

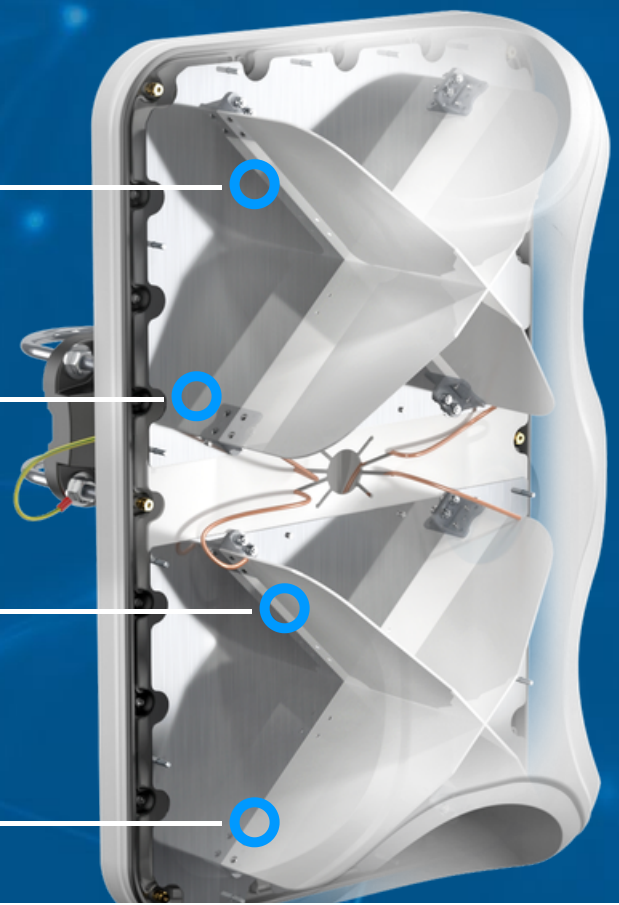
# QuMax for Teltonika TRB500

**INTEGRATED MULTI-BAND LTE & 5G PANEL ANTENNA + PoE SPLITTER + PLACE TO INSTALL TELTONIKA TRB500 (ALL-IN-ONE)**

**QuMax for TRB500** is a high performance directional antenna designed for use in a variety of wireless communication applications. This all-in-one product consists of multi-band 5G antennas and PoE splitter integrated in IP68 enclosure. It offers 7.5 dBi gain and wide beamwidth, which makes it suitable for use in both urban and rural environments.

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. **NOTE:** should only be used with a 24V (or lower voltage) Passive PoE power supply it is not compatible with an 802.3af/at power source!

Combining QuMax with TRB500 inside the antenna housing gives you complete outdoor solution with multiple use scenarios such as transportation public, energy, mining IoT and more.



## 5G / LTE ANTENNA SPECIFICATION

<b>FREQUENCY</b>	0.617 - 0.96 GHz 1.7 - 2.7 GHz 3.3 - 4.6 GHz 4.7 - 6.0 GHz
<b>GAIN</b>	0.617 - 0.96 GHz: 6 dBi 1.7 - 2.7 GHz: 7 dBi 3.3 - 4.6 GHz: 7 dBi 4.7 - 6.0 GHz: 5.5 dBi
<b>SUPPORTED LTE BANDS</b>	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
<b>SUPPORTED 5G BANDS</b>	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, n80, n81, n82, n83, n84, n85, n86, n89, n90, n95, n97, n98, n100, n101, n255
<b>VSWR</b>	<2.00, max <3.00
<b>BEAMWIDTH</b>	80°/80° ±15°
<b>POLARIZATION</b>	X (±45degrees)
<b>IMPEDANCE</b>	50 Ω

## MECHANICAL SPECIFICATION

<b>MATERIALS</b>	ABS, aluminum, PTFE, Fiberglass
<b>CONNECTOR TYPE</b>	RJ45
<b>INGRESS PROTECTION</b>	IP68
<b>DIMENSIONS</b>	486.0 x 292.2 x 175.4 mm 19.13 x 11.50 x 6.87 inch
<b>WEIGHT</b>	2.8 kg 6.17 lbs
<b>OPERATING TEMPERATURE</b>	From -40°C to 80°C From -40°F to 176°F
<b>ENCLOSURE RECOMMENDED TIGHTENING TORQUE</b>	0,6 - 0,8 Nm
<b>MAST DIAMETER</b>	25-66mm 0.98-2.60 inch

## POE SPECIFICATION

<b>POE TYPE</b>	Passive PoE up to 24V, not compatible with an 802.3af/at power source!
<b>POE IN MODE</b>	Mode type: B
<b>IEEE STANDARD</b>	IEEE 802.3ab 1000Base-T Gigabit Ethernet

