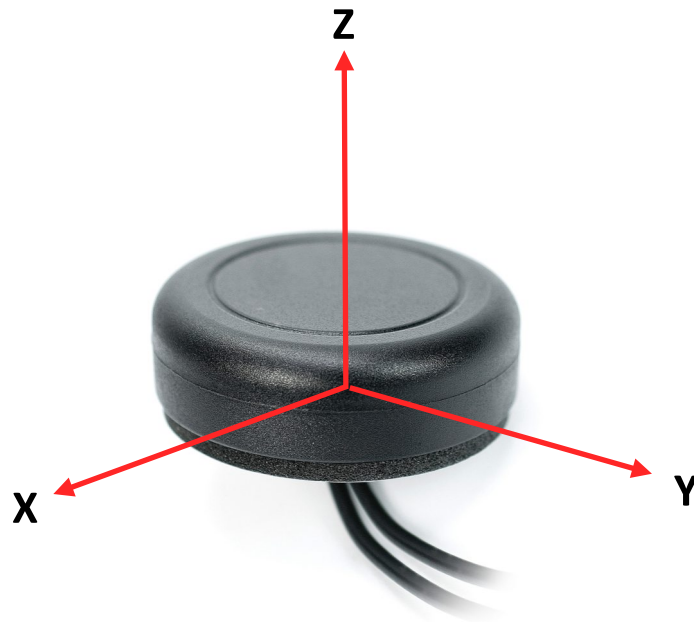
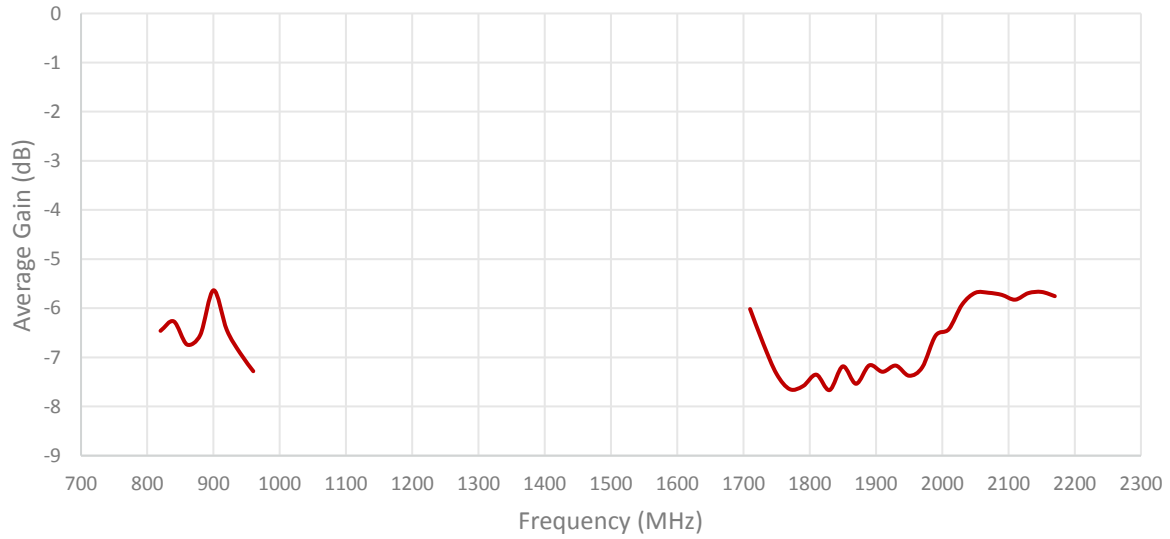
| Specifications | 2J4700BGF-TH19 |
|----------------------------------|----------------|
| Mounting Type | Screw Mount |
| Dimensions (mm) | Ø 52 × 17.5 |
| Max. Tighten Torque (Nm) | 4 Nm |
| Radome Type | ABS |
| Radome Color | Black |
| Antenna Base | ABS |
| Operating Temperature (C) | -40 to +85 |
| Storage Temperature (C) | -40 to +85 |
| Certificates | IP69K |
| Substance Compliance | RoHS |

