

# QuWave 5G High Gain 802.3at for XR60, RX400, EX400, RV55, RX55, RV50X, LX60

**INTEGRATED MULTI-BAND LTE OMNI ANTENNA + WI-FI OMNI ANTENNA + GPS ACTIVE ANTENNA + ACTIVE POE SPLITTER + PLACE TO INSTALL SEMTECH ROUTERS (ALL-IN-ONE)**

QuWave is an outdoor antenna designed to provide reliable wireless connectivity in a variety of environments. This product is an all in one solution that integrates a high gain omnidirectional 5G/LTE, Wi-Fi and GPS antennas with Semtech routers into a single IP67 enclosure. Such integration allows implementation of new outdoor 5G/LTE solutions.

QuWave for Semtech is an ideal solution for outdoor wireless connectivity in moving applications such as transportation, yachting, boats and camping but also city centres with high signal density.

Compatible with the following Semtech routers: XR60, RX400, EX400, RV55, RX55, RV50X, LX60

The set contains a [802.3at 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. Using QuWireless splitter provides 3KA surge and lightning protection.



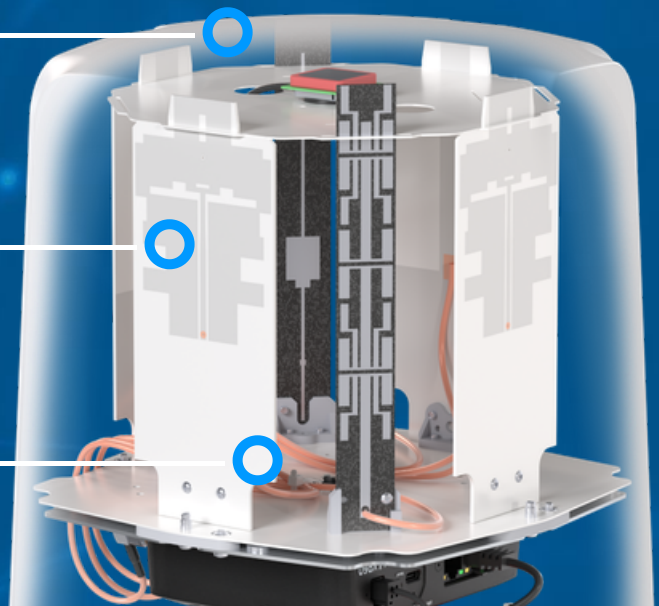
OUTDOOR ANTENNA WORKS IN ANY WEATHER CONDITIONS, IP67



ANTENNA PERFECTLY MATCHED WITH THE SEMTECH ROUTERS



ALL ANTENNAS AND SEMTECH ROUTER INTEGRATED IN ONE ENCLOSURE



## 5G / LTE ANTENNA SPECIFICATION

<b>FREQUENCY</b>	0.5 - 2.0 GHz 2.0 - 3.7 GHz 3.7 - 5.0 GHz 5.0 - 6.23 GHz
<b>MAX. GAIN</b>	0.5 - 2.0 GHz : 3 dBi 2.0 - 3.7 GHz : 4 dBi 3.7 - 5.0 GHz : 4.6 dBi 5.0 - 6.23 GHz : 4.1 dBi
<b>SUPPORTED LTE BANDS</b>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 65, 66, 67, 68, 69, 70, 71, 74, 75, 76, 85, 103, 106, 107, 111, 252, 253, 254, 255, 256
<b>SUPPORTED 5G BANDS</b>	n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n24, n25, n26, n28, n29, n30, n34, n38, n39, n40, n41, n46, n47, n48, n50, n51, n53, n54, n65, n66, n67, n68, n70, n71, n74, n75, n76, n77, n78, n79, n80, n81, n82, n83, n84, n85, n86, n89, n90, n91, n92, n93, n94, n95, n97, n98, n99, n100, n101, n105, n106, n109, n110, n250, n251, n252, n253, n254, n255, n256
<b>VSWR</b>	<2.50, max <3.00
<b>BEAMWIDTH</b>	360°/35° ±5°
<b>POLARIZATION</b>	Vertical
<b>IMPEDANCE</b>	50 Ω
<b>CONNECTOR</b>	4x SMA
<b>CABLE TYPE</b>	RG316

