

# QuMax for Option CloudGate

**INTEGRATED MULTI-BAND 5G DIRECTIONAL ANTENNA + WI-FI 6E OMNI ANTENNA + LORA ANTENNA + GPS ANTENNA + POE SPLITTER + PLACE TO INSTALL OPTION CLOUDGATE (ALL-IN-ONE)**

QuMax antenna for Option CloudGate router is a perfect outdoor device for improving the signal in rural/suburban and locations where the mobile signal is weak. It has embedded directional 5G, omni Wi-Fi 6E, LoRa and GPS antenna. If you use CloudGate with QuMax antenna, you get an integrated complete solution with embedded router and multi band antennas in one enclosure.

Wi-Fi 6E support!

The set contains a [Passive PoE splitter](#), allowing you to split data and power from a single Ethernet cable and maintain gigabit transfer speeds while protecting the LAN port from damage caused by overvoltage, short circuit or improper connection.



OUTDOOR ANTENNA WORKS IN ANY WEATHER CONDITIONS, IP68



MOUNTING SYSTEM WITH TWO PLANES, 60 DEGREES REGULATION



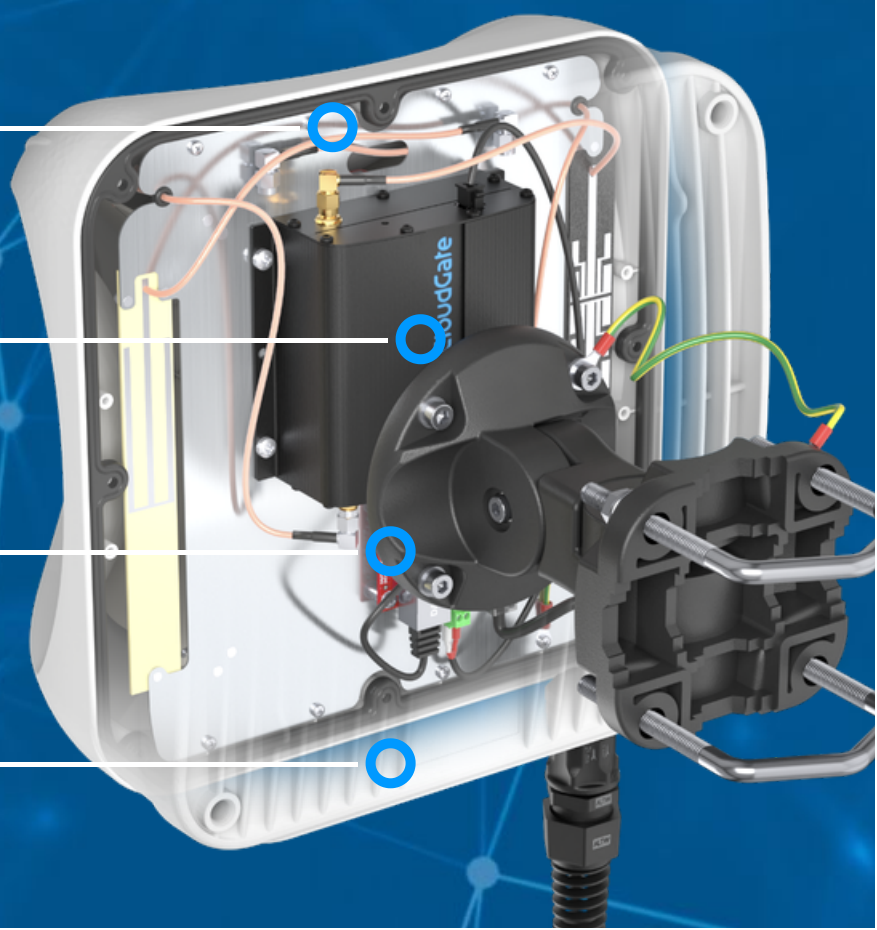
WIDE BAND 600-6000MHZ, 5G TECHNOLOGY



ANTENNA PERFECTLY MATCHED WITH THE OPTION CLOUDGATE



ALL ANTENNAS AND OPTION ROUTER INTEGRATED IN ONE ENCLOSURE



## 5G / LTE ANTENNA SPECIFICATION

|                     |  |
|---------------------|--|
| FREQUENCY           | 617 - 960 MHz<br>1.7 - 2.7 GHz<br>3.3 - 4.6 GHz<br>4.7 - 6.0 GHz   |
| GAIN                | 617 - 960 MHz : 6 dBi<br>1.7 - 2.7 GHz : 7 dBi<br>3.3 - 4.6 GHz : 7 dBi<br>4.7 - 6.0 GHz : 5.5dBi  |
| SUPPORTED LTE BANDS | 1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13, 14, 17, 18, 19, 20, 22, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49, 52, 53, 65, 66, 67, 68, 69, 71, 85, 103, 106                                       |
| SUPPORTED 5G BANDS  | n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n34, n38, n39, n40, n41, n46, n47, n48, n53, n65, n66, n67, n71, n77, n78, n79, n80, n81, n82, n83, n84, n85, n86, n89, n90, n95, n97, n98, n100, n101, n256 |
| VSWR                | <2.00, max <3.00   |
| BEAMWIDTH           | 80°/80° ±15°   |
| POLARIZATION        | X (±45degrees)   |
| IMPEDANCE           | 50 $\Omega$  |

## WI-FI ANTENNA SPECIFICATION

|              |   |
|--------------|---|
| FREQUENCY    | 2.4 - 2.5 GHz<br>5.0 - 7.2 GHz                        |
| GAIN         | 2.4 - 2.5 GHz: 6dBi<br>5 GHz: 7.5dBi<br>7 GHz: 7.5dBi |
| VSWR         | < 1.50, max < 2.00                                    |
| BEAMWIDTH    | 360°/25°  |
| POLARIZATION | Vertical  |
| IMPEDANCE    | 50 $\Omega$   |

## LORA SPECIFICATION

|               |   |
|---------------|---|
| FREQUENCY     | 840-940 MHz (EU868, IN865, RU864, US915, AU915, AS923, KR920) |
| GAIN          | 3 dBi   |
| VSWR          | <1.20, max <2.00  |
| BEAMWIDTH     | 360°/70° $\pm 10^\circ$                                       |
| POLARIZATION  | Vertical  |
| IMPEDANCE     | 50 $\Omega$   |
| FRONT TO BACK | >17 dB  |

## MECHANICAL SPECIFICATION

|  |   |
|--|---|
| MATERIALS                                  | ABS, aluminum, PTFE, fiberglass                   |
| CONNECTOR TYPE                             | RJ45  |
| INGRESS PROTECTION                         | IP68  |
| DIMENSIONS                                 | 26.9 x 26.95 x 19.0 cm<br>10.6 x 10.6 x 7.48 inch |
| WEIGHT                                     | 2.8 kg<br>6.17 lbs                                |
| OPERATING TEMPERATURE                      | From -40°C to 80°C<br>From -40°F to 176°F         |
| ENCLOSURE RECOMMENDED<br>TIGHTENING TORQUE | 0.6 - 0.8 Nm                                      |
| MAST DIAMETER                              | 25-66mm<br>0.98-2.60 inch                         |



