

# QuPanel 5G/LTE Global MIMO 2x2 Nf

## Directional ultra wideband 5G/LTE MIMO 2x2 antenna

QuPanel **5G**/LTE Nf directional MIMO 2x2 is ultra wideband 5G outdoor antenna. It's primary designed for LTE/5G/3G/2G devices which require high efficiency connections. The antenna covers many LTE bands including the new Extended LTE **Band 71** and frequencies: **600 - 6000MHz**. The mounting bracket allows the antenna to be installed on the pole or on the wall, as the client antenna to receive Internet by LTE/5G/3G/2G. It's ideal solution to use with all industrial and domestic MIMO2x2 5G modems and routers. Integrated Nf connectors.

**5G****BAND 71****2x2 MIMO****617-6000MHz****7 dBi****DIRECTIONAL****IP 68****-40° TO +80°****WIDE BAND 600-6000MHZ, 5G TECHNOLOGY****FIBERGLASS, WALL OR POLE MOUNTING BRACKET****TWO NF CONNECTORS****80° BEAMWIDTH****7DBI GAIN****MADE IN EUROPE**

## 5G / LTE ANTENNA SPECIFICATION

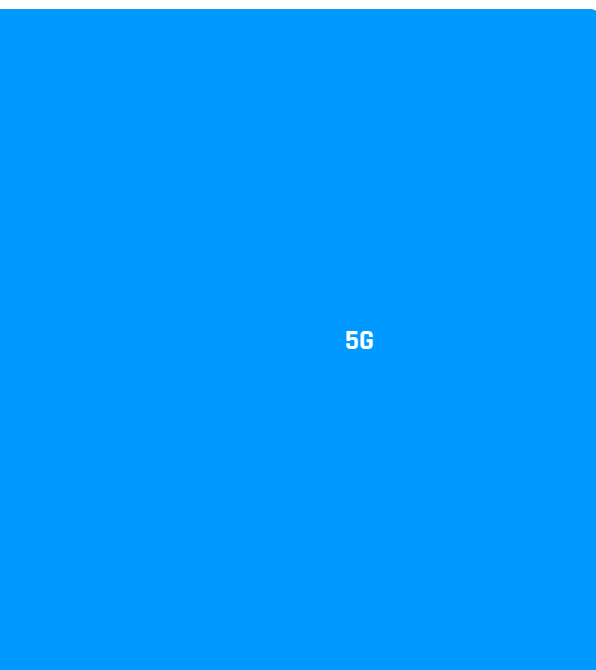
FREQUENCY	617 - 960 MHz 1.7 - 2.7 GHz 3.3 - 4.6 GHz 4.7 - 6.0 GHz
GAIN	617 - 960 MHz : 6 dBi 1.7 - 2.7 GHz : 7 dBi 3.3 - 4.6 GHz : 7 dBi 4.7 - 6.0 GHz : 5.5dBi
SUPPORTED LTE BANDS	1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13, 14, 17, 18, 19, 20, 22, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 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 $\Omega$

## MECHANICAL SPECIFICATION

MATERIALS	ABS, aluminum, PTFE, fiberglass
CONNECTOR TYPE	Nf
INGRESS PROTECTION	IP68
DIMENSIONS	486.0 x 292.2 x 105.6 mm 19.13 x 11.50 x 4.16 inch
WEIGHT	2.8 kg 6.17 lbs
OPERATING TEMPERATURE	From -40°C to 80°C From -40°F to 176°F
MAST DIAMETER	25-66mm 0.98-2.60 inch

## FREQUENCY BANDS

LTE / 4G	1	2	3	4	5	7	8	6000 MHz
	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							
617 MHz								



	n1	n2	n3	n5	n7	n8	n12	
	n13	n14	n18	n20	n25	n26	n28	
	n29	n30	n34	n38	n39	n40	n41	
617 MHz	n46	n47	n48	n53	n65	n66	n67	6000 MHz
	n71	n77	n78	n79	n80	n81	n82	
	n83	n84	n85	n86	n89	n90	n95	
	n97	n98	n100	n101	n256			

## COMPATIBLE ROUTERS

VARIANT: AP5G2-GN

<b>TELTONIKA</b>
<b>ROBUSTEL</b>
<b>RAJANT</b>
<b>ACKSYS</b>
<b>ADVANTECH</b>
<b>AIRGAIN</b>

RUT200, RUT230, RUT240, RUT241, RUT260, RUT271, RUT900, RUT901, RUT950, RUT951, RUT955, RUT956, RUT976, RUTM09, RUTM11, RUTX09, RUTX11, TRB160
EG5100, LG5100, R1500, R1510, R1511, R1511P, R1520 Global, R1520-4L (S), R1520-4L (V), R2010, R2011, R201x, R2110, R3000, R3000 Industrial, R3000 LG, R3000 Lite, R3000 Quad, R3010
Peregrine LTE BreadCrumb FE1-2455LS, Peregrine LTE BreadCrumb FE1-2455LW
AirBox LTE, AirWan
ICR-2031
NL-SW-LTE-GELS3, NL-SW-LTE-QBG95, NL-SW-LTE-QBG96, NL-SW-LTE-SRC7611-4, NL-SW-LTE-TC1NAG, NL-SW-LTE-TC1WWG, NL-SW-LTE-TC4NAG, NL-SW-LTE-TC4WWG, NL-SW-LTE-TG1WWG, NL-SWNB-LTE-NRF9160-D