# FREQUENCY BANDS

LTE / 4G

617 MHz	1	2	3	4	5	7	8	6000M Hz
	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							

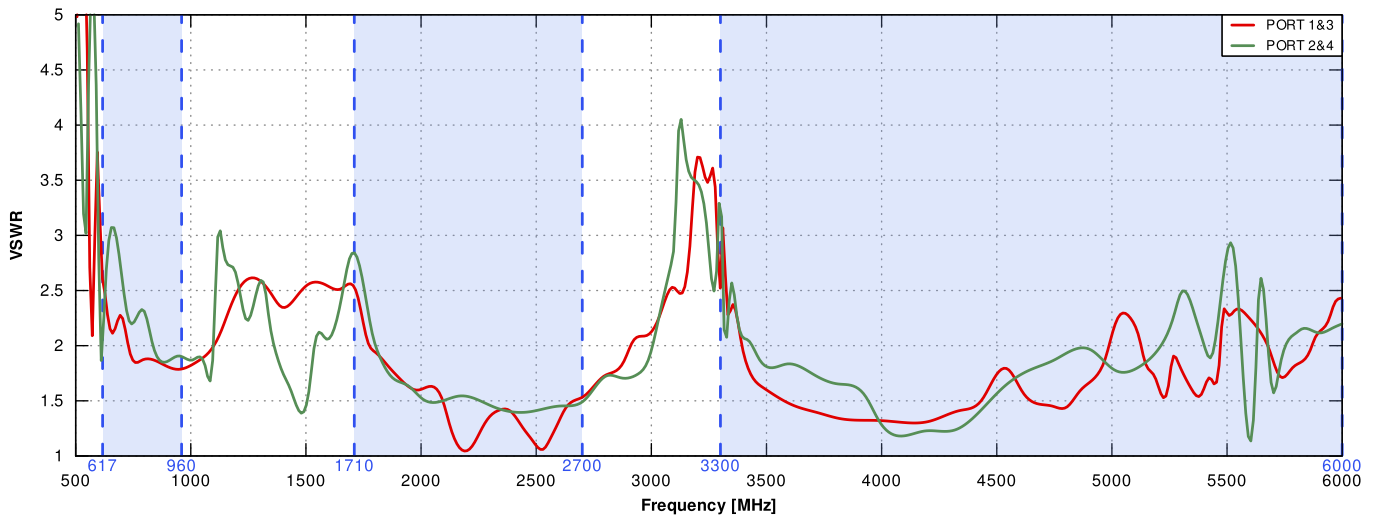
5G

617 MHz	n1	n2	n3	n5	n7	n8	n12	6000 MHz
	n13	n14	n18	n20	n25	n26	n28	
	n29	n30	n34	n38	n39	n40	n41	
	n46	n47	n48	n53	n65	n66	n67	
	n71	n77	n78	n80	n81	n82	n83	
	n84	n85	n86	n89	n90	n95	n97	
	n98	n100	n101	n255				

