

# QuPanel 5G/LTE MIMO 2x2 Nf

## Directional High Power multiband 5G/LTE MIMO 2x2 antenna

QuPanel 5G/LTE directional MIMO 2x2 high gain outdoor antenna is primarily designed for 5G and 4G LTE usage but also offers compatibility with 3G and 2G networks. This antenna is especially effective in enhancing signal strength in rural and suburban areas or places with weak mobile signal.

It is intended for installation on buildings, either on a pole or affixed to a wall.

Thanks to its exceptionally wide operating frequency range, this antenna can function as a versatile client for various 5G bands like n77 and n78, as well as LTE bands such as LTE700, LTE800, LTE1800, LTE1900, LTE2100, LTE2300, LTE2600, LTE3400, and LTE3800.

It is fully compatible with Teltonika products and other MIMO 4x4 5G/LTE/3G/2G modems and routers.

**5G****2x2 MIMO****694-3800MHz****7 dBi****DIRECTIONAL****IP 67****-40° TO +80°**

OUTDOOR ANTENNA WORKS IN ANY WEATHER CONDITIONS, IP67



MOUNTING SYSTEM WITH TWO PLANES, 60 DEGREES REGULATION



TWO NF CONNECTORS



7.5 DBI GAIN



70° BEAMWIDTH



MADE IN EUROPE



## 5G / LTE ANTENNA SPECIFICATION

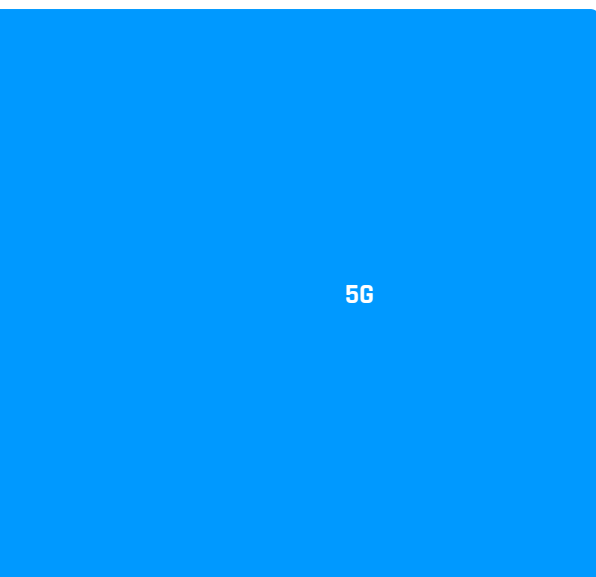
FREQUENCY	694 - 960 MHz 1.7 - 2.2 GHz 2.2 - 2.7 GHz 3.3 - 3.8 GHz
GAIN	694 - 960 MHz : 7 dBi 1.7 - 2.2 GHz : 7 dBi 2.2 - 2.7 GHz : 7.5 dBi 3.3 - 3.8 GHz : 5.5 dBi
SUPPORTED LTE BANDS	1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13, 14, 17, 18, 19, 20, 22, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 48, 49, 52, 53, 65, 66, 67, 68, 69, 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, n48, n53, n65, n66, n67, n78, n80, n81, n82, n83, n84, n85, n86, n89, n90, n95, n97, n98, n100, n101, n256
FRONT-TO-BACK	694 - 960 MHz : >10 dB 1.7 - 2.2 GHz : >12 dB 2.2 - 2.7 GHz : >14 dB 3.3 - 3.8 GHz : >17 dB
VSWR	<1.70, max <2.00
BEAMWIDTH	70°/70° ±15°
POLARIZATION	Dual polarized X-Pol
IMPEDANCE	50 $\Omega$

## MECHANICAL SPECIFICATION

MATERIALS	ABS, aluminum, PTFE, Fiberglass
INGRESS PROTECTION	IP67
DIMENSIONS	272 x 276 x 96 mm 10.71 x 10.87 x 3.78 inch
WEIGHT	1.8 kg 3.97 lbs
OPERATING TEMPERATURE	From -40°C to 80°C From -40°F to 176°F
CONNECTOR TYPE	Integrated Nf connectors
MAST DIAMETER	25-60mm 0.98-2.36 inch

## FREQUENCY BANDS

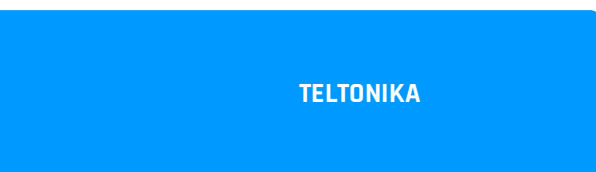
LTE / 4G	1	2	3	4	5	7	8	694 MHz	3800 MHz
	9	10	12	13	14	17	18		
	19	20	22	25	26	27	28		
	29	30	33	34	35	36	37		
	38	39	40	41	42	43	44		
	48	49	52	53	65	66	67		
	68	69	85	103	106				