<b>AM TELECOM</b>	AMM545, AMM5500, AMM574, AMM585
<b>ANYBUS</b>	Wireless Router WLAN
<b>COMSET</b>	CM210A-W, CM210Q-W, CM510Q-W, CM685T-W, CM685V-1, CM685V-4, CM685V-6, CM685V-6-G, CM820Q-4, CM820Q-6, CM820T-W, CM820V-4, CM820V-W
<b>D-LINK</b>	DWR-960, G415 AX1500, G416 AX1500, N300 4G
<b>DIGI</b>	6310-DX, 6330-MX, EX12, EX15, IX10, IX15, IX20, IX30, WR31, WR44 RR
<b>ERICSSON (CRADLEPOINT)</b>	CBA550, E100, E102, IBR200, IBR600C, IBR900, L950, R500, R920, S400, S700
<b>FIBOCOM</b>	FG132-M.2, FG132-MiniPCle, FM101-CG, FM101-EAU, FM101-NA, L610-EU-MiniPCle, L610-LA-MiniPCle, L716-CN MiniPCle, L716-EU-MiniPCle, NL668-AM MiniPCle, NL668-EAU-M.2, NL668-EU MiniPCle, NL668-JP MiniPCle, NL668-LA MiniPCle
<b>FORTINET</b>	FEX-101F, FEX-201F, FEX-211E, FEX-212F, FortiGate Rugged 60F-3G4G, FortiGate Rugged 70F-3G4G
<b>FOUR-FAITH</b>	4G Cellular Router F-R100, 4G Industrial Computer F4931-R2H, 4G Industrial Computer F4932-R2H-DF1, Android Industrial Computer F4932-R1Q, Cellular Wireless Router F-R200, Dual Sim 4G Router F3X46, Dual-sim WiFi Router F3946, Edge Computing Gateway F-G100, Industrial WiFi Router F3X36Q, LAN Port Router F3X26 V2, LTE Industrial Router F3X27 V2, LTE Wireless Router F3x36
<b>INHAND</b>	IR302
<b>MIKROTIK</b>	RB912, RB922, RBM11G, RBM33G
<b>MILESIGHT</b>	UR32
<b>OPTION</b>	CloudGate LTE WW CAT4

<b>PEPLINK</b>	Balance 20X, Balance 310 5G, MAX BR1 Classic, MAX BR1 ENT, MAX BR1 IP55, MAX BR1 M2M, MAX BR1 Mini, MAX BR1 Mini (HW3), MAX BR1 Mini Core (HW3), MAX BR1 Mini M2M, MAX BR1 MK2, MAX BR1 Pro, MAX BR1 Slim
<b>PROROUTE</b>	H685 4G Router, H685 LTE 4G CAT6 Router, H820 M2M 4G Router
<b>QUECTEL</b>	LTE-A EM060K-EA, LTE-A EM060K-GL, LTE-A EM061K-GL, LTE-A EM120K-GL, LTE-A EM120R-GL
<b>RAJANT</b>	Peregrine LTE BreadCrumb FE1-2455LS, Peregrine LTE BreadCrumb FE1-2455LW
<b>ROBUSTEL</b>	EG5100, LG5100, R1500, R1510, R1511, R1511P, R1520 Global, R1520-4L (S), R1520-4L (V), R2010, R2011, R201x, R2110, R3000, R3000 Industrial, R3000 LG, R3000 Lite, R3000 Quad, R3010
<b>SEMTECH (SIERRA WIRELESS)</b>	AirLink LX40, AirLink LX60, AirLink MP70, AirLink RV50X, AirLink RV55, AirLink RX55, EM7411, EM7421, EM7431, EM7511, EM7565, EM7590, EM7595, EM7690, MC7411, MC7421, MC7431, RV55, WP7607, WP7610
<b>SIEMENS</b>	6GK5876-4AA00-2BA2, 6GK5876-4AA00-2DA2, 6GK5876-4AA10-2BA2
<b>SIMCOM</b>	A7602E-H-M2, A7602E-H-PCIEA, A7608SA-H MiniPCie, A7906E-M2, SIM7600X-H MiniPCie, SIM7600X-H-M2, SIM7600X-MiniPCie, SIM7906A-M2, SIM7906E-M2, SIM7906G-M2, SIM7912A-M2, SIM7912E-M2
<b>TELIT CINTERION</b>	FN920C04, LE910Cx Linux mPCie Series, LE910Cx ThreadX mPCie Series, LM940, LN920, mPLS63, mPLS83
<b>TELTONIKA</b>	RUT200, RUT230, RUT240, RUT241, RUT260, RUT271, RUT900, RUT901, RUT950, RUT951, RUT955, RUT956, RUT976, RUTM09, RUTM11, RUTX09, RUTX11, TRB160
<b>WAVETEL</b>	W2400 LTE , W3600 4G/LTE Dual WAN, W3604 Multi-WAN, W3608 Multi-WAN, W421, W4300S 5G, W4600, W4600-S2
<b>WLINK</b>	ER120, G200, G510, G520, ODU310, R210, R220, R520

