

## 2J7584MG

### 5GNR and GPS/GLONASS Magnetic Mount

#### Key Features

##### Cable 1: 5GNR

- 617-960 MHz
- 1427-2690 MHz
- 3300-5000 MHz
- 5150-5925 MHz

##### Cable 2: GPS/GLONASS

- 1575-1610 MHz

Magnetic Mount

High Performance

Ground Plane Dependent

Customizable Cable and Connector

Dimensions Ø 54 x 80 mm

Certificates IP67, IP69



## 1. Antenna and electrical specifications

**Cable 1**

| Parameters           | 5GNR Antenna                                                                                        |                                                                                                                                                                                 |                                 |                      |
|----------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------|
| Technologies         | 5G, 4G, 3G and 2G                                                                                   |                                                                                                                                                                                 |                                 |                      |
| Standards            | 5GNR/4GLTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G                                     |                                                                                                                                                                                 |                                 |                      |
| Frequency (MHz)      | 617-960                                                                                             | 1427-2690                                                                                                                                                                       | 3300-5000                       | 5150-5925            |
| Band (MHz)           | 600, 700, 850, 900                                                                                  | 1500, 1600, 1700, 1800,<br>1900, 2000, 2100, 2300,<br>2500, 2600                                                                                                                | 3300, 3500, 3600,<br>3700, 4500 | 5200, 5500, 5800     |
| 5GNR Bands           | n5, n8 ,12, n20, n28, n71,<br>n81, n82, n83,                                                        | n1, n2, n3, n7, n25, n34,<br>n38, n39, n40, n41, n50,<br>n51, n66, n70, n74, n75,<br>n76, n80, n84, n86                                                                         | n77, n78, n79                   |                      |
| 4GLTE Bands          | B5, B6, B8, B12, B13, B14,<br>B17, B18, B19, B20, B26,<br>B27, B28, B29, B44, B67,<br>B68, B71, B85 | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B23, B24,<br>B25, B30, B32, B33, B34,<br>B35, B36, B37, B38, B39,<br>B40, B41, B45, B50, B51,<br>B65, B66, B69, B70, B74,<br>B75, B76 | B22, B42, B43, B48,<br>B49, B52 | B46, B47, B252, B255 |
| 3GCELL Bands         | B5, B6, B8, B12, B13, B14,<br>B19, B20, B26                                                         | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B25, B32,<br>B33, B34, B35, B36, B37,<br>B38, B39, B40                                                                                | B22                             |                      |
| 2GCELL Bands         | 710, 750, 810T, 850, 900P,<br>900E, 900R                                                            | 1800DCS, 1900PCS                                                                                                                                                                |                                 |                      |
| CDMACELL Bands       | BC0, BC2, BC3, BC7, BC9,<br>BC10, BC12, BC18, BC19                                                  | BC1, BC4, BC6, BC8,<br>BC13, BC14, BC15, BC16,<br>BC20, BC21                                                                                                                    |                                 |                      |
| Return Loss (dB)     | ~-8.9                                                                                               | ~-15.1                                                                                                                                                                          | ~-11.7                          | ~-5.1                |
| VSWR                 | ~3.1:1                                                                                              | ~1.9:1                                                                                                                                                                          | ~1.9:1                          | ~3.6:1               |
| Efficiency (%)       | ~50.7                                                                                               | ~60.1                                                                                                                                                                           | ~31.7                           | ~21.1                |
| Peak Gain (dBi)      | ~0.3                                                                                                | ~3.4                                                                                                                                                                            | ~1.5                            | ~0.1                 |
| Average Gain (dB)    | ~-3.4                                                                                               | ~-2.4                                                                                                                                                                           | ~-5.1                           | ~-6.8                |
| Impedance (Ohm)      | 50                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Polarisation         | Linear                                                                                              |                                                                                                                                                                                 |                                 |                      |
| Radiation Pattern    | Omni-Directional                                                                                    |                                                                                                                                                                                 |                                 |                      |
| Max. Input Power (W) | 35                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Connector Type       | SMA-Male Standard (Other Connectors Available)                                                      |                                                                                                                                                                                 |                                 |                      |
| Cable Length         | 300 cm Standard (Any Cable Length Available)                                                        |                                                                                                                                                                                 |                                 |                      |
| Cable Type           | LL100 Standard (Other Cables Available)                                                             |                                                                                                                                                                                 |                                 |                      |