## **WI-FI ANTENNA SPECIFICATION**

<b>FREQUENCY</b>	2.4 - 2.5 GHz 5.0 - 7.2 GHz
<b>MAX. GAIN</b>	2.4 - 2.5 GHz: 6dBi 5 GHz: 7.5dBi 7 GHz: 7.5dBi
<b>VSWR</b>	< 1.50, max < 2.00
<b>BEAMWIDTH</b>	360°/25°
<b>POLARIZATION</b>	Vertical
<b>IMPEDANCE</b>	50 $\Omega$
<b>CONNECTOR</b>	2x RPSMA
<b>CABLE TYPE</b>	RG316

## **GPS ACTIVE ANTENNA SPECIFICATION**

<b>FREQUENCY</b>	1.56 - 1.61 GHz
<b>VSWR</b>	< 2
<b>GAIN</b>	3 dBi
<b>GAIN 3V</b>	28 dBi
<b>DC POWER INPUT</b>	2.5 V ~ 6.5 V
<b>POWER CONSUMPTION</b>	2.5 - 6.5 mA
<b>IMPEDANCE</b>	50 $\Omega$

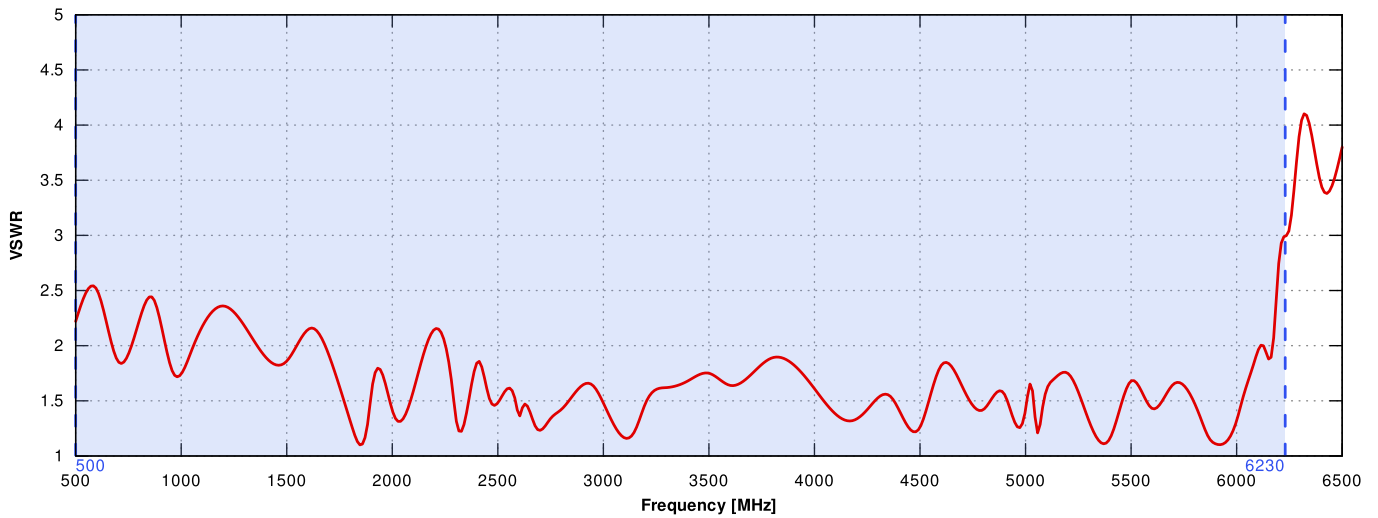
<b>POLARIZATION</b>	RHCP (right hand circularly polarized)
<b>CONNECTOR</b>	1x SMA
<b>CABLE TYPE</b>	RG174