**ZYXEL**

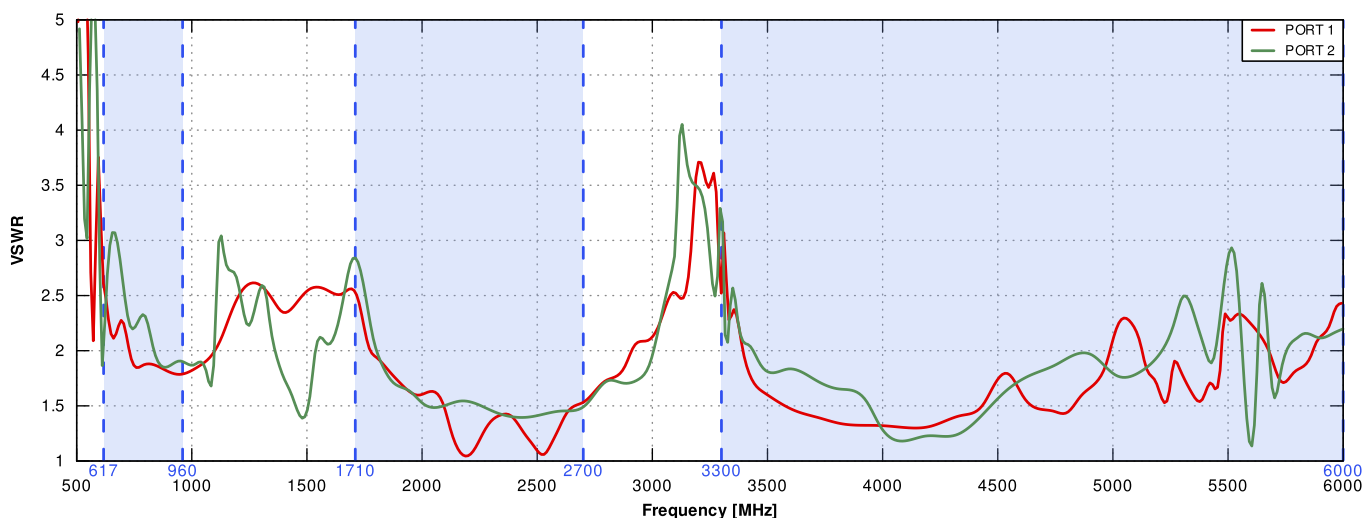
 LTE3202-M437, LTE3301-PLUS, LTE5388-M804, LTE5398-M904,  
NR5101