### Antenna Measurement Conditions:

Mounted on 30 x 30 Metal Plate

100 cm of Cable LL100

Measured in Certified CTIA 3D Anechoic Chamber

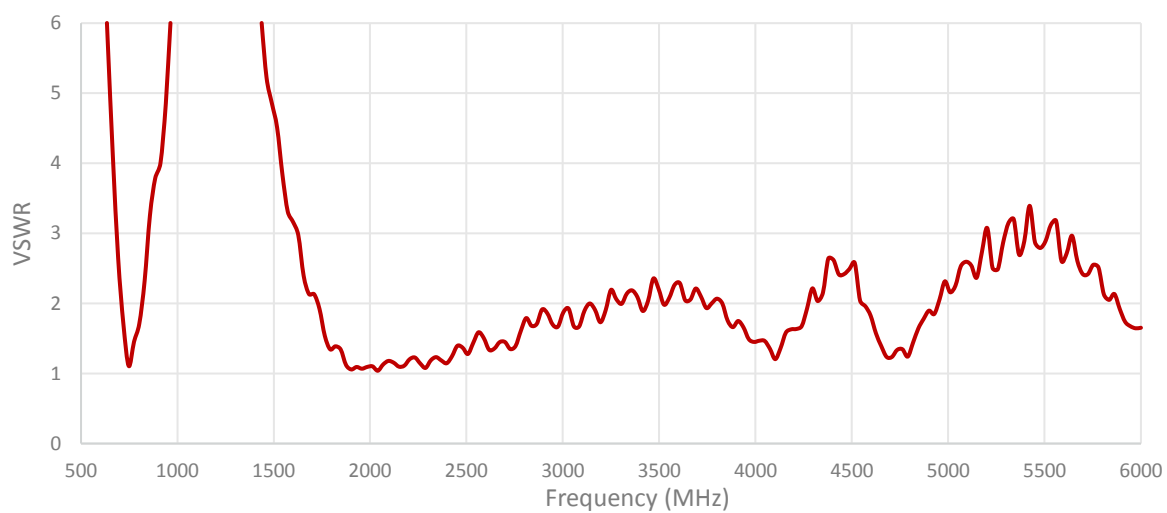
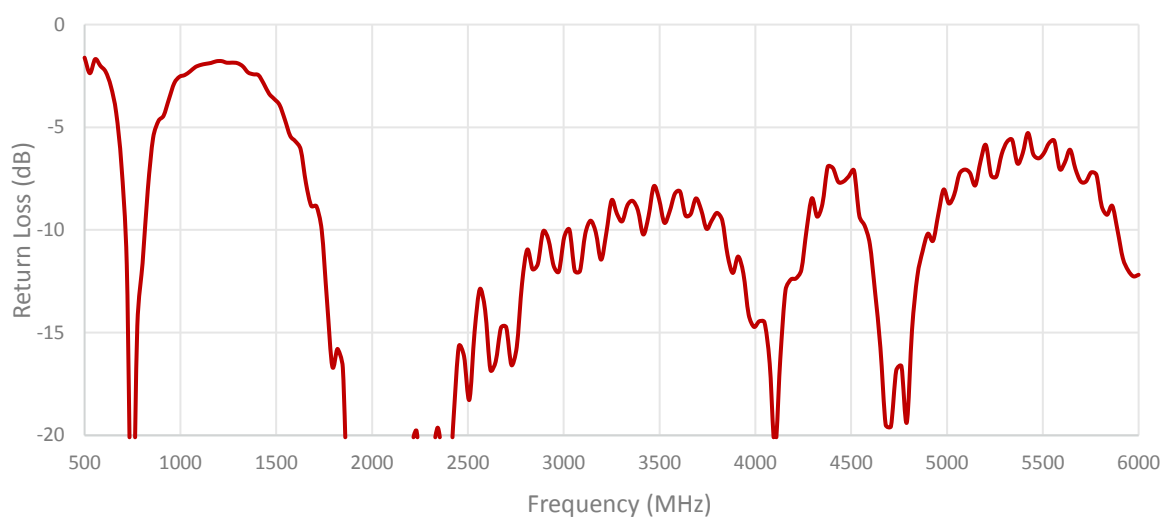
Cable 2