# **FREQUENCY BANDS**

**LTE / 4G**

617  
MHz

|     |    |    |    |    |    |     |
|-----|----|----|----|----|----|-----|
| 1   | 2  | 3  | 4  | 5  | 7  | 8   |
| 9   | 10 | 12 | 13 | 14 | 17 | 18  |
| 19  | 20 | 22 | 25 | 26 | 27 | 28  |
| 29  | 30 | 33 | 34 | 35 | 36 | 37  |
| 38  | 39 | 40 | 41 | 42 | 43 | 44  |
| 46  | 47 | 48 | 49 | 52 | 53 | 65  |
| 66  | 67 | 68 | 69 | 71 | 85 | 103 |
| 106 |    |    |    |    |    |     |

6000  
MHz

**5G**

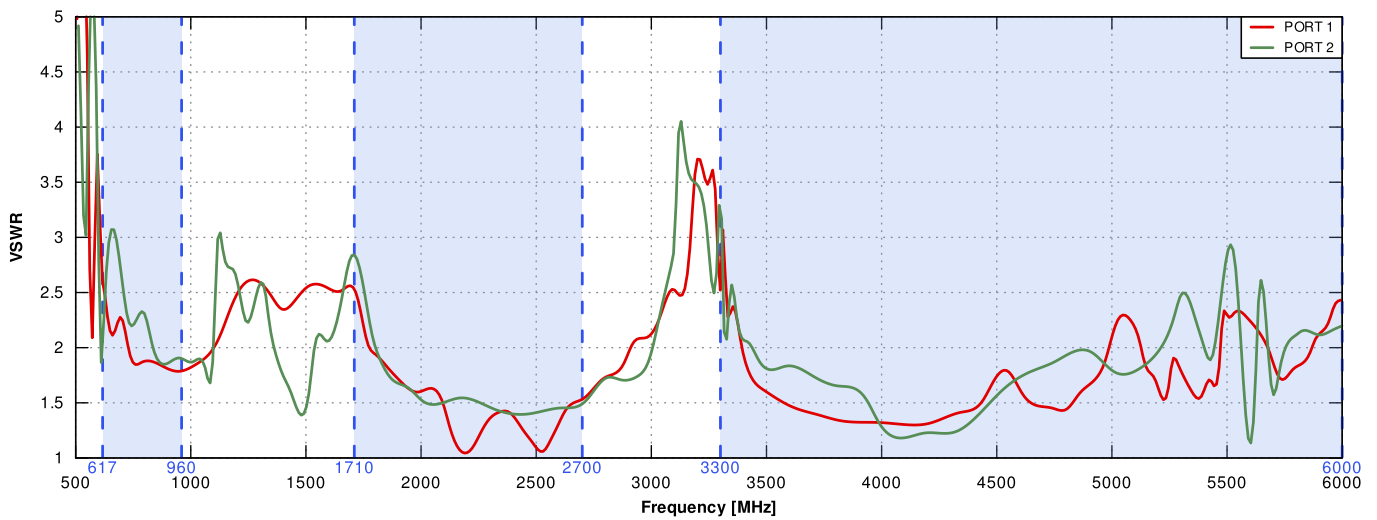
617  
MHz

|     |     |      |      |      |     |     |
|-----|-----|------|------|------|-----|-----|
| n1  | n2  | n3   | n5   | n7   | n8  | n12 |
| n13 | n14 | n18  | n20  | n25  | n26 | n28 |
| n29 | n30 | n34  | n38  | n39  | n40 | n41 |
| n46 | n47 | n48  | n53  | n65  | n66 | n67 |
| n71 | n77 | n78  | n79  | n80  | n81 | n82 |
| n83 | n84 | n85  | n86  | n89  | n90 | n95 |
| n97 | n98 | n100 | n101 | n255 |     |     |