**OTHER**

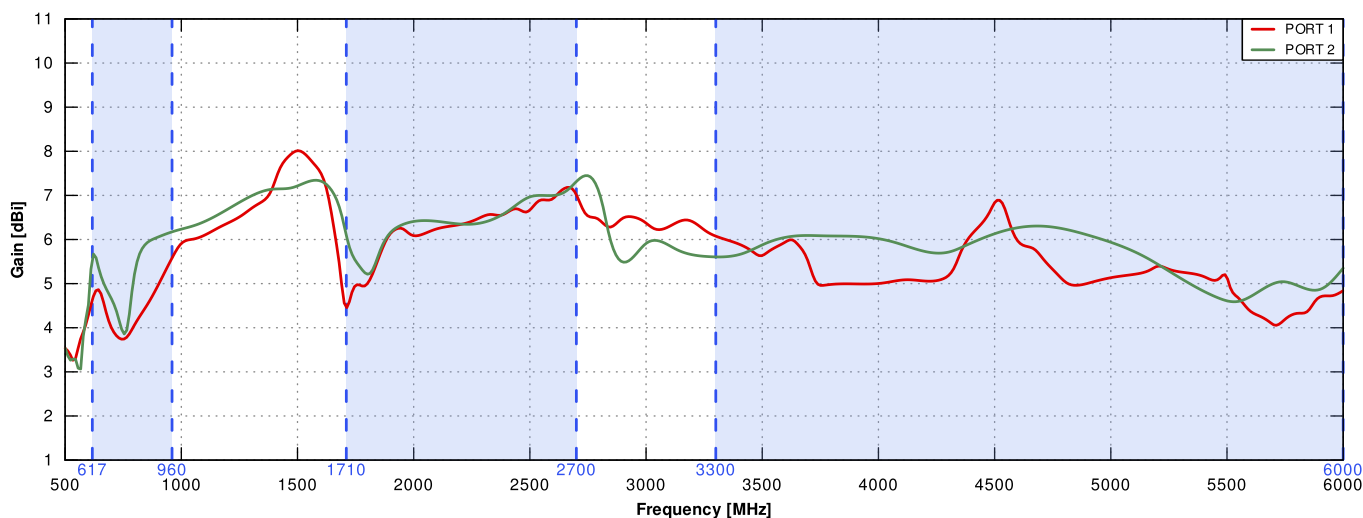
2 \* SMA, 3 \* SMA

## PLOTS

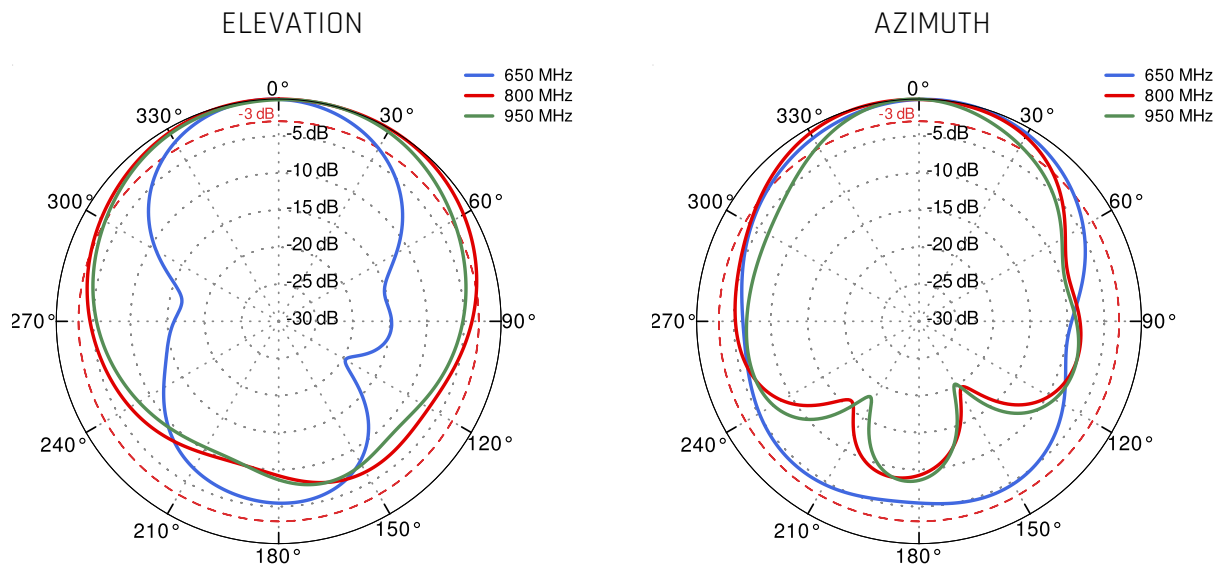
VSWR



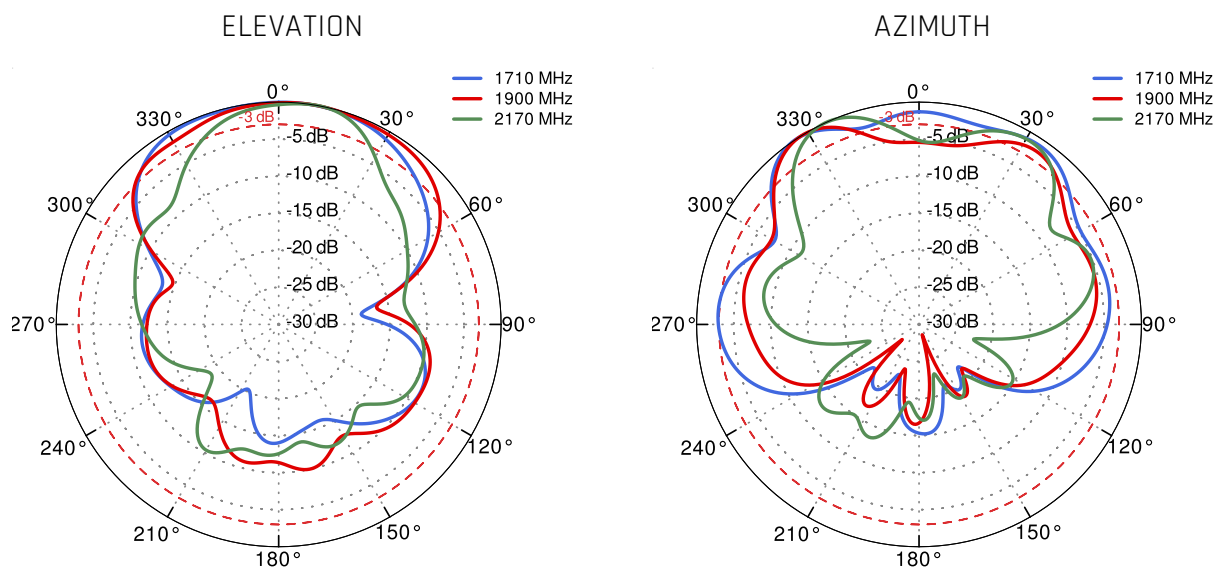
Gain



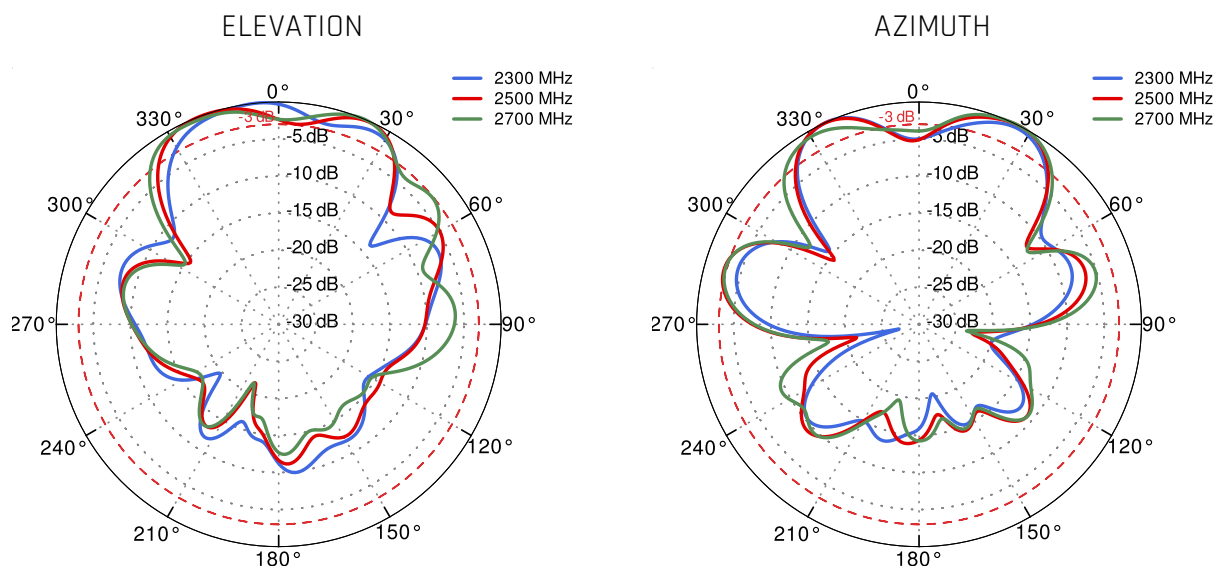
## PORT 1 - 5G/LTE from 650MHz to 950MHz