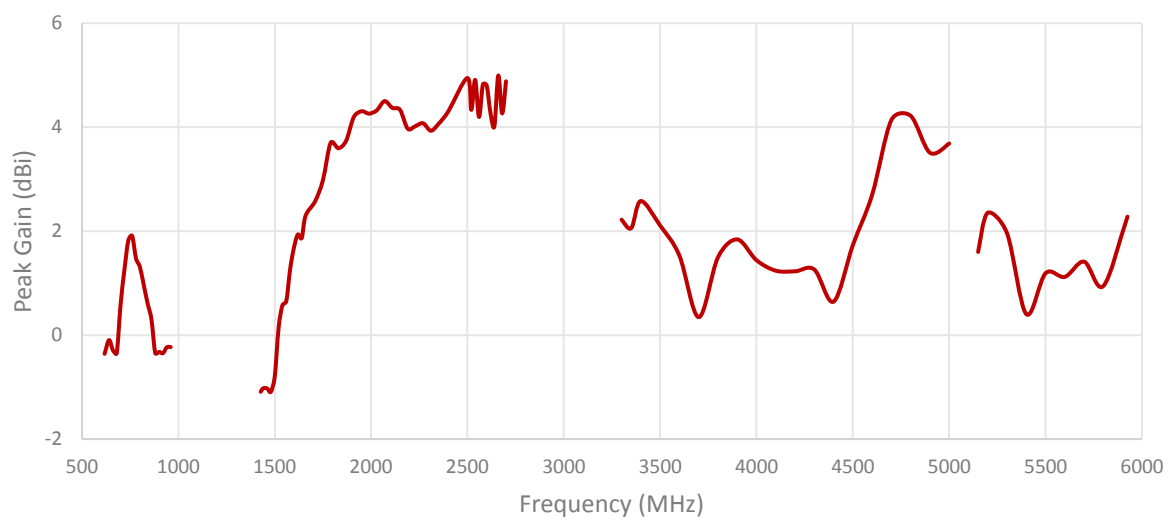
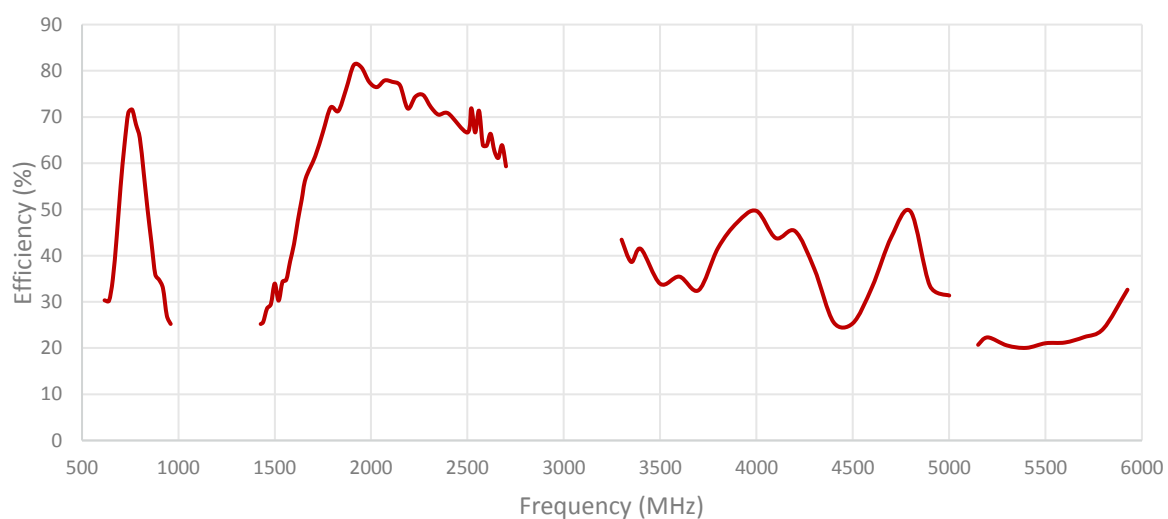
| Parameters             | GPS/GLONASS Antenna                     |           |
|------------------------|-----------------------------------------|-----------|
| Standard               | GPS / GLONASS                           |           |
| Band (MHz)             | 1575                                    | 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) |           |