## **MECHANICAL SPECIFICATION**

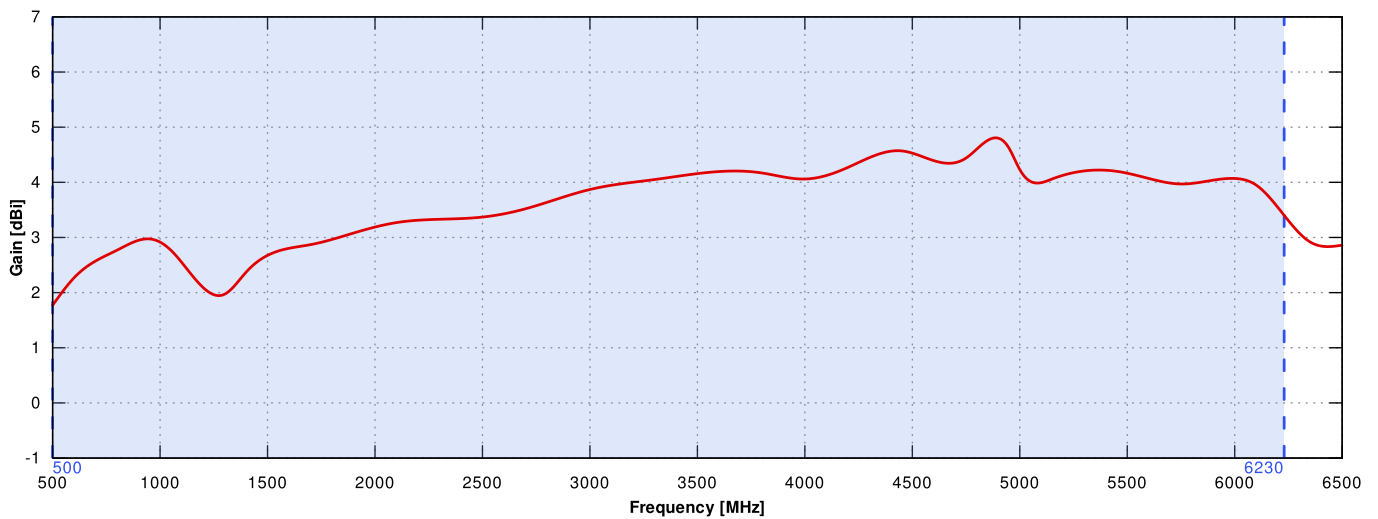
<b>MATERIALS</b>	ABS, aluminum, PTFE
<b>CONNECTOR TYPE</b>	1x QuRJ45
<b>OUTER DIMENSIONS</b>	210 x 210 x 254 mm 8.27 x 8.27 x 10 inch
<b>INGRESS PROTECTION</b>	IP67
<b>OPERATING TEMPERATURE</b>	From -40°C to 80°C From -40°F to 176°F
<b>MAST DIAMETER</b>	25-66 mm 0.98-2.60 inch
<b>ENCLOSURE RECOMMENDED TIGHTENING TORQUE</b>	0.5 - 0.7 Nm