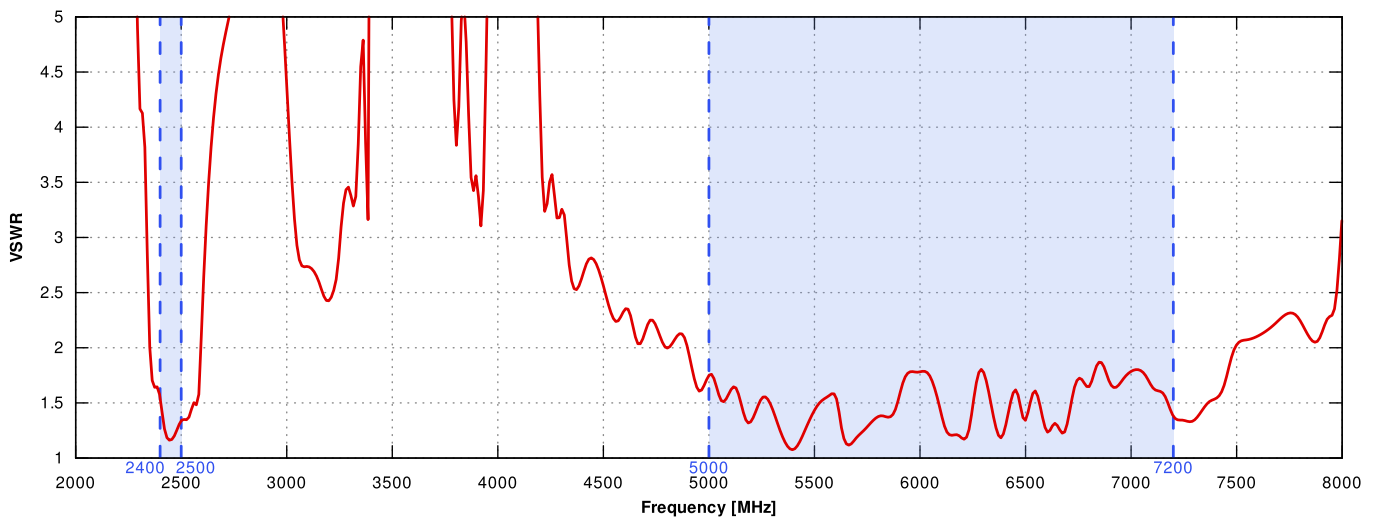
6000  
MHz

## PLOTS

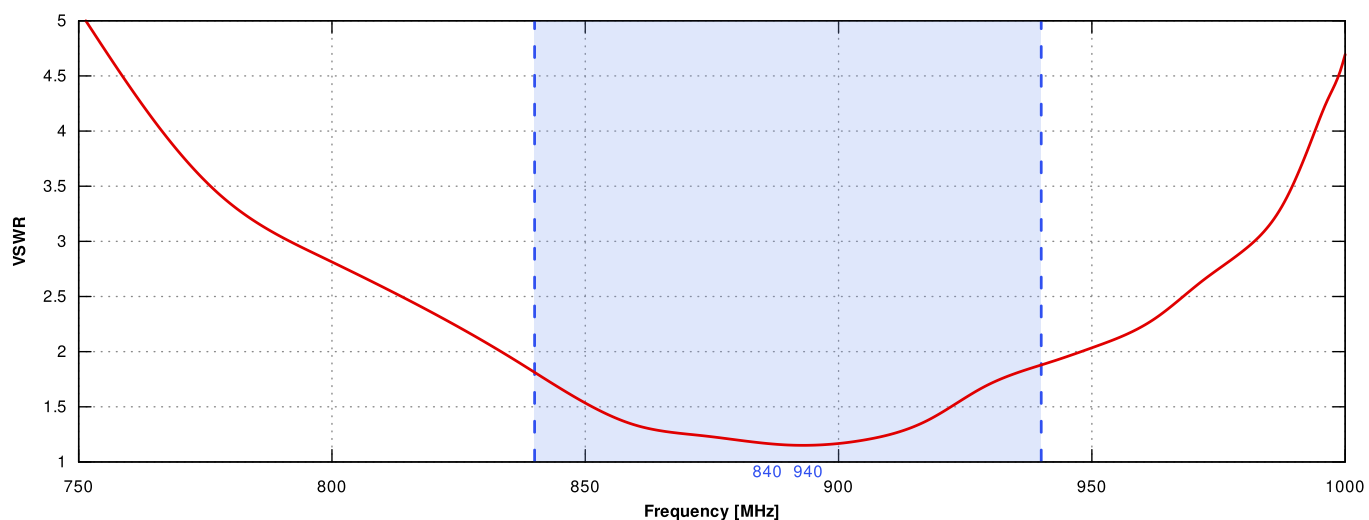
### LTE VSWR



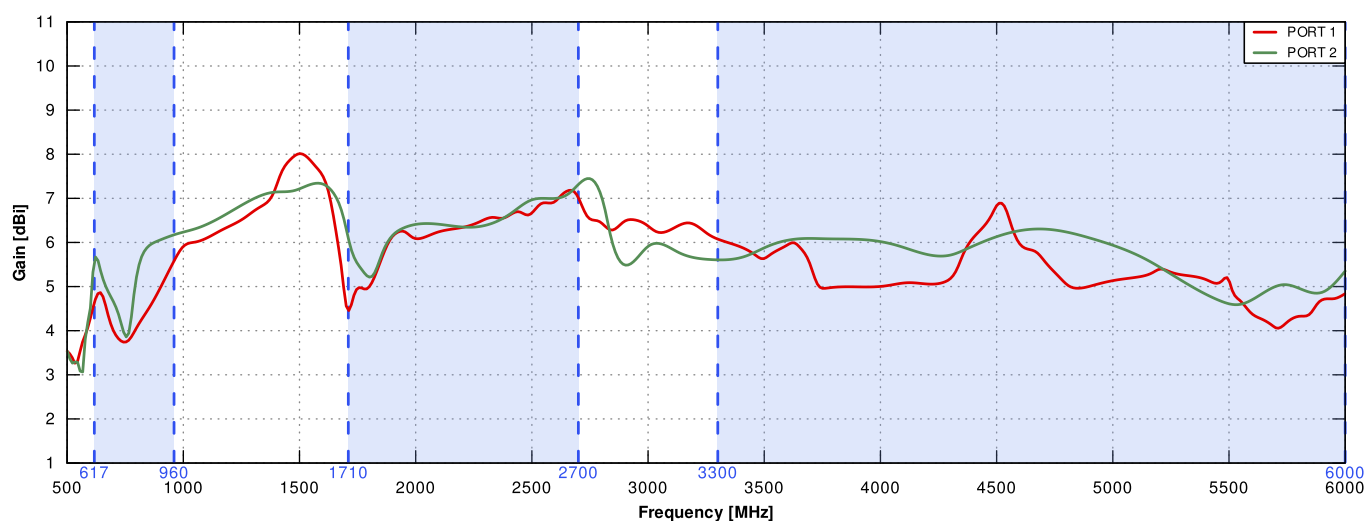
### WI-FI VSWR



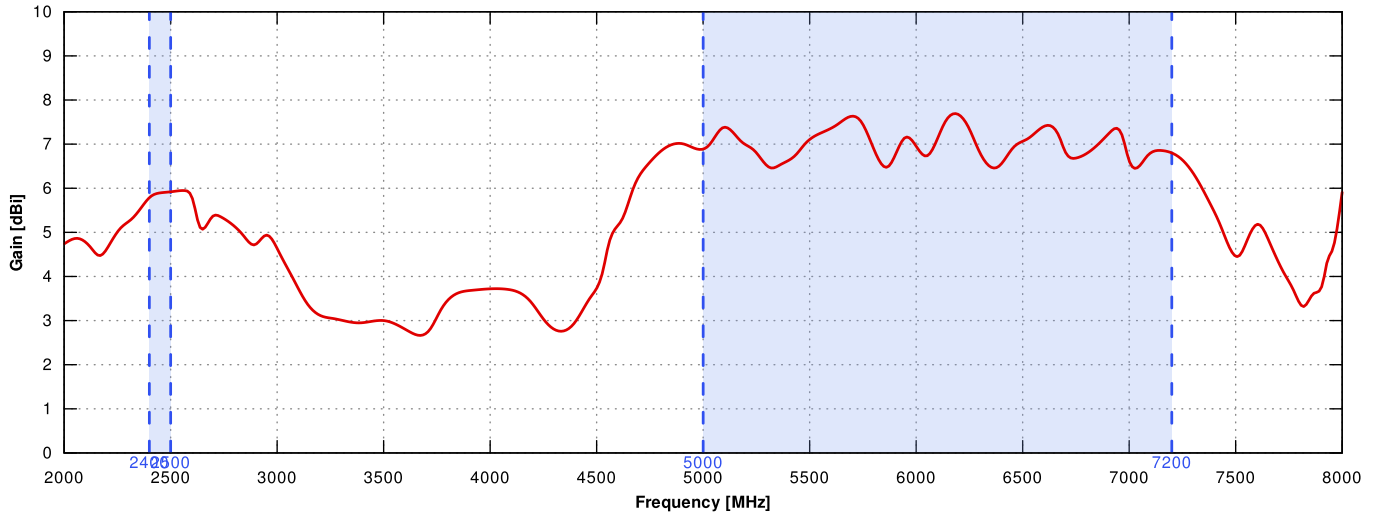