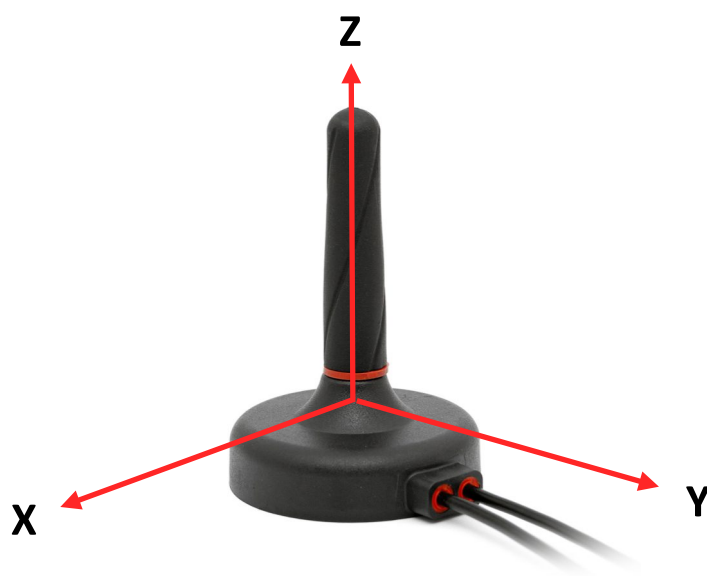
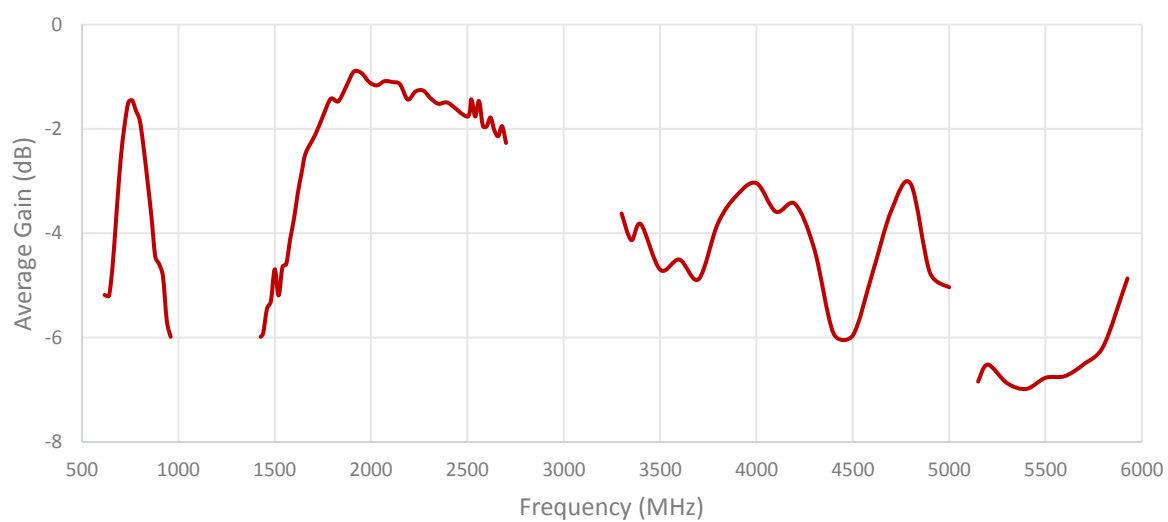
## 2. Mechanical and environmental specifications

| Specifications            | 2J7584MG       |
|---------------------------|----------------|
| Mounting Type             | Magnetic Mount |
| Dimensions (mm)           | Ø 54 × 80      |
| 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     |