## PLOTS

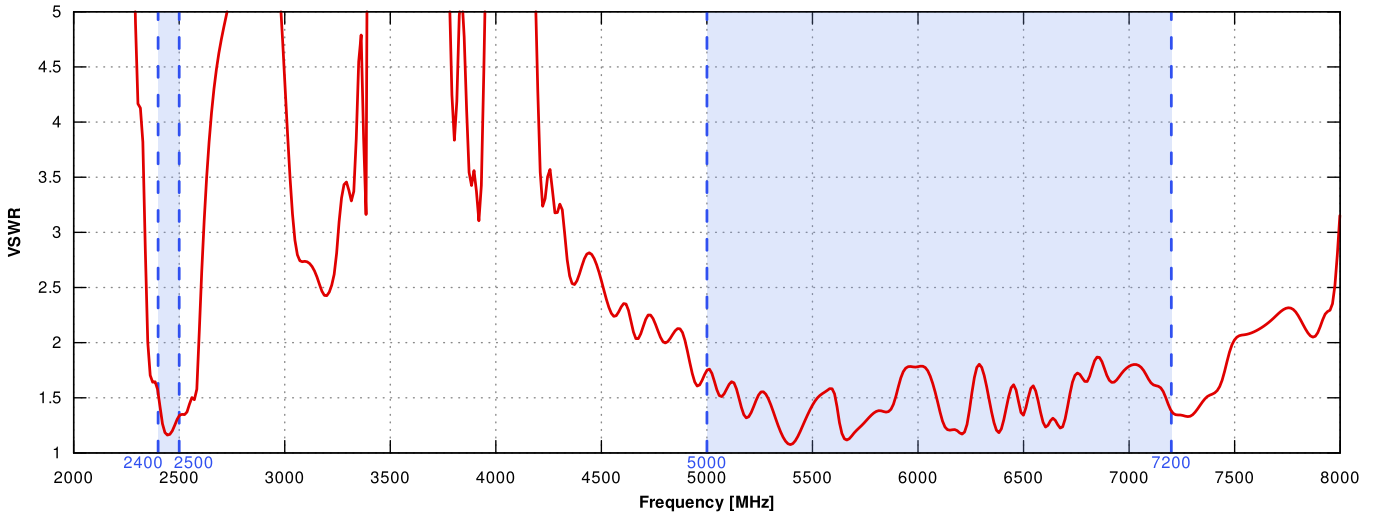
### 5G/LTE VSWR



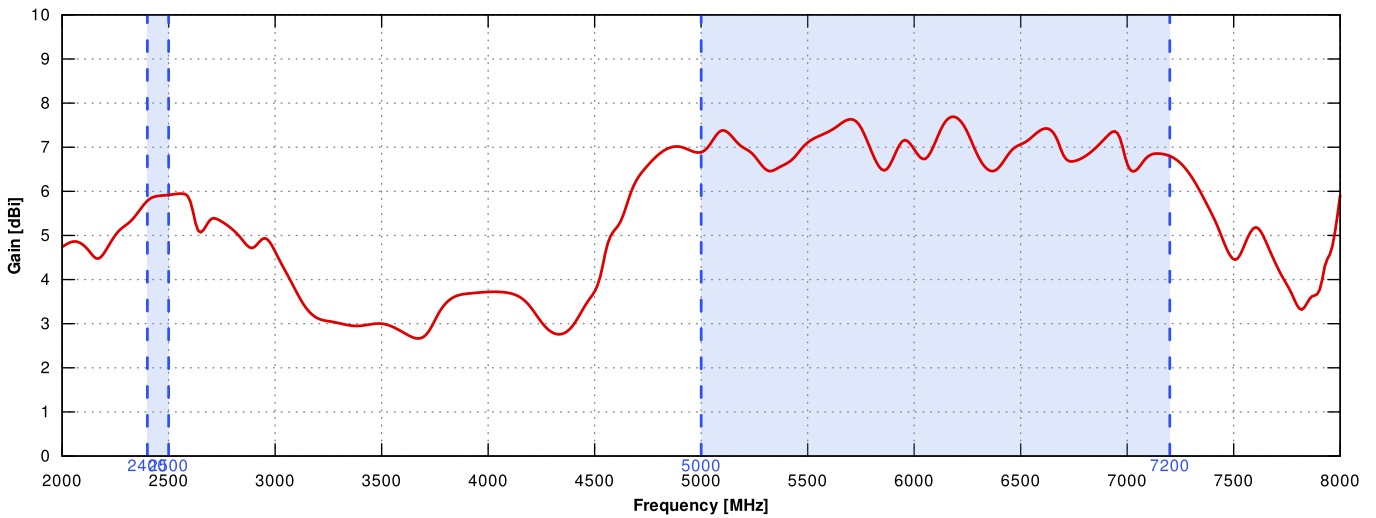
### 5G/LTE Gain