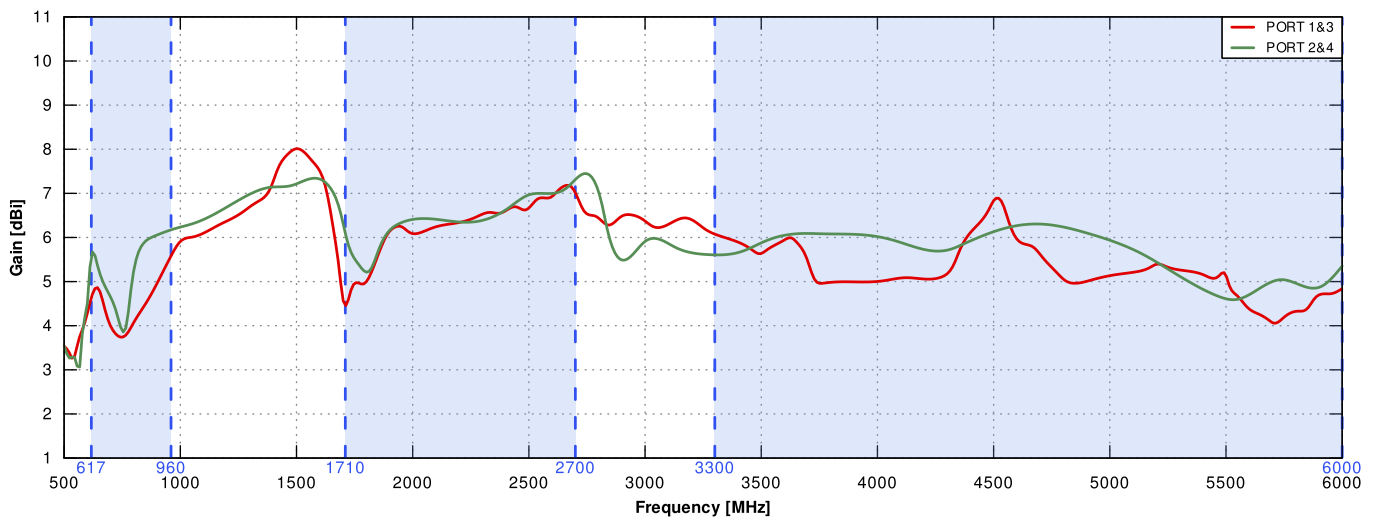


# PLOTS

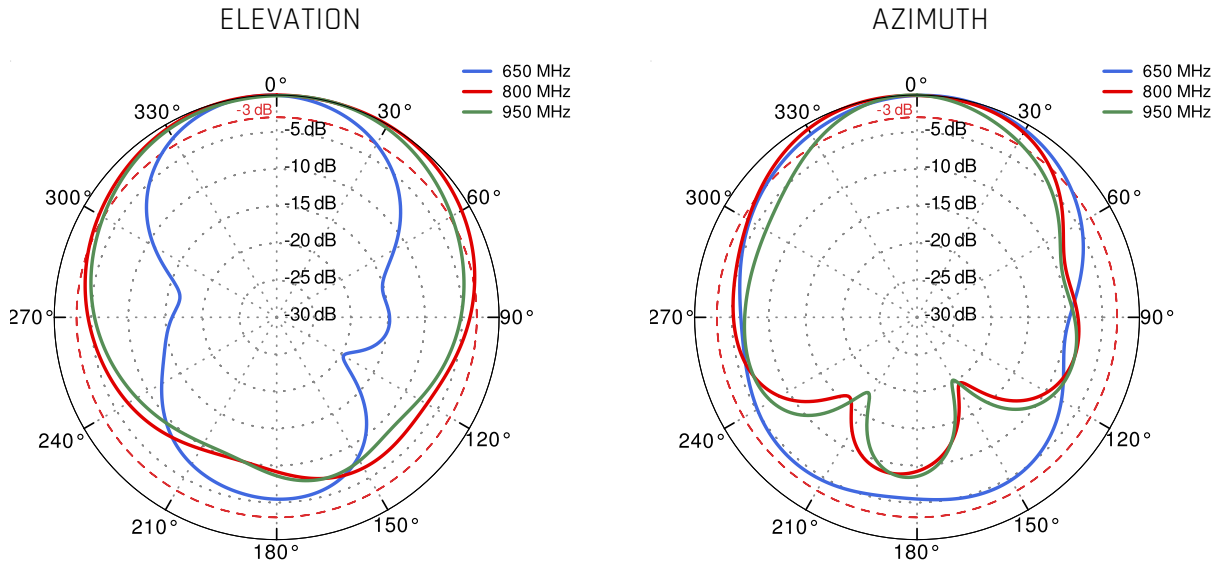
## VSWR for 5G/LTE antenna



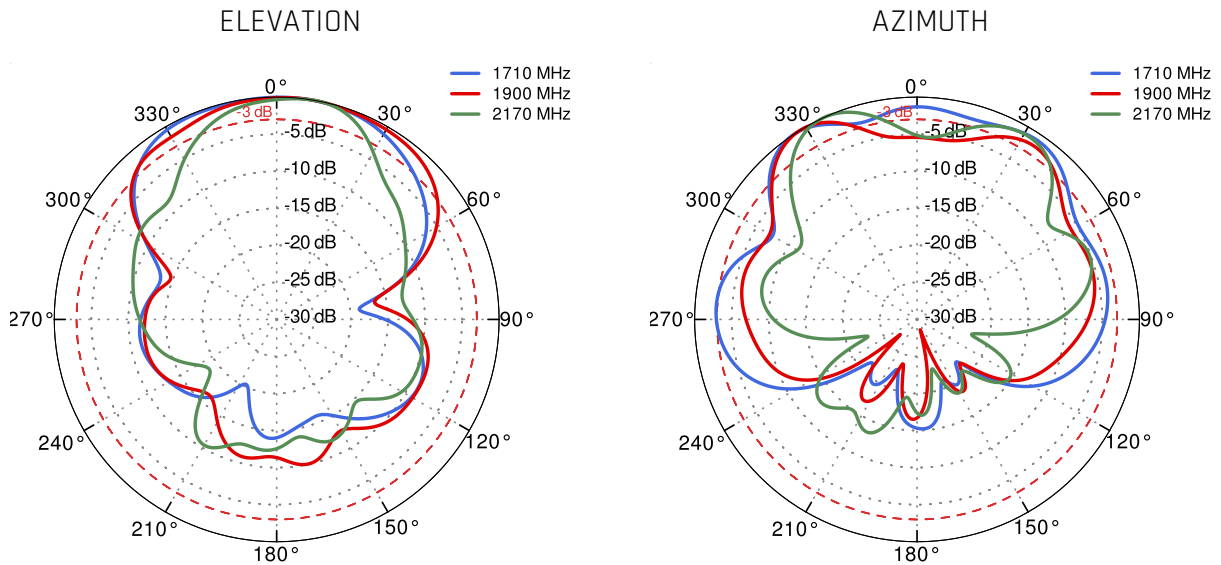