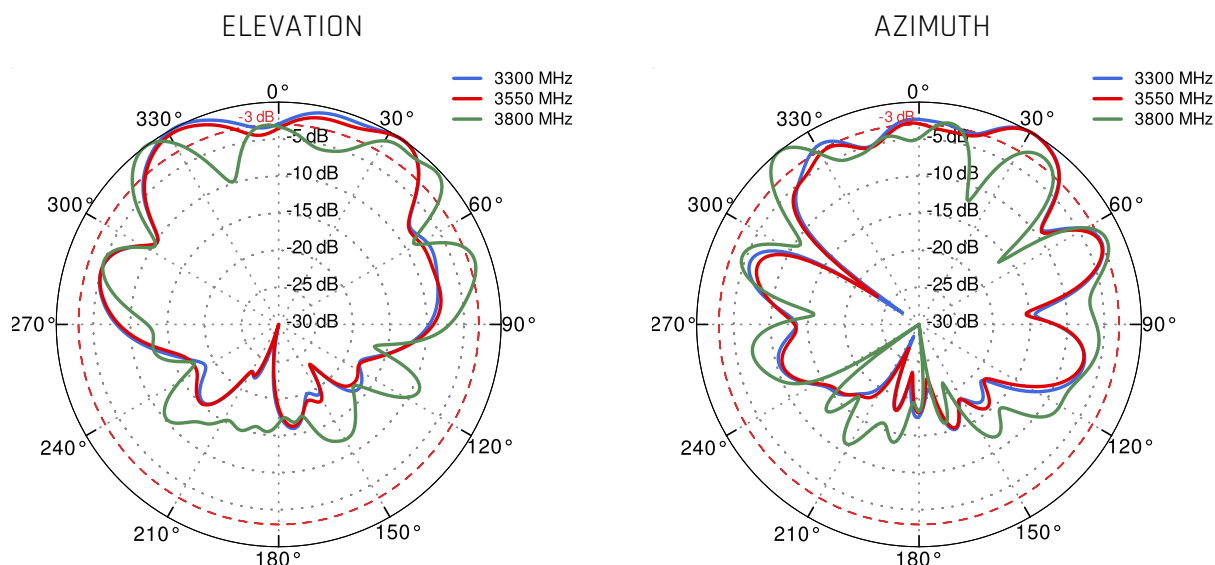
## PORT 1 - 5G/LTE from 1.71GHz to 2.17GHz



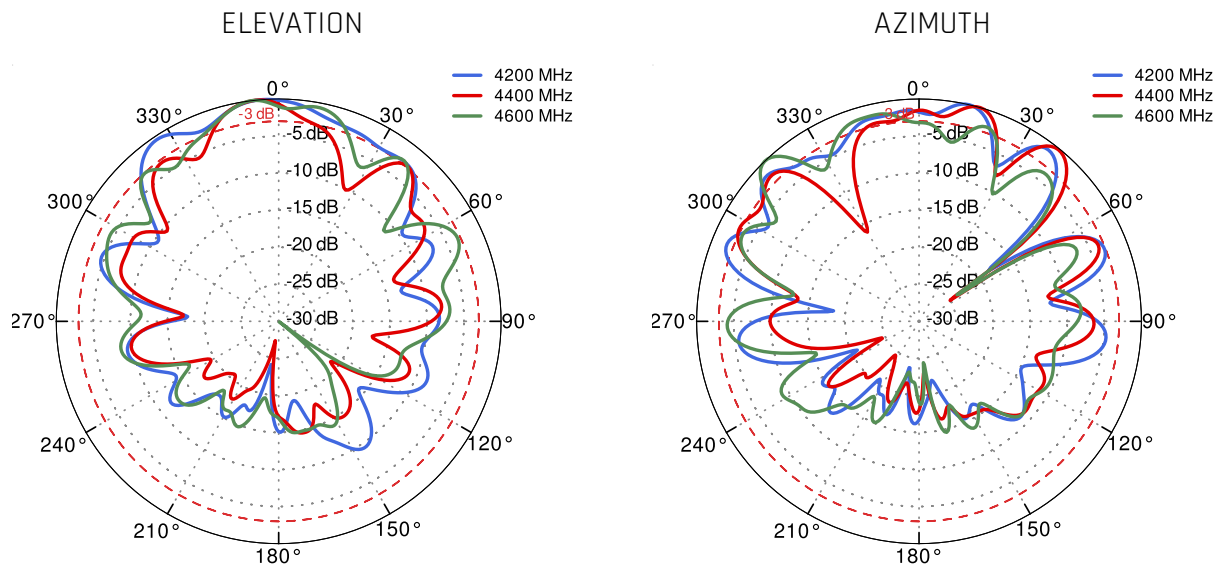
## PORT 1 - 5G/LTE from 2.3GHz to 2.7GHz