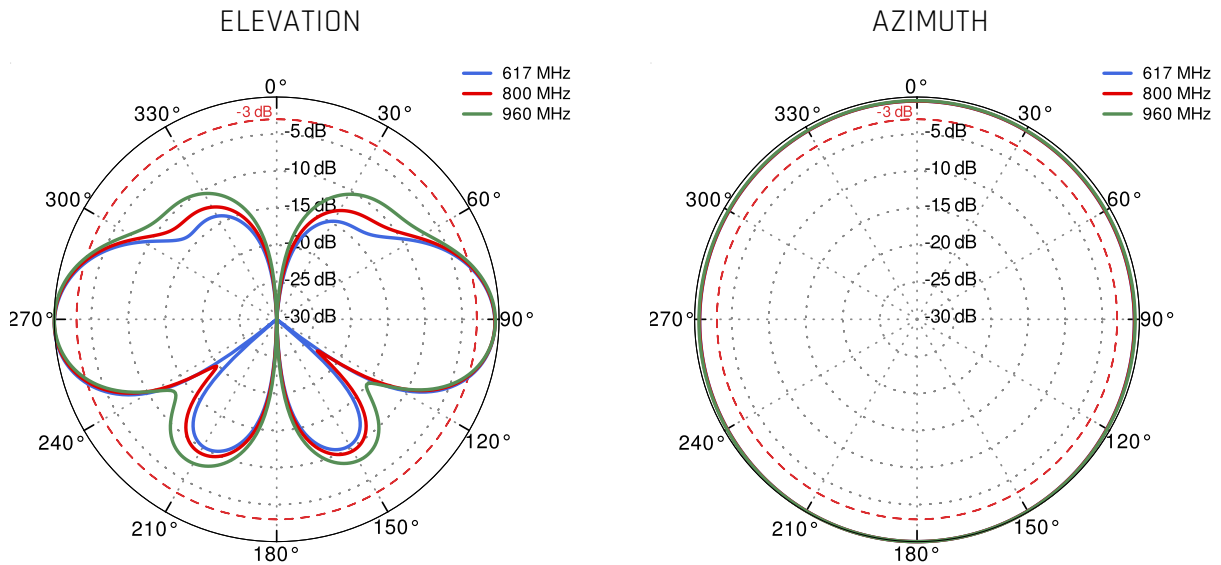
## WI-FI VSWR



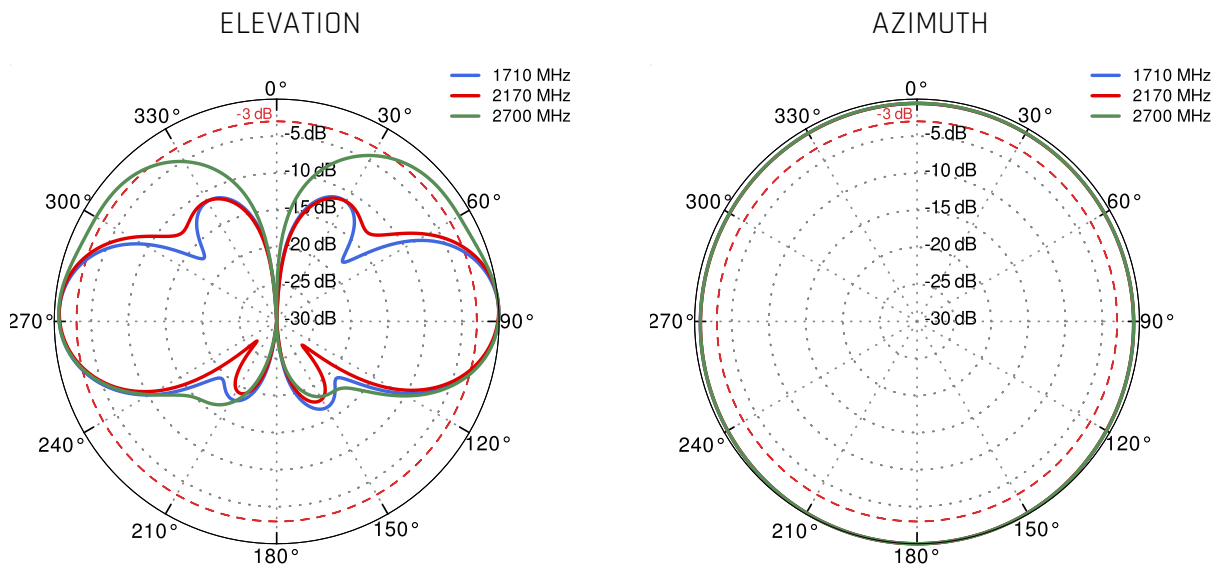
## WI-FI Gain



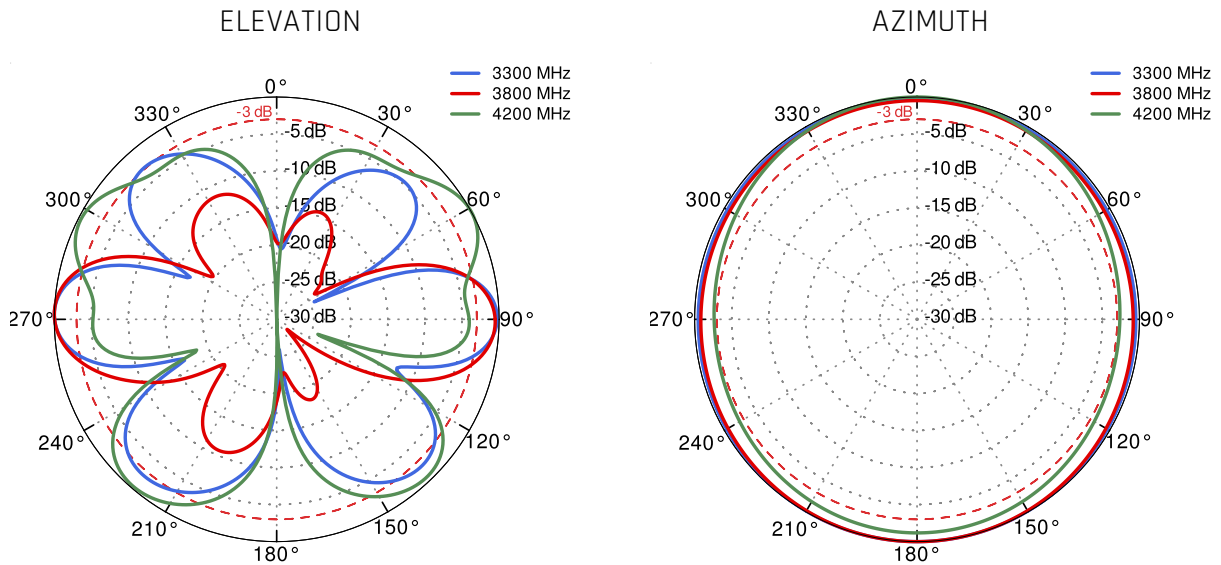