## LoRa VSWR



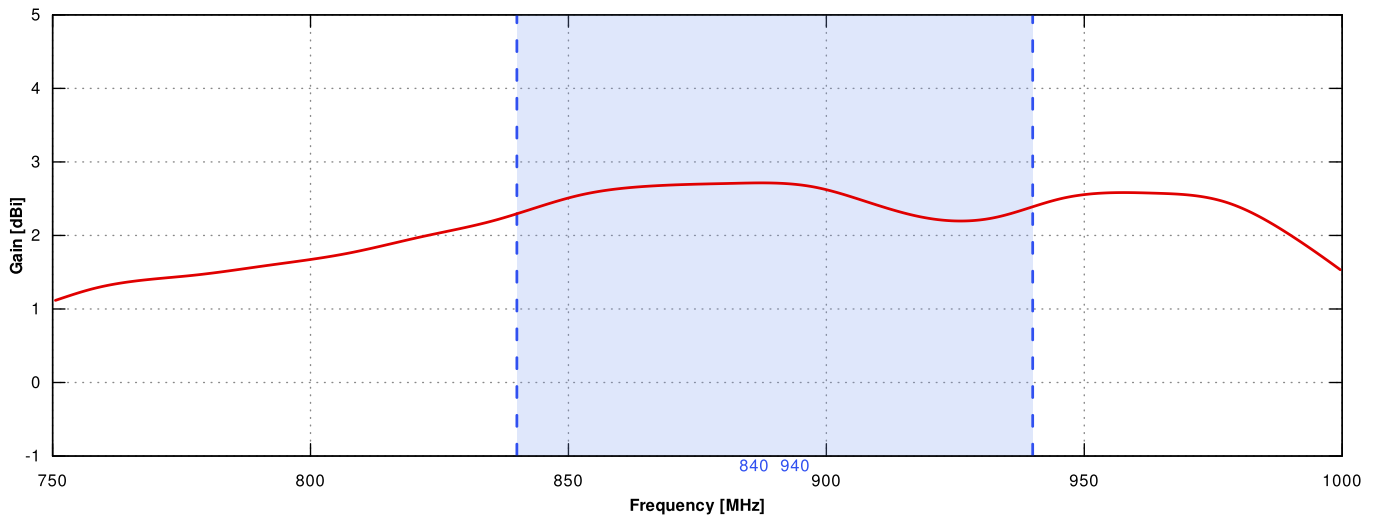
## LTE Gain



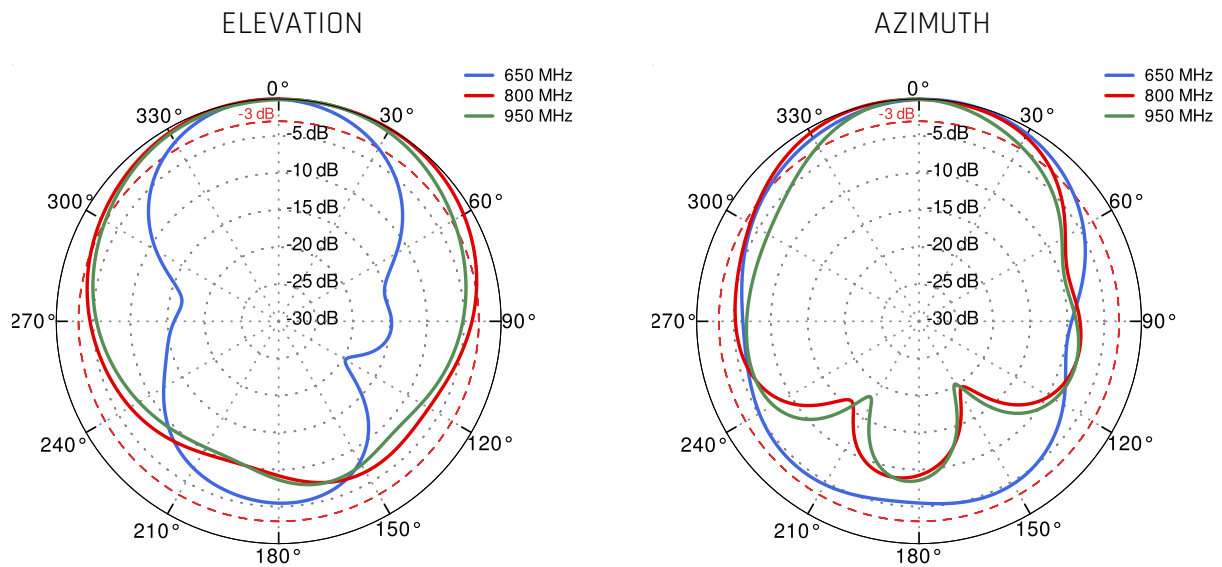
## Wi-Fi Gain



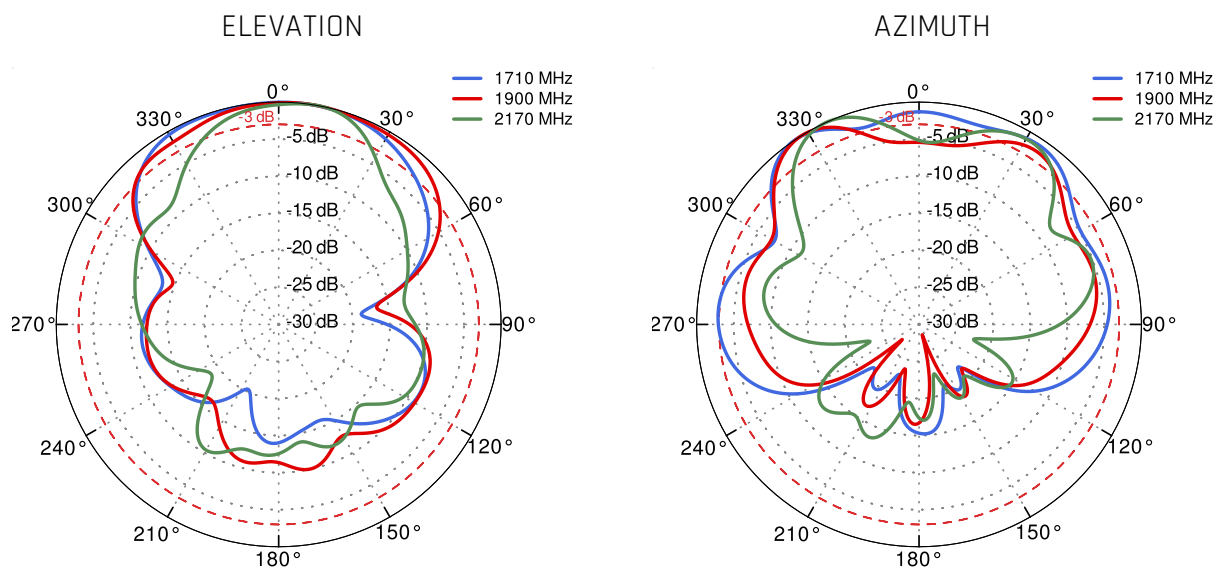
## LoRa Gain



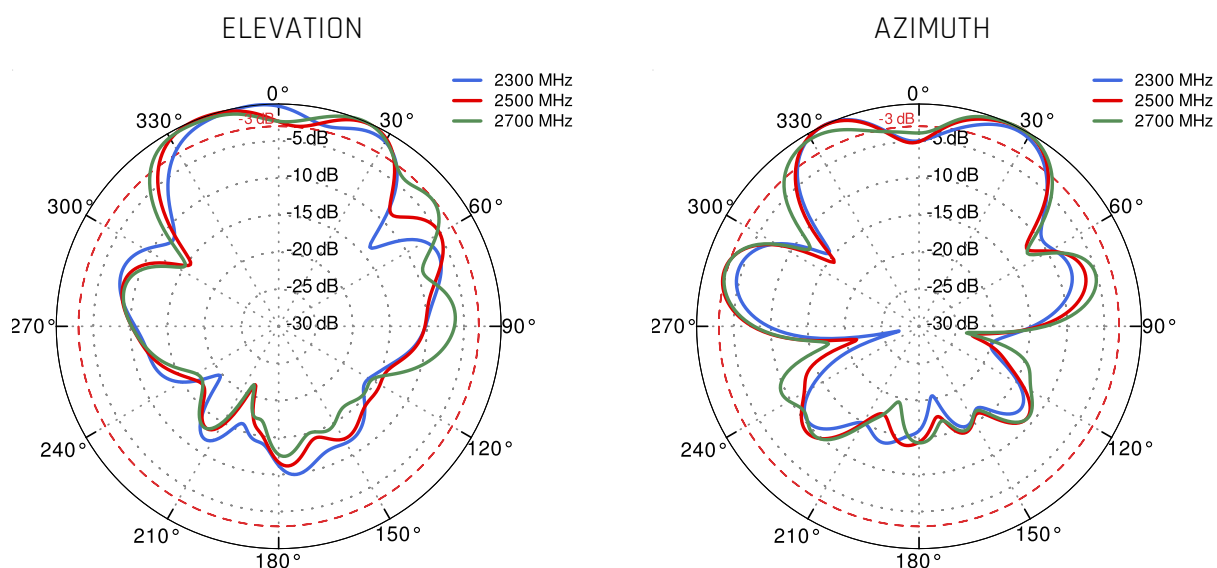