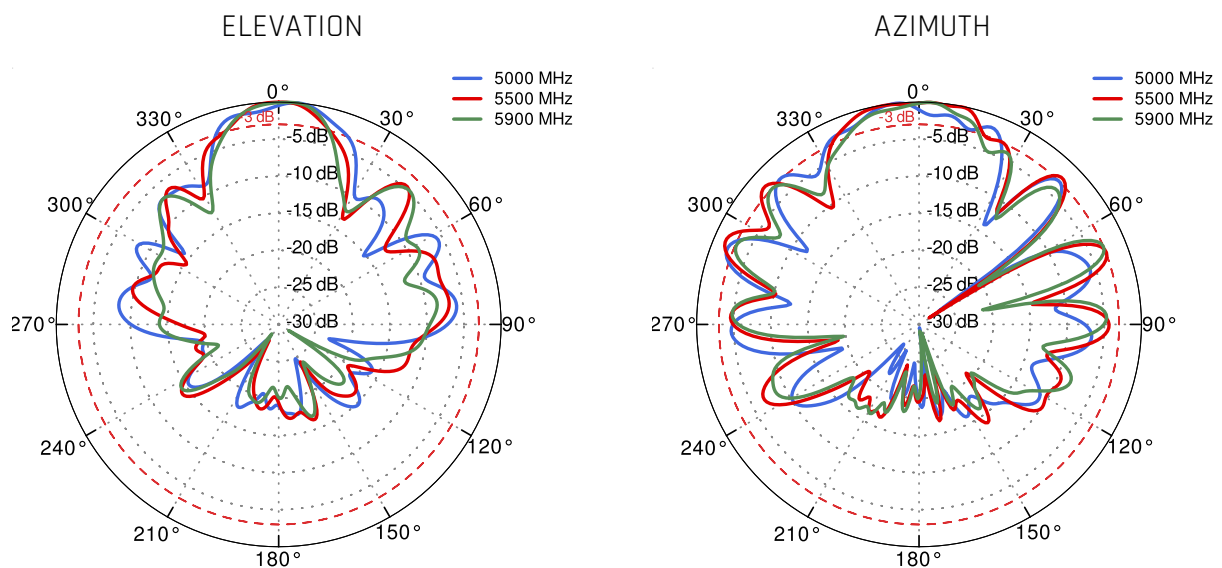
## PORT 1 - 5G/LTE from 3.3GHz to 3.8GHz



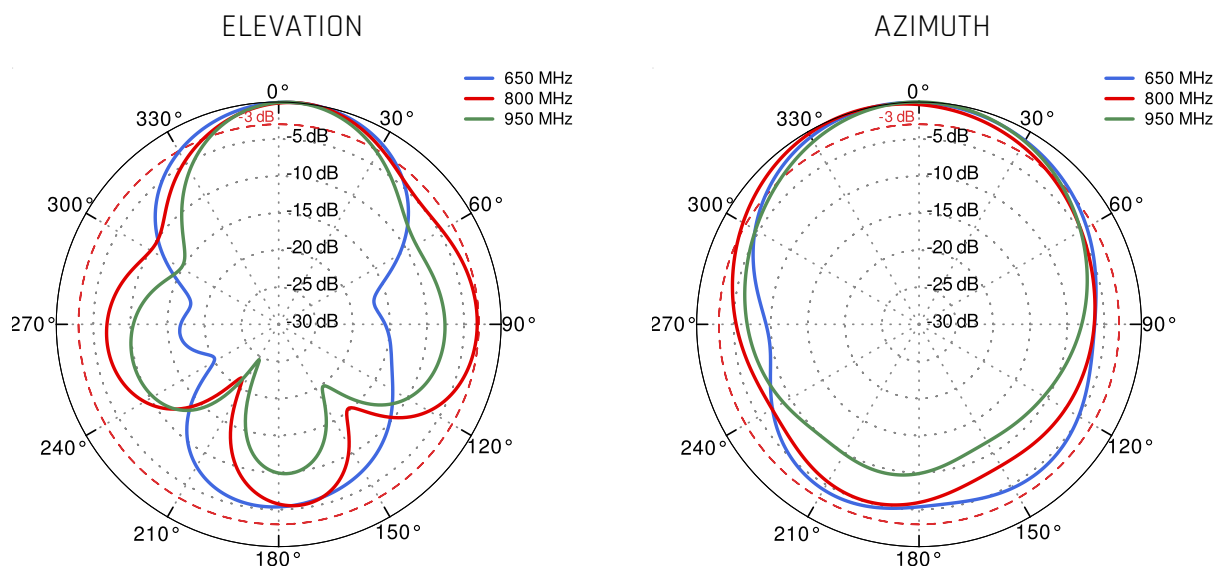
## PORT 1 - 5G/LTE from 4.2GHz to 4.6GHz