## Gain for 5G/LTE antenna



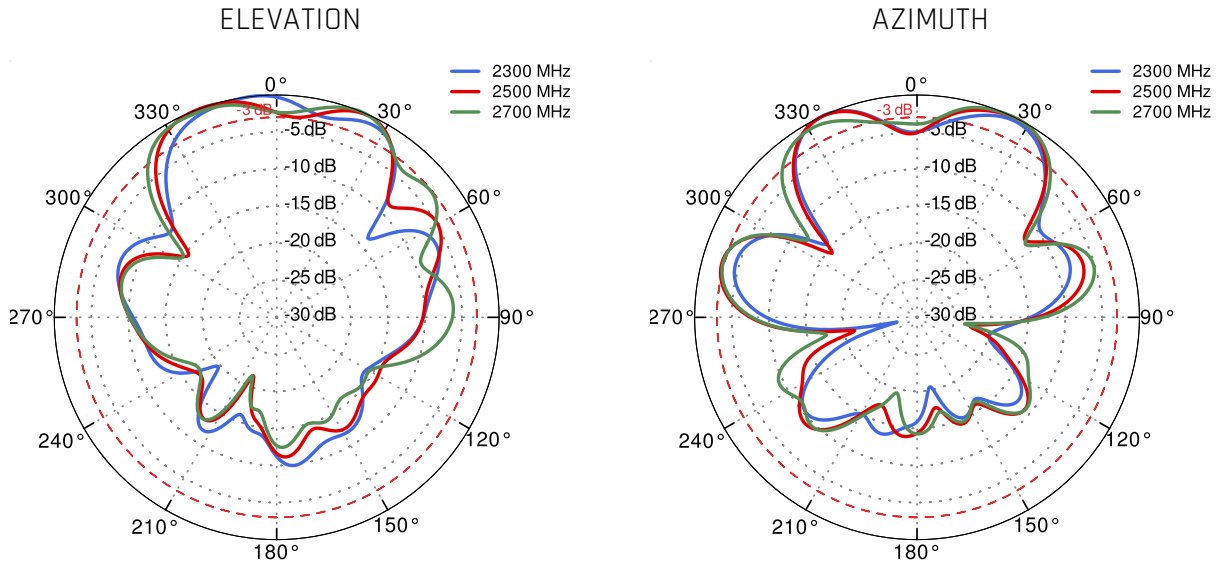
PORT 1&3 - 5G/LTE from 650MHz to 950MHz



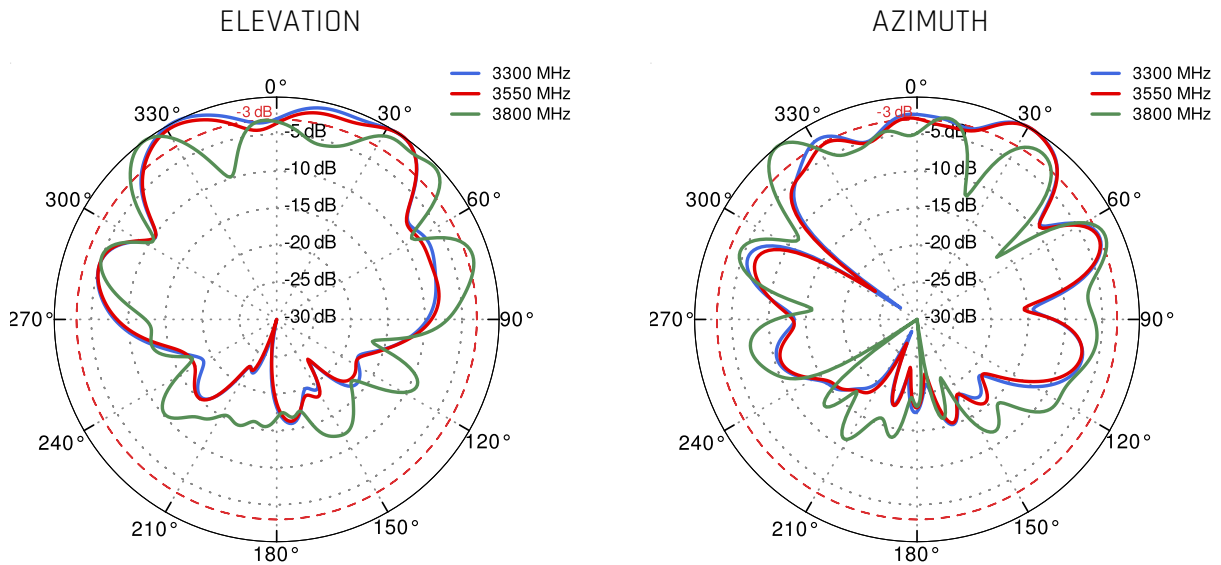
PORT 1&3 - 5G/LTE from 1.71GHz to 2.17GHz