## PORT 1 - 5G/LTE from 650MHz to 950MHz



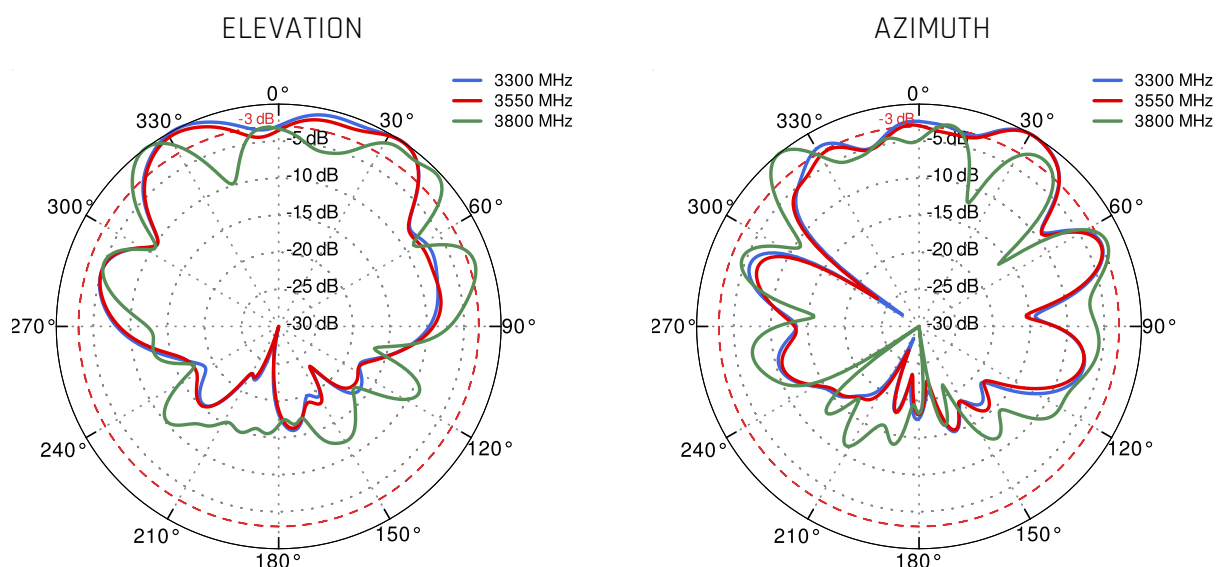
## PORT 1 - 5G/LTE from 1.71GHz to 2.17GHz



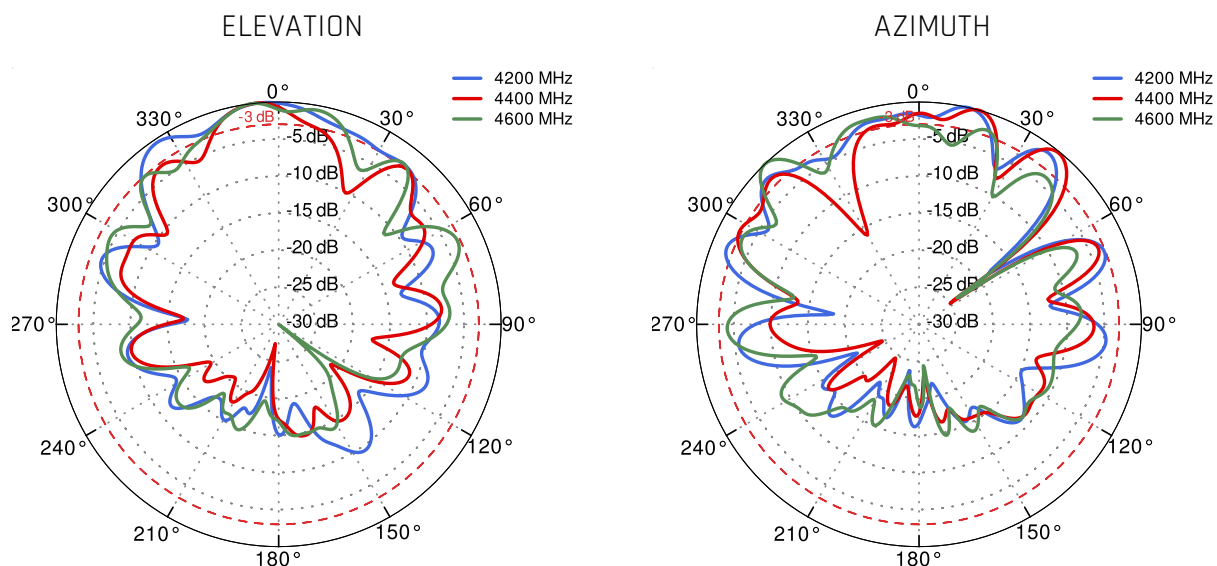
## PORT 1 - 5G/LTE from 2.3GHz to 2.7GHz