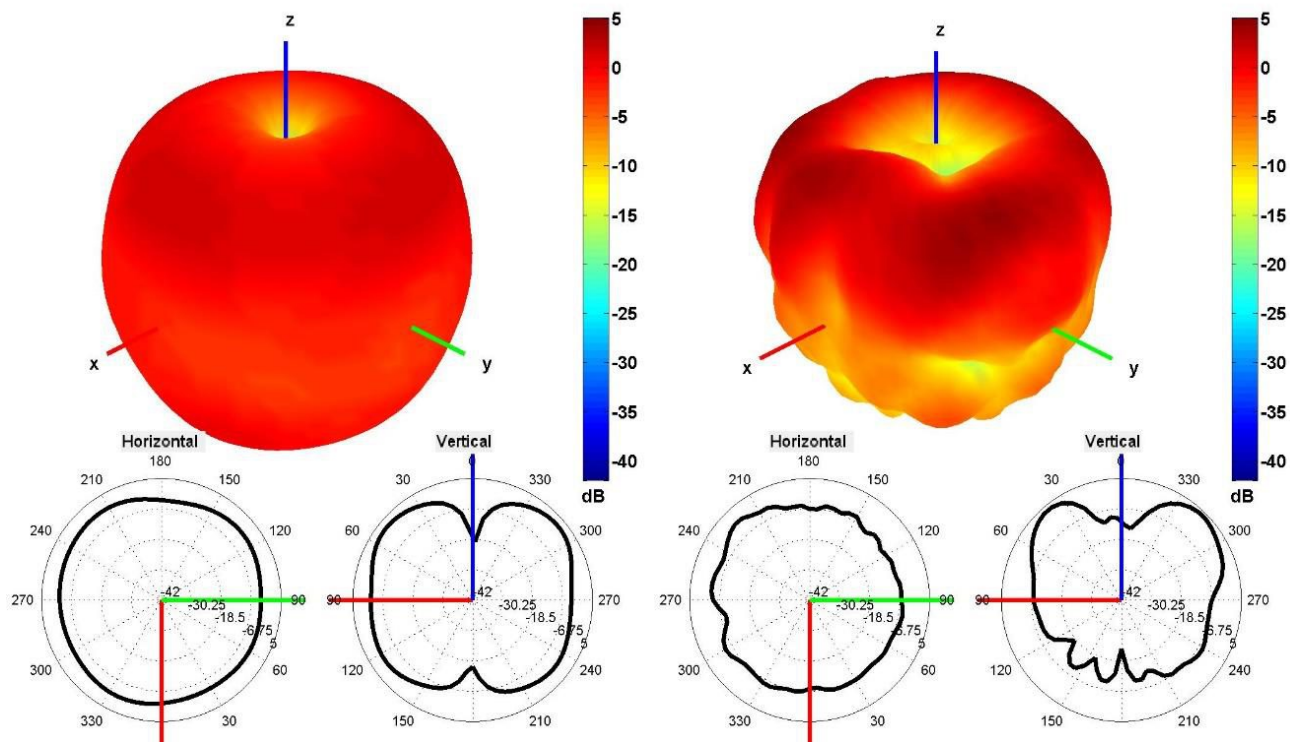
### 3. Antenna parameters



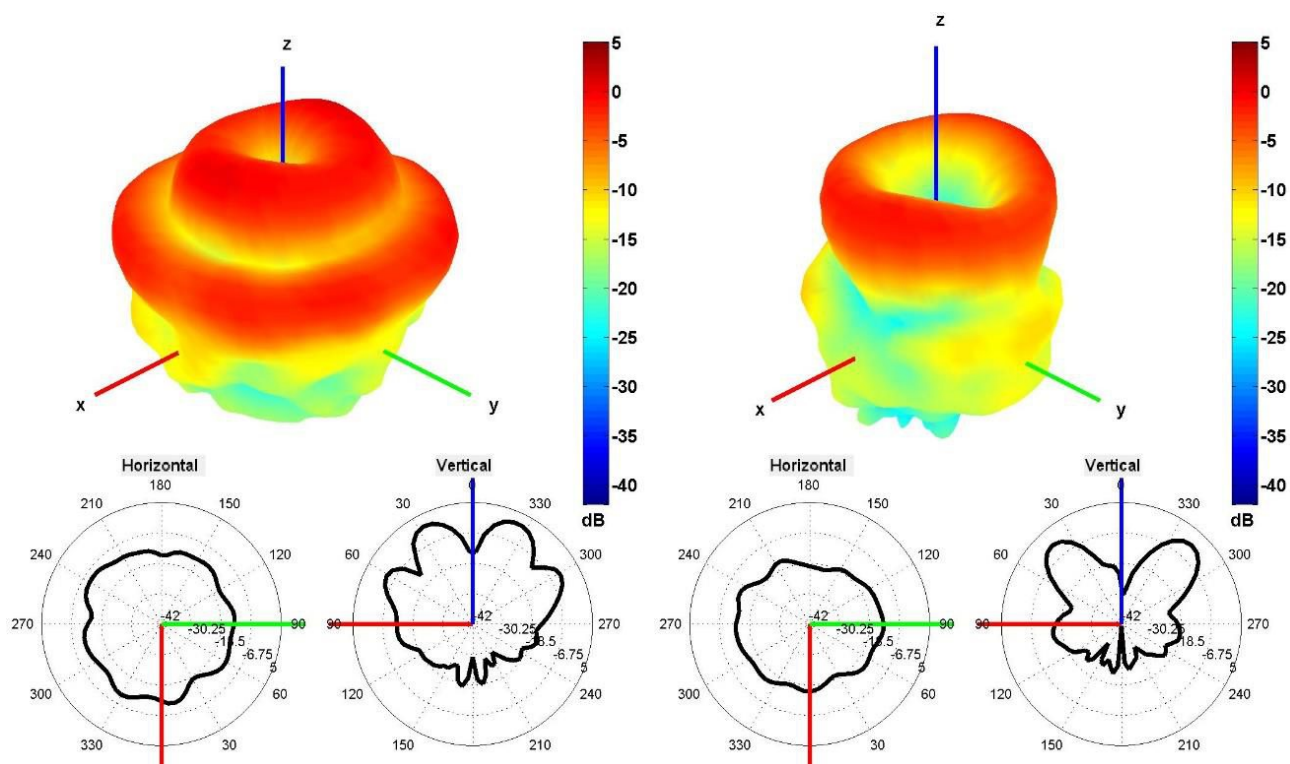




Radiation pattern reference

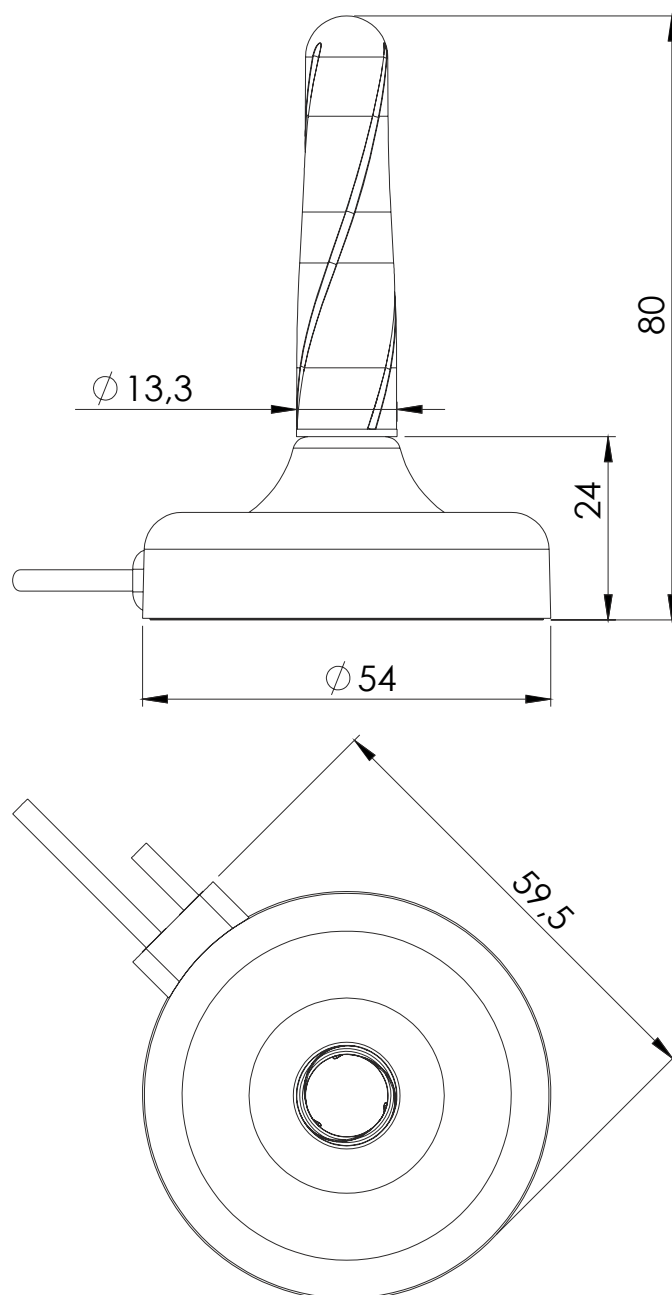


740 and 2500 MHz Radiation pattern



4500 and 5500 MHz Radiation pattern

## 4. Antenna drawings





## 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 ЕМС, 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

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