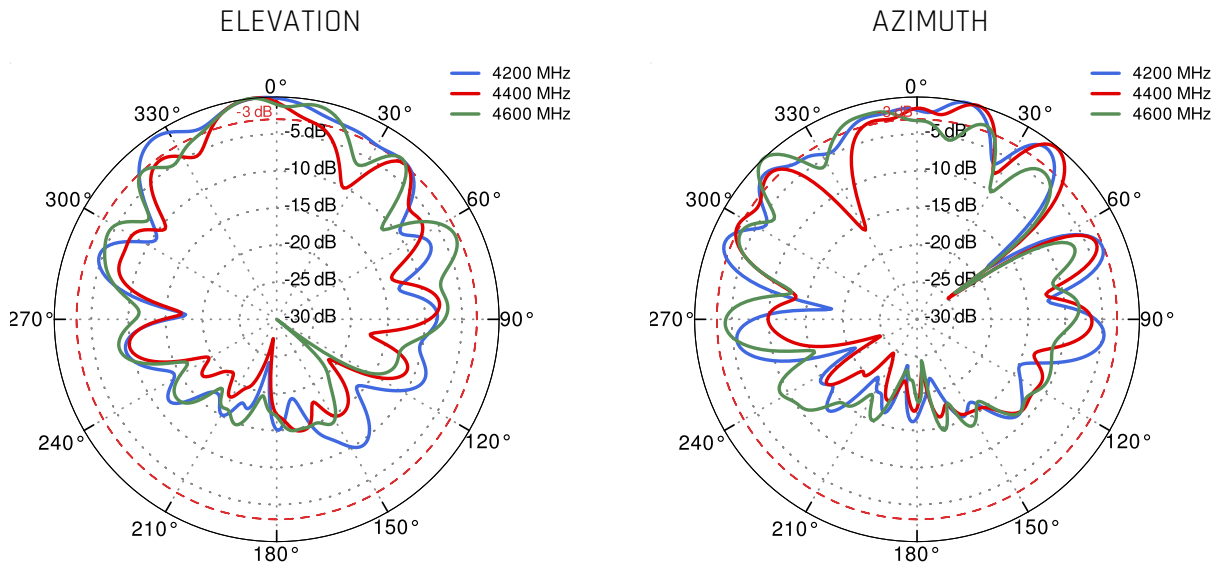
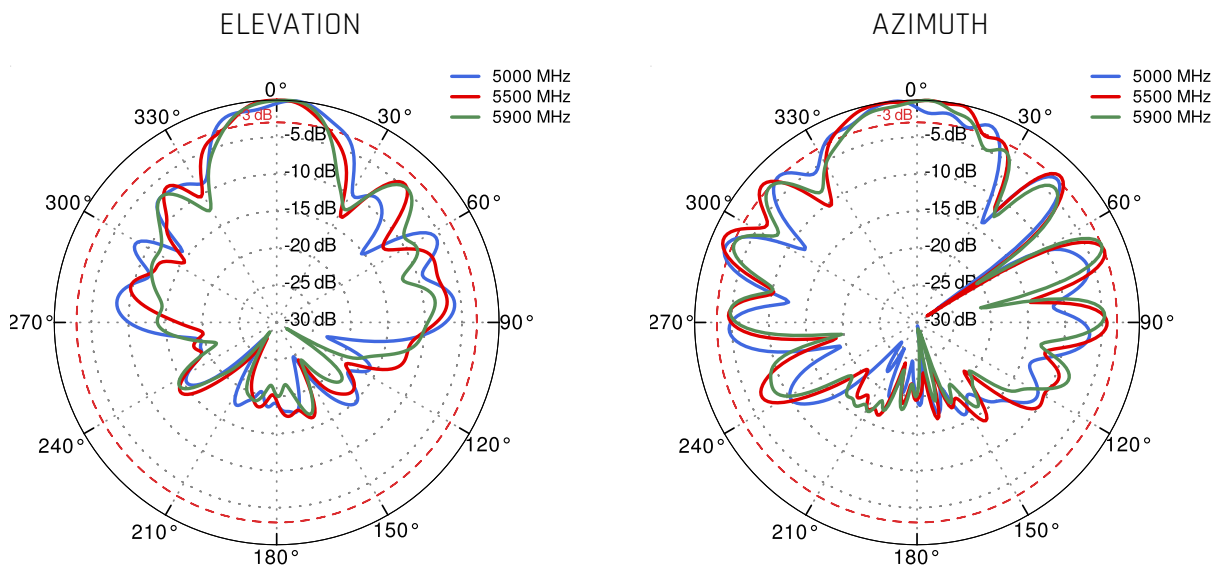