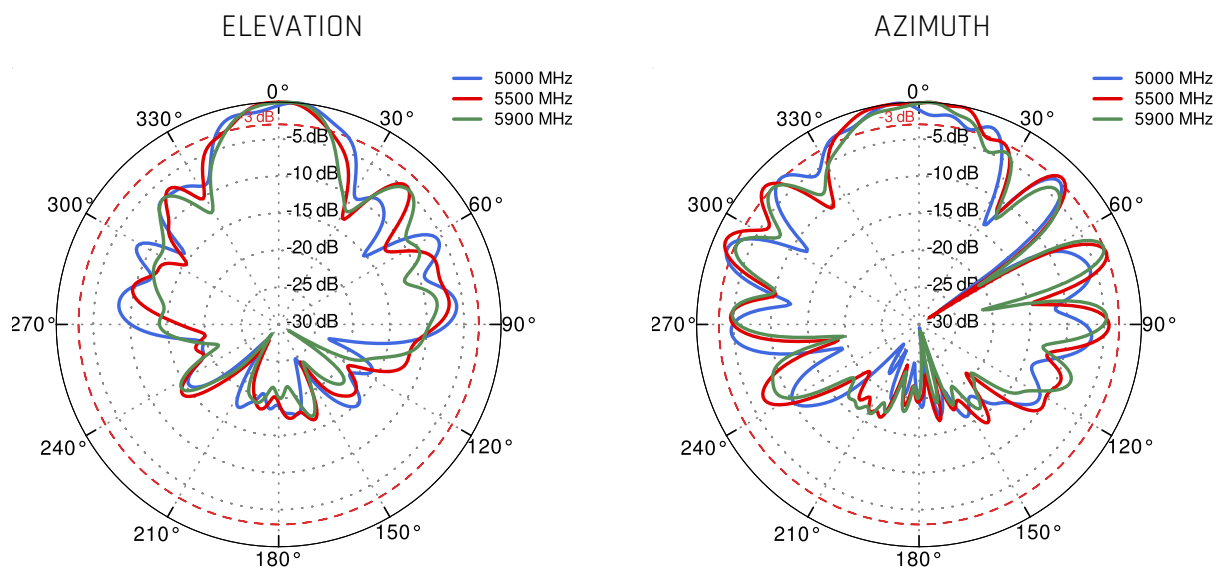
## PORT 1 - 5G/LTE from 3.3GHz to 3.8GHz



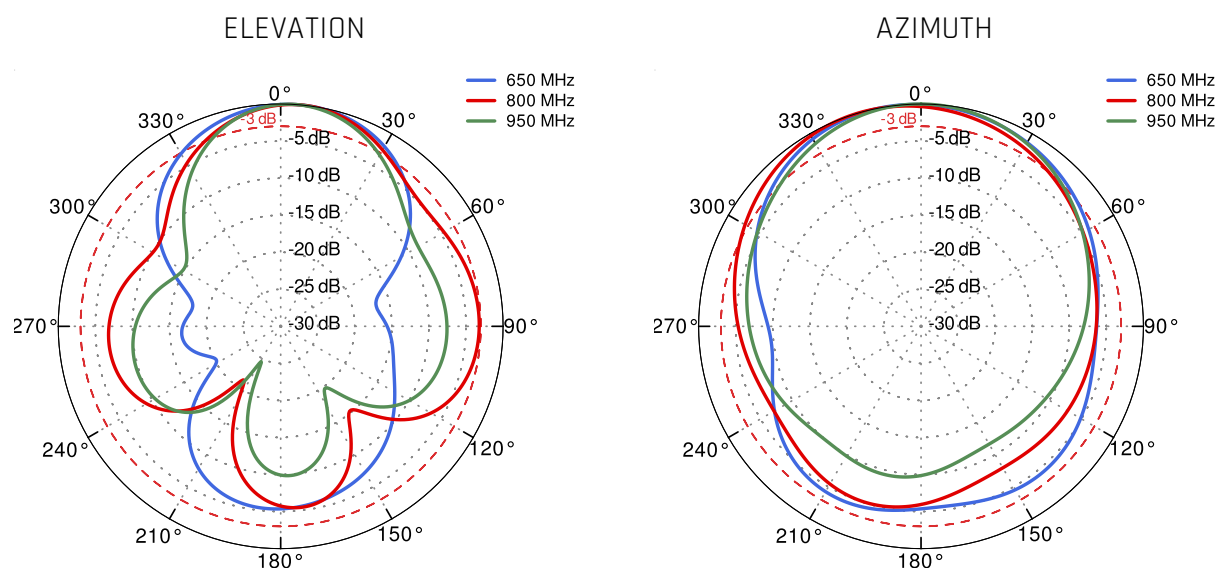
## PORT 1 - 5G/LTE from 4.2GHz to 4.6GHz



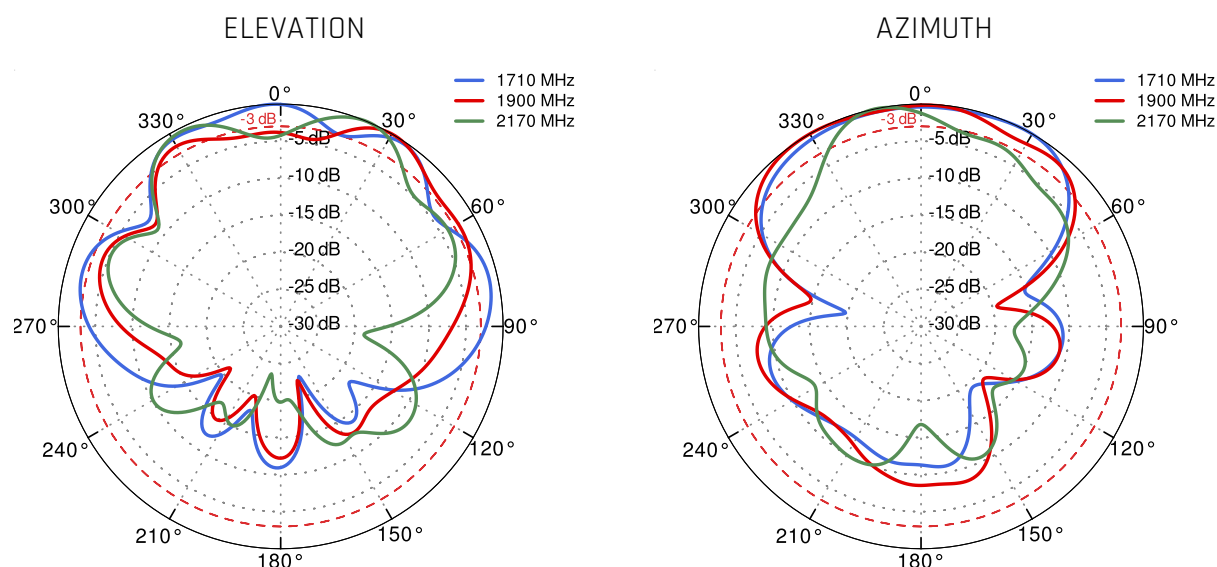
## PORT 1 - 5G/LTE from 5.0GHz to 5.9GHz