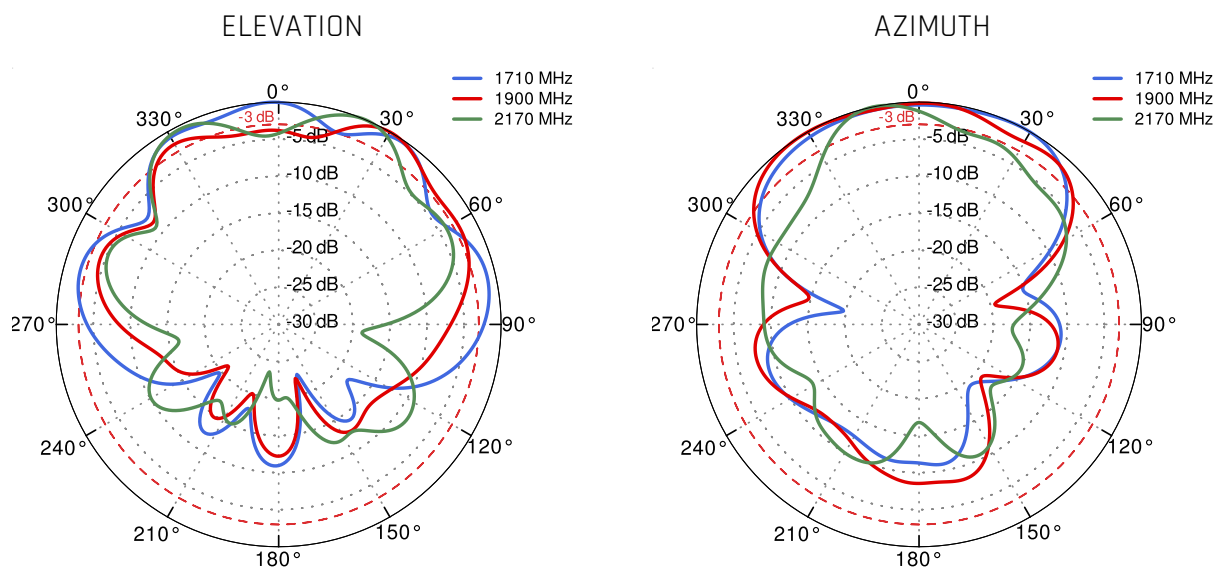
## PORT 1 - 5G/LTE from 5.0GHz to 5.9GHz