PORT 1&3 - 5G/LTE from 2.3GHz to 2.7GHz

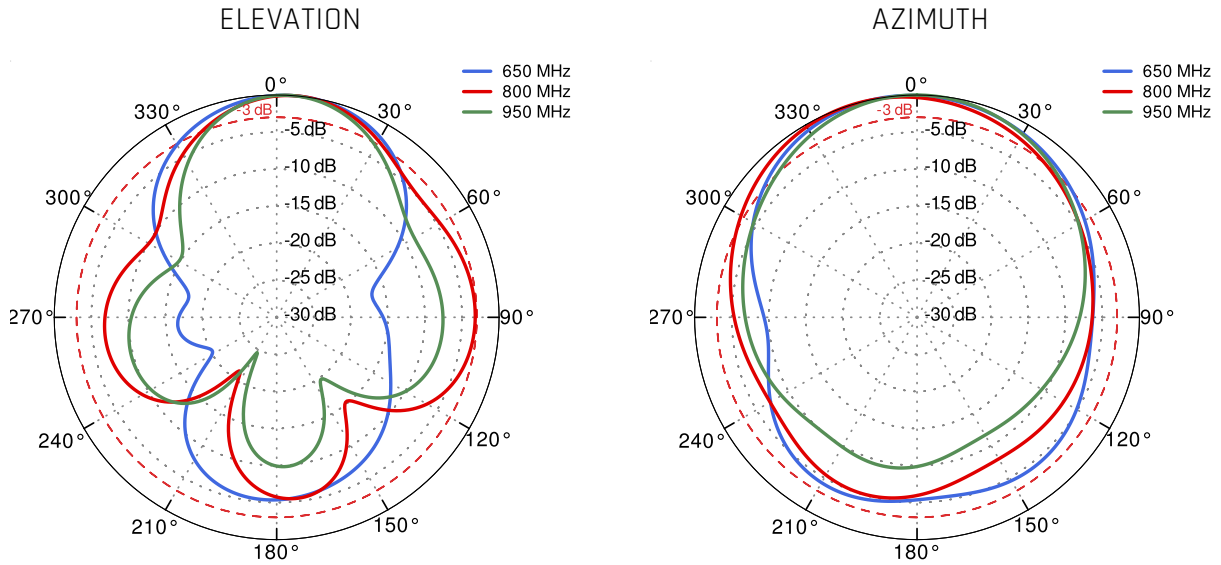


PORT 1&3 - 5G/LTE from 3.3GHz to 3.8GHz

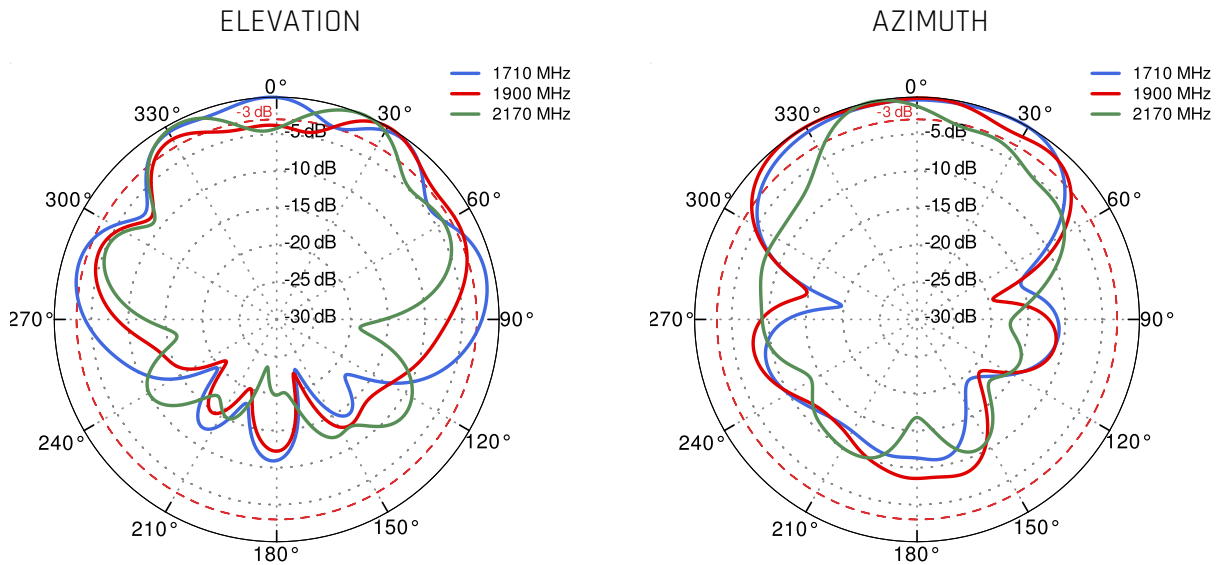


**PORT 1&3 - 5G/LTE from 4.2GHz to 4.6GHz**