## PORT 2 - 5G/LTE from 650MHz to 950MHz

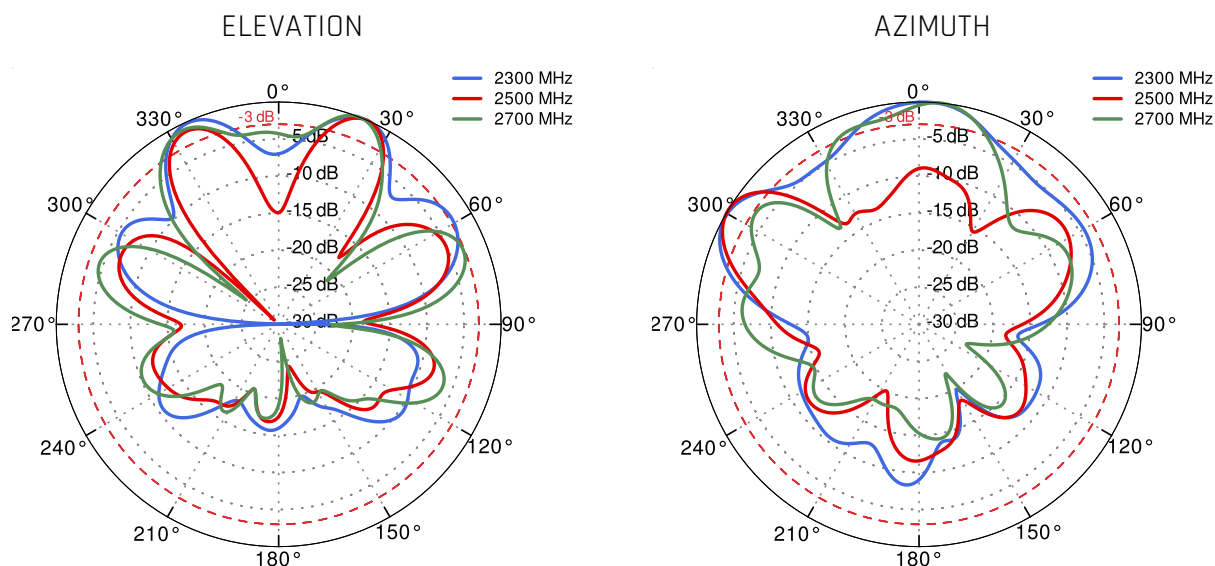


## PORT 2 - 5G/LTE from 1.71GHz to 2.17GHz

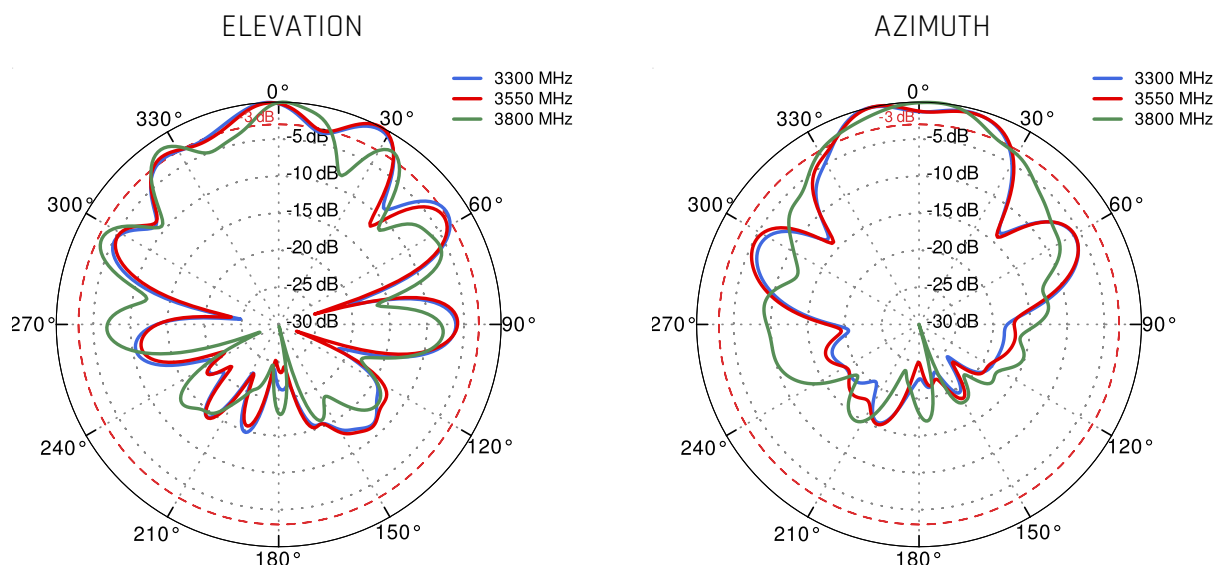




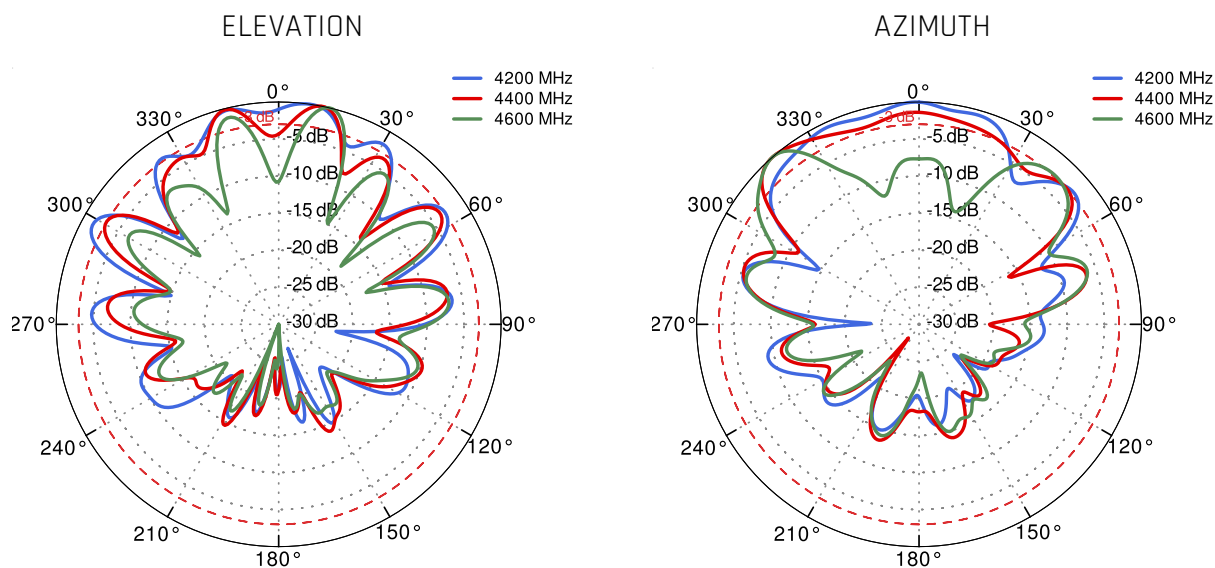
## PORT 2 - 5G/LTE from 2.3GHz to 2.7GHz