5G/LTE From 617MHz to 960MHz



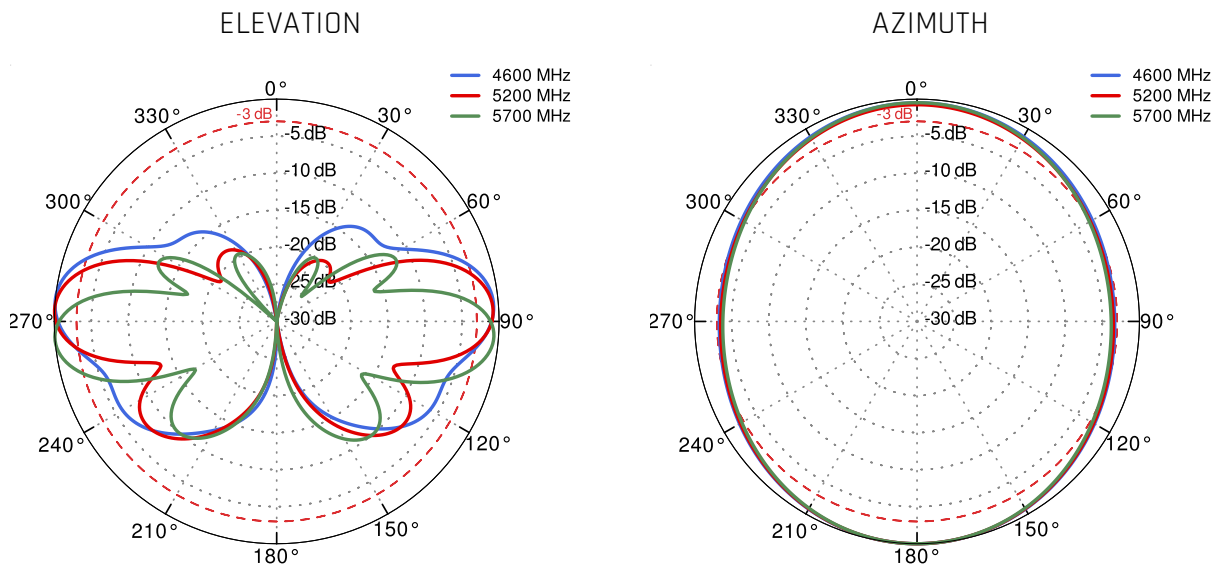
5G/LTE From 1.71GHz to 2.7GHz