**PORT 1&3 - 5G/LTE from 5.0GHz to 5.9GHz**


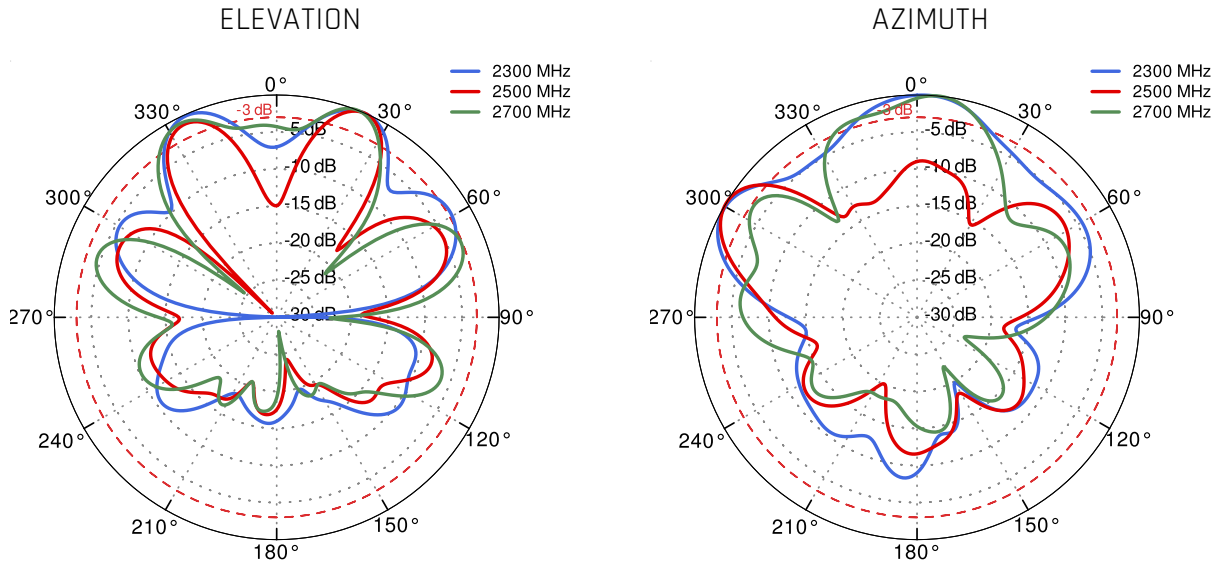
PORT 2&4 - 5G/LTE from 650MHz to 950MHz



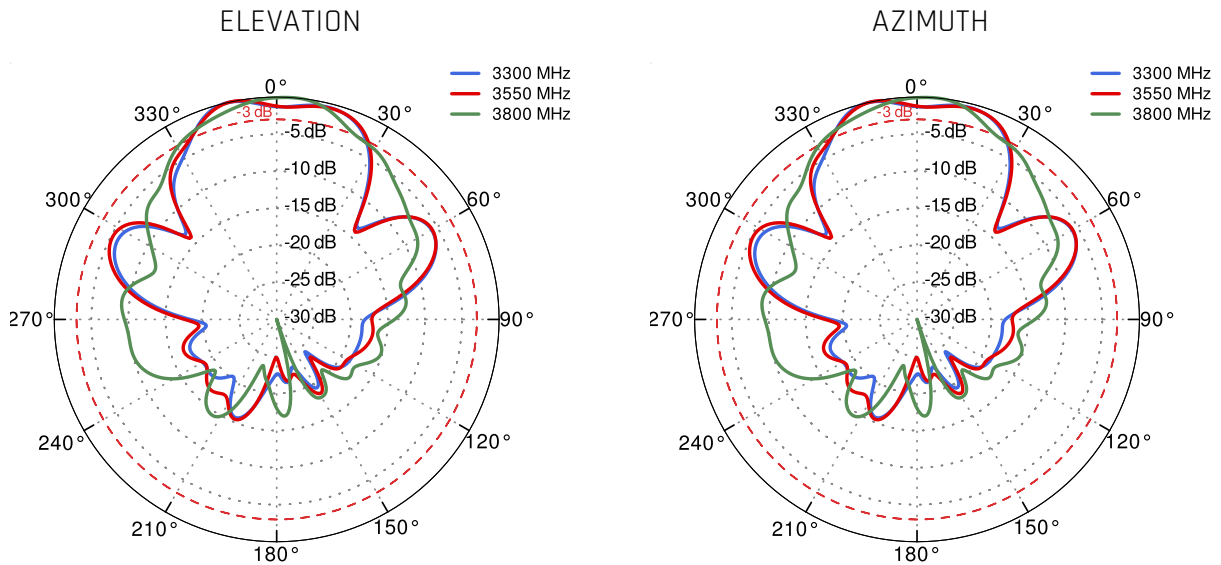
PORT 2&4 - 5G/LTE from 1.71GHz to 2.17GHz