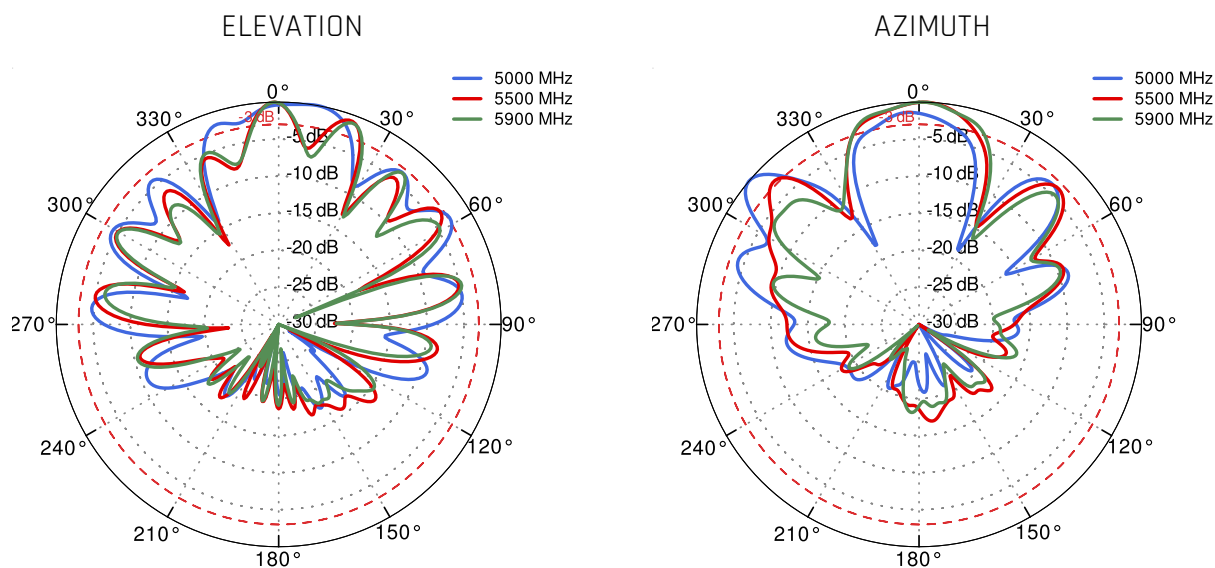
## PORT 2 - 5G/LTE from 3.3GHz to 3.8GHz



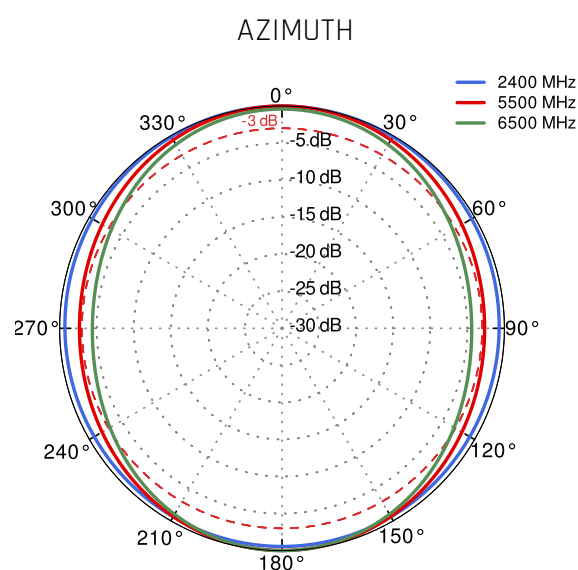
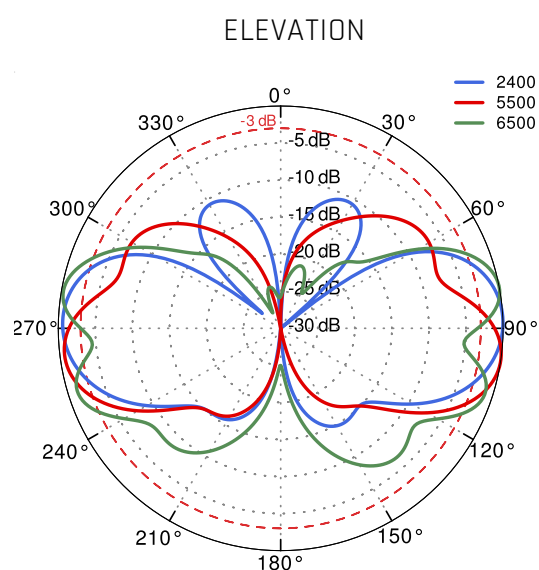
## PORT 2 - 5G/LTE from 4.2GHz to 4.6GHz



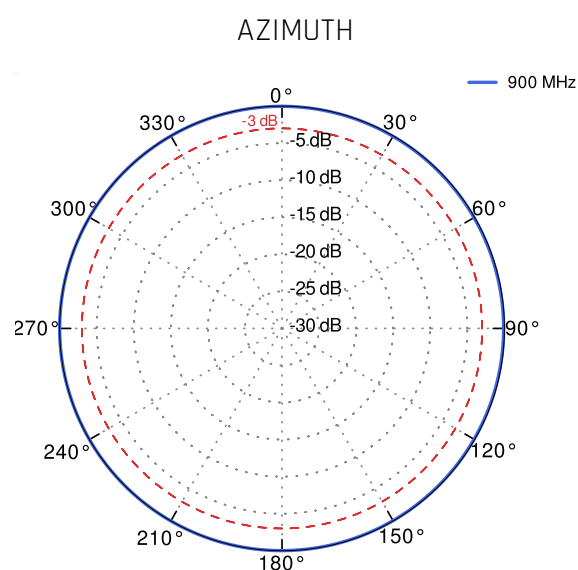
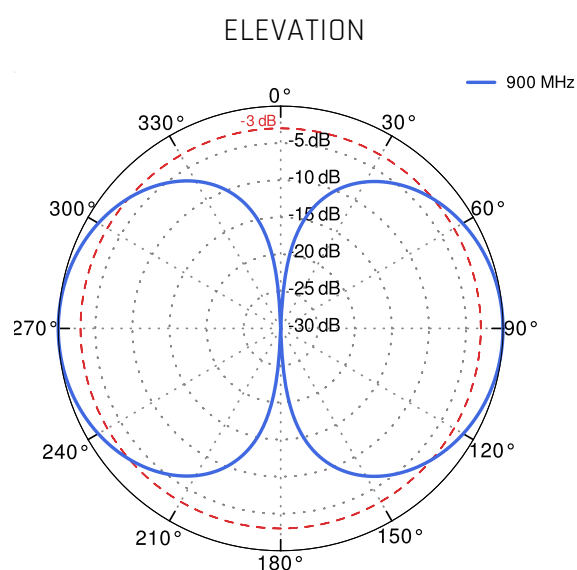
## PORT 2 - 5G/LTE from 5.0GHz to 5.9GHz



## Wi-Fi From 2.4 GHz to 6.5 GHz



## LoRa 900 MHz



## DIMENSIONS