3. Antenna parameters

Table 1: Cellular

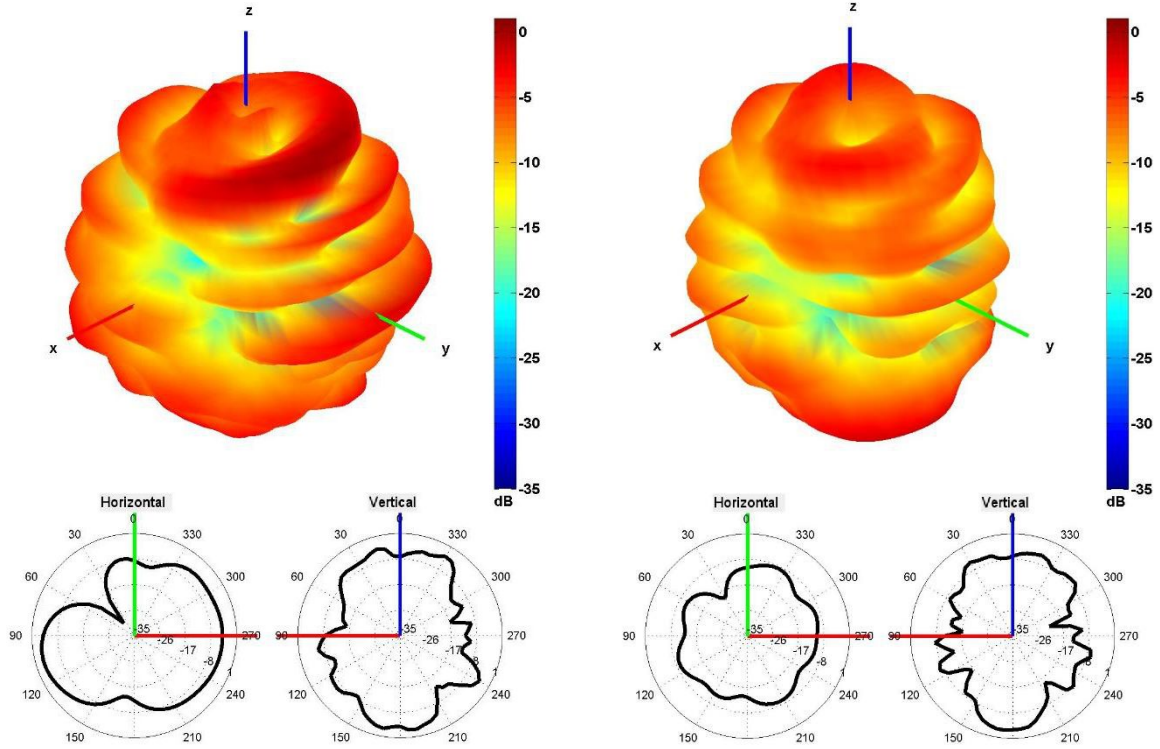




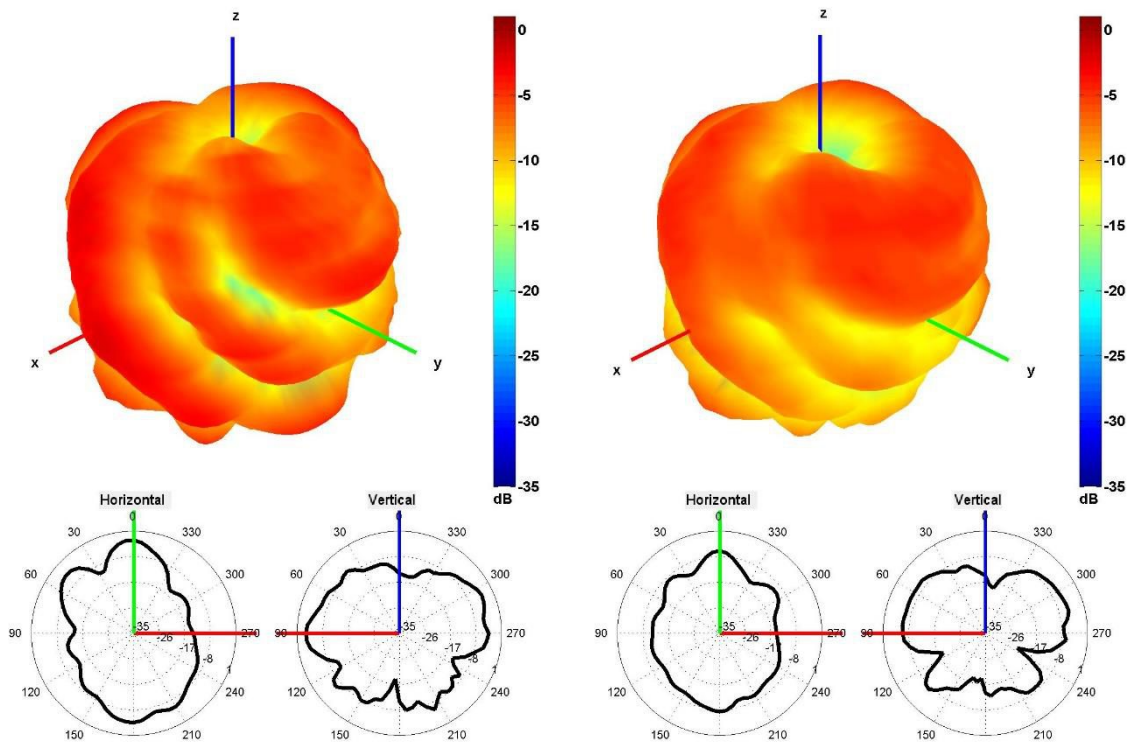


Radiation pattern reference

Cable 1: Cellular

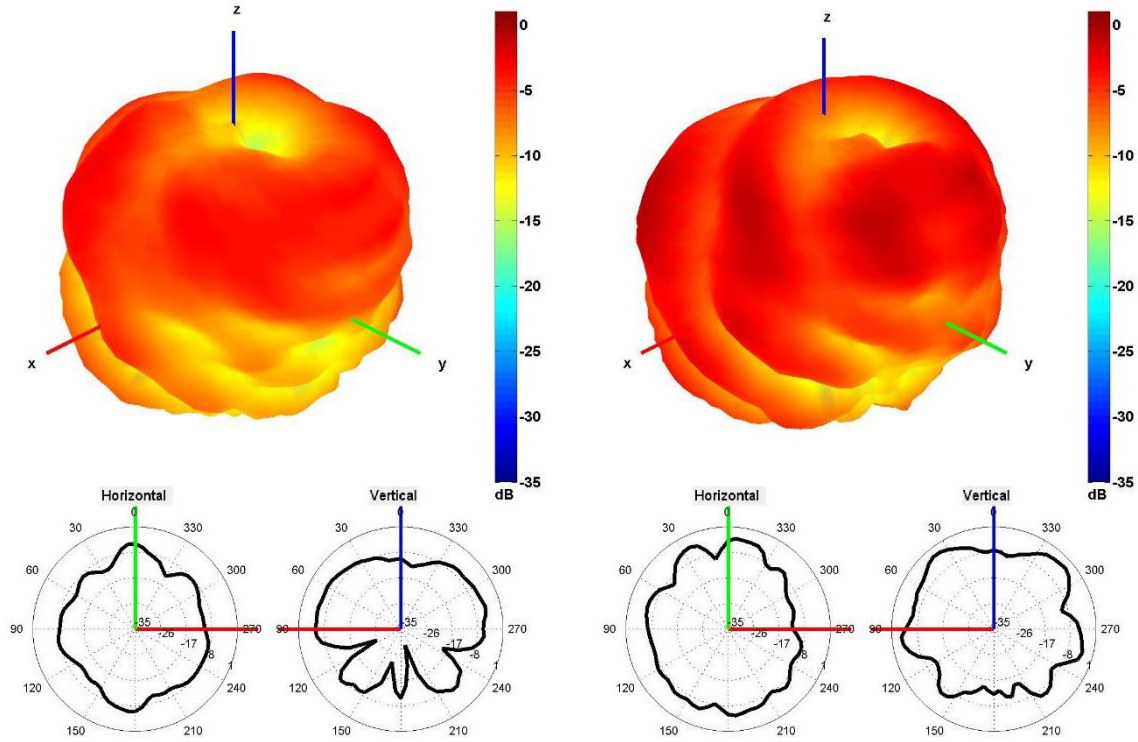


850 and 940 MHz Radiation pattern



1750 and 1850 MHz Radiation pattern

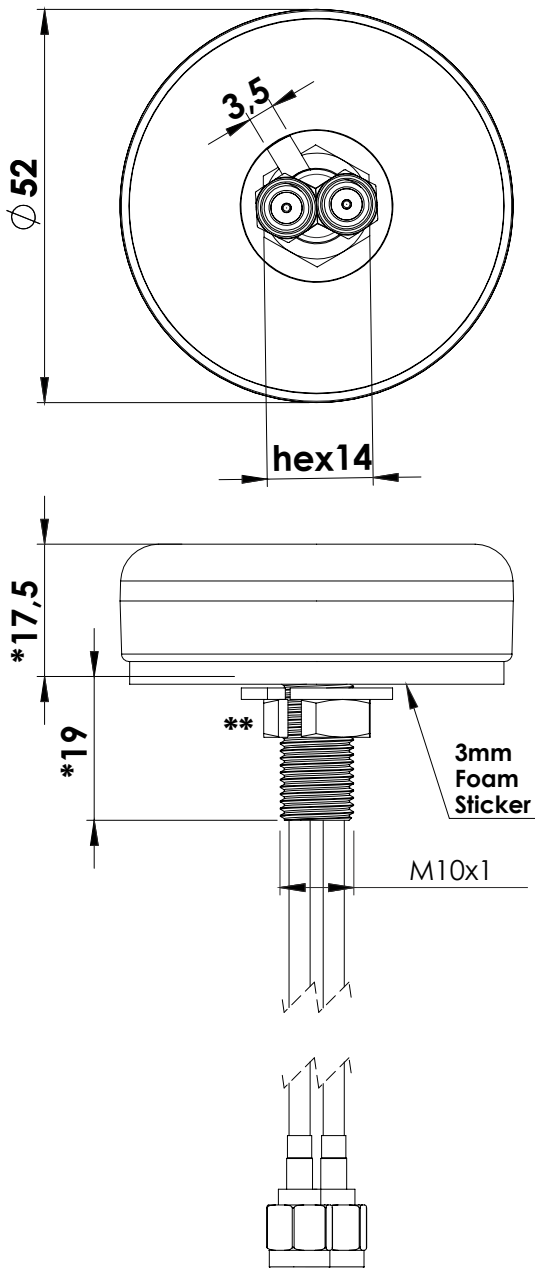
Table 1: Cellular



1950 and 2100 MHz Radiation pattern

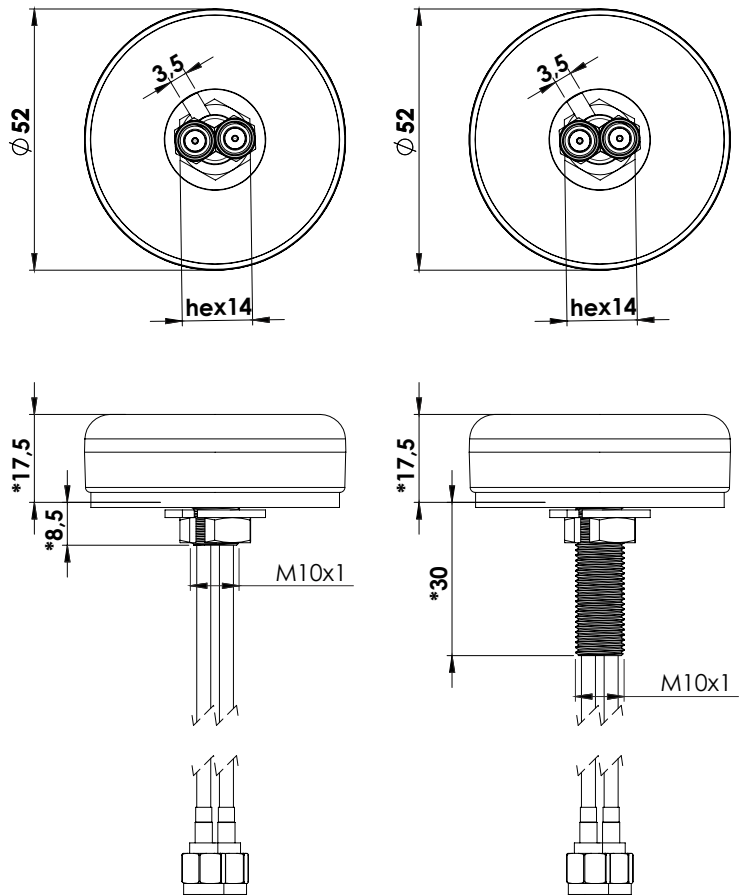
4. Antenna drawings

Default Thread Option



2J4700BGF-TH19
19 mm Thread
Default Option

Other Thread Options available



2J4700BGF-TH8,5
8,5 mm Thread

2J4700BGF-TH30
30 mm Thread

***Dimensions after mounting**
****Max. Torque= 4 Nm**

5. Antenna Images





Макро Групп – это:

- дистрибьютор электронных компонентов с 1994 года
- контрактный производитель электроники с 2007 года с собственным производством в Санкт-Петербурге (компания Макро EMC, входит в ГК Макро Групп)
- поставщик полупроводниковых материалов
- комплексный поставщик электронных компонентов
- моделирование и производство полупроводниковых эпитаксиальных гетероструктур для задач оптоэлектроники

Головной офис расположен в Санкт-Петербурге. Собственные представительства в крупных промышленных городах России и стран СНГ.

Преимущества для наших заказчиков:

- работа по тендерам с 2012 года
- оформление банковских гарантий
- отсрочки платежей
- поставка электронных компонентов по проектным ценам
- инженерная поддержка проектов заказчиков
- сертификат системы менеджмента качества ISO 9001-2015
- необходимые сертификаты и лицензии

Данный файл получен с сайта www.macrogroup.ru