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

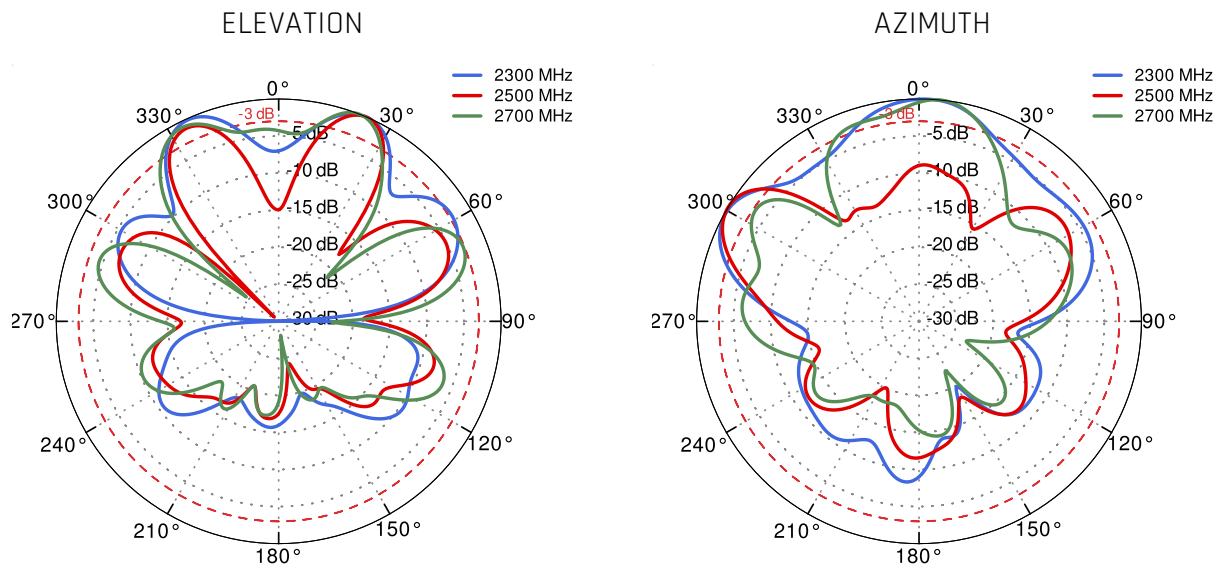


## PORT 2 - 5G/LTE from 1.71GHz to 2.17GHz

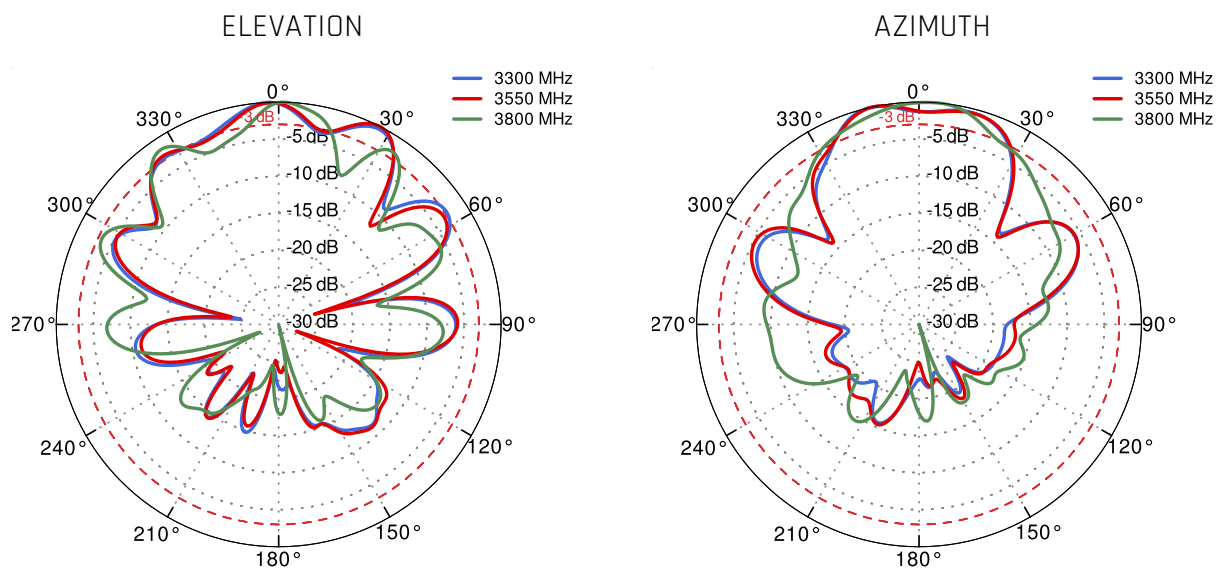




## PORT 2 - 5G/LTE from 2.3GHz to 2.7GHz

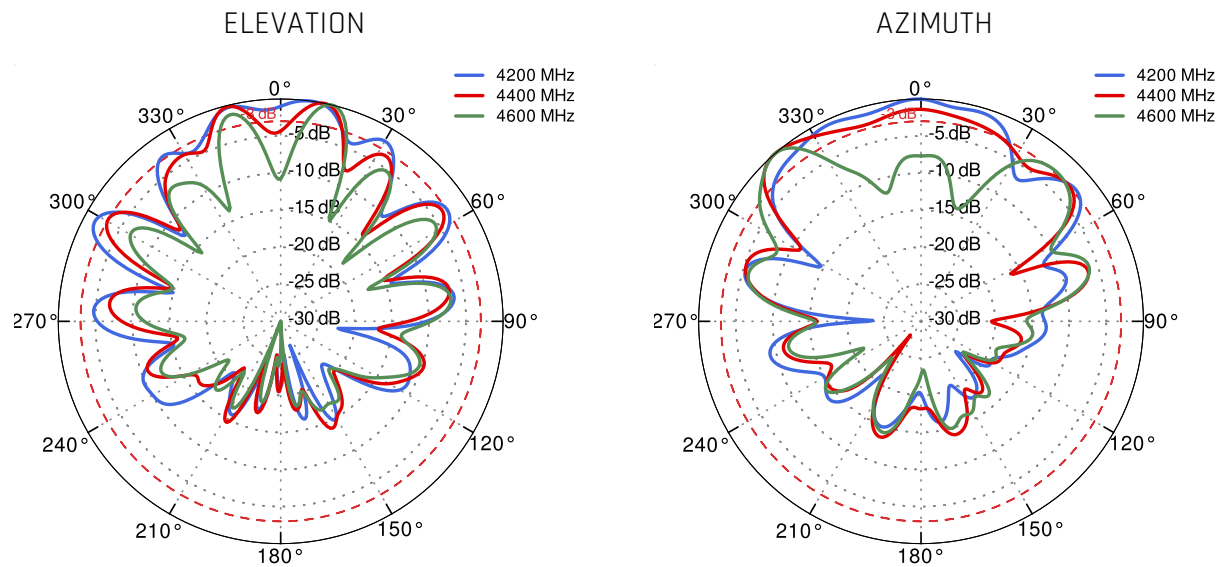


## PORT 2 - 5G/LTE from 3.3GHz to 3.8GHz

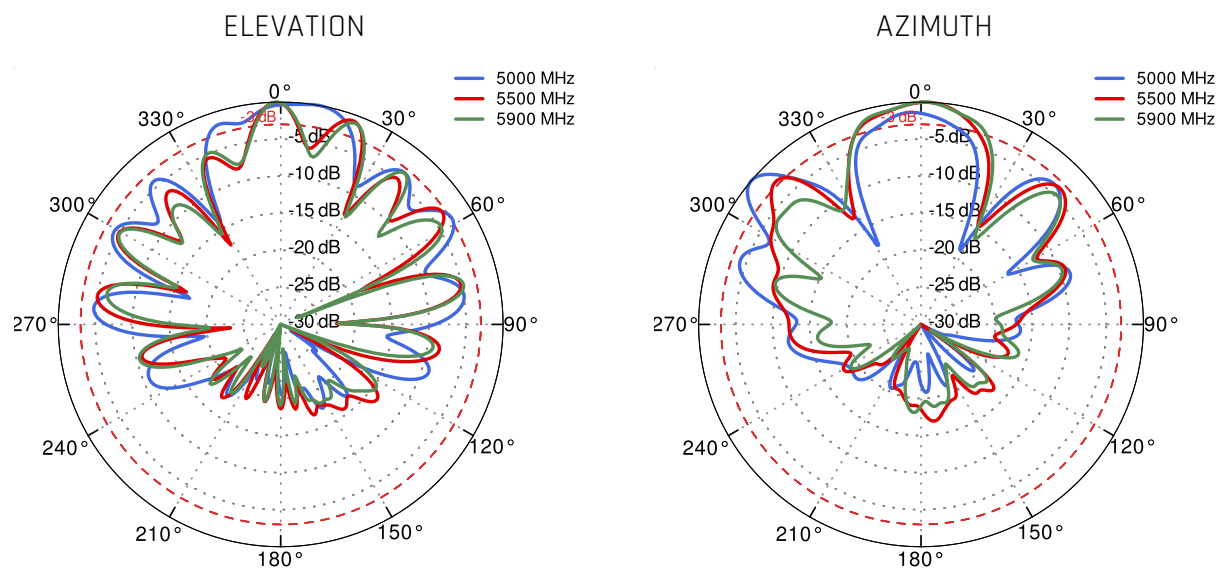




## PORT 2 - 5G/LTE from 4.2GHz to 4.6GHz



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



## DIMENSIONS