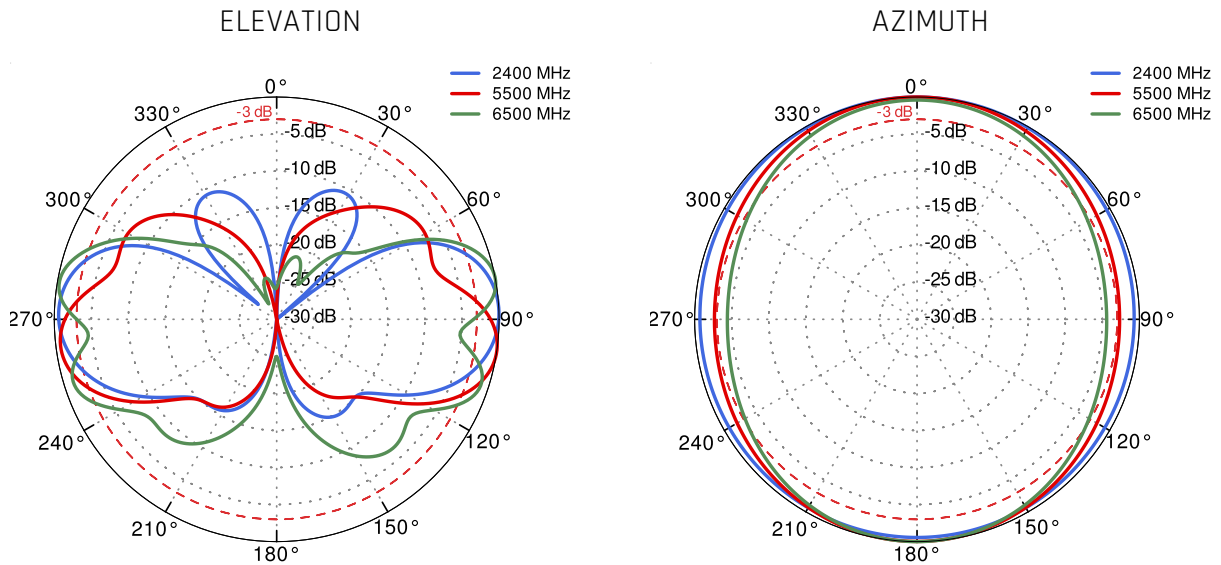
5G/LTE From 3.3GHz to 4.2GHz



5G/LTE From 4.6GHz to 5.7GHz



Wi-Fi From 2.4 GHz to 6.5 GHz



## DIMENSIONS