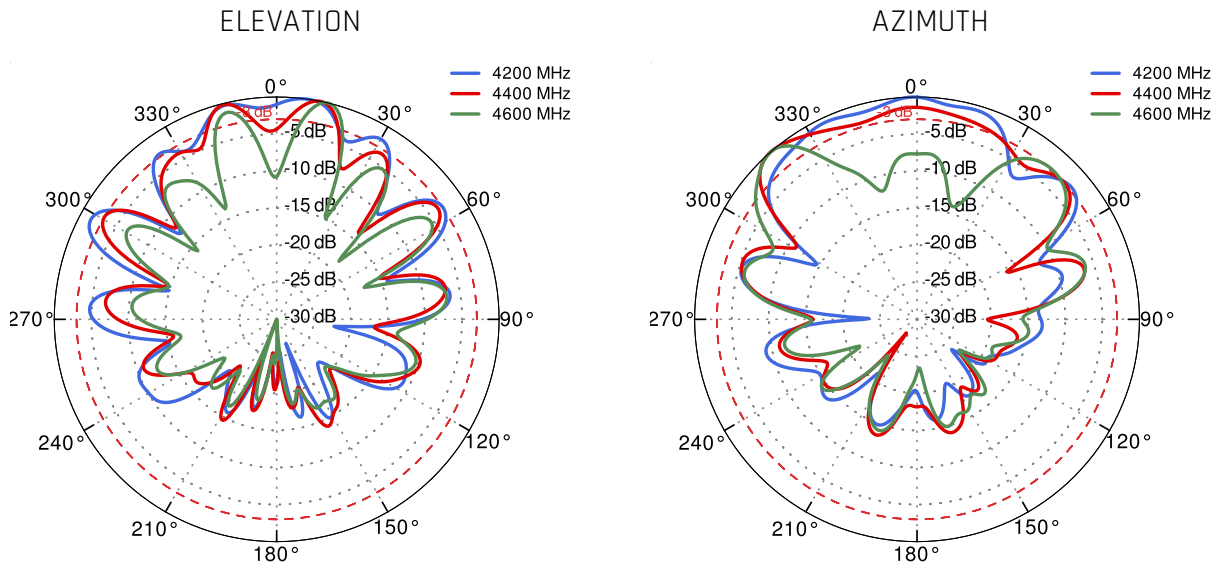
PORT 2&4 - 5G/LTE from 2.3GHz to 2.7GHz



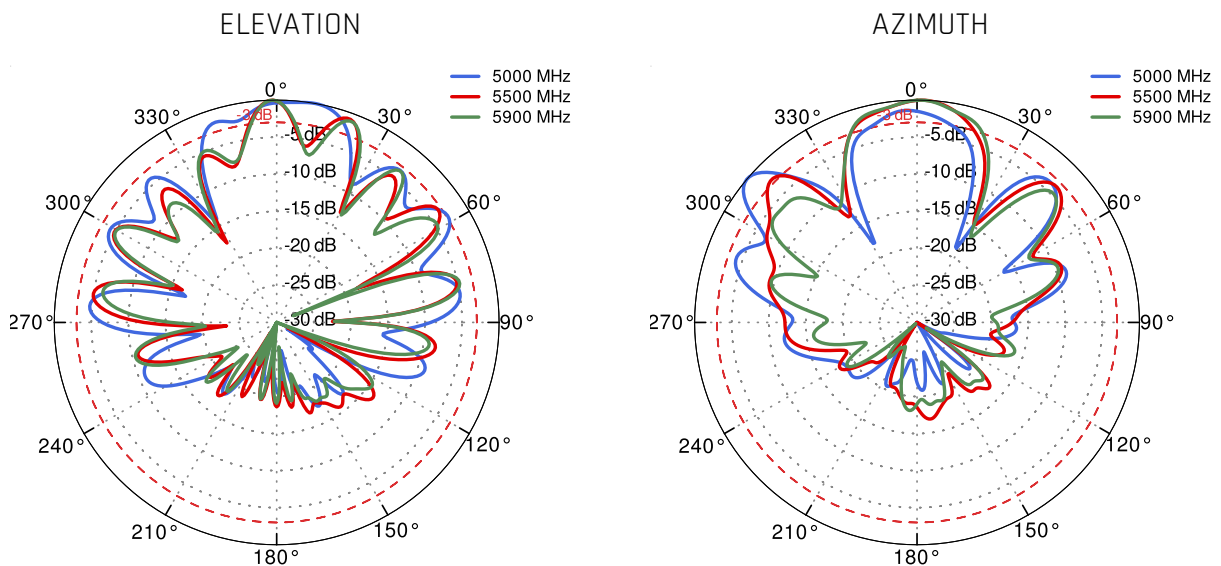
PORT 2&4 - 5G/LTE from 3.3GHz to 3.8GHz



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



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





## **DIMENSIONS**