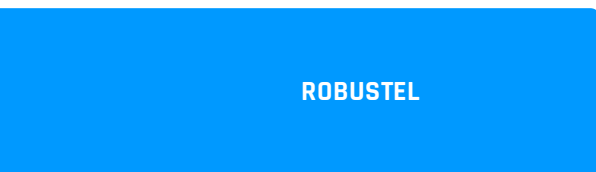
694 MHz	n1	n2	n3	n5	n7	n8	n12	3800 MHz
	n13	n14	n18	n20	n25	n26	n28	
	n29	n30	n34	n38	n39	n40	n41	
	n48	n53	n65	n66	n67	n78	n80	
	n81	n82	n83	n84	n85	n86	n89	
	n90	n95	n97	n98	n100	n101	n256	

## COMPATIBLE ROUTERS

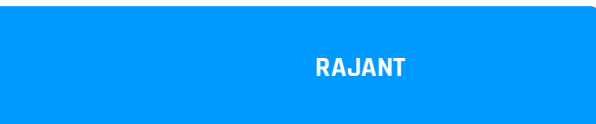
VARIANT: AP5G2-N



RUT200, RUT230, RUT240, RUT241, RUT260, RUT271, RUT900, RUT901, RUT950, RUT951, RUT955, RUT956, RUT976, RUTM09, RUTM11, RUTX09, RUTX11, TRB160



EG5100, LG5100, R1500, R1510, R1511P, R151x, R1520 Global, R1520-4L (S), R1520-4L (V), R2010, R2011, R201x, R2110, R3000, R3000 Industrial, R3000 LG, R3000 Lite, R3000 Quad, R3010



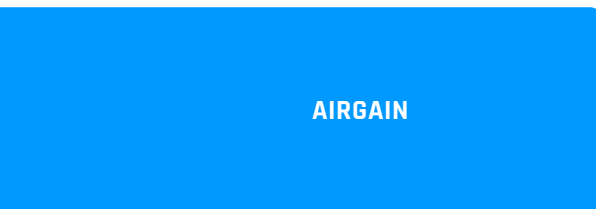
Peregrine LTE BreadCrumb FE1-2455LS, Peregrine LTE BreadCrumb FE1-2455LW



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



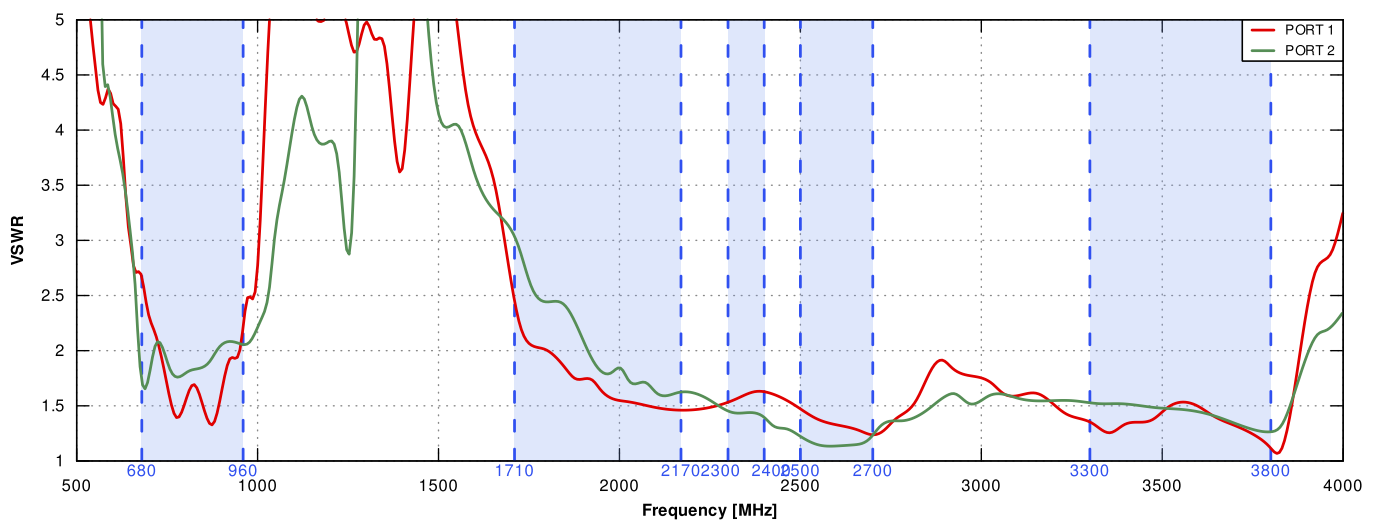
AMM545, AMM5500, AMM574, AMM585

<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>CRADLEPOINT</b>	CBA550, E100, E102, IBR200, IBR600C, IBR900, L950, R500, R920, S700
<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>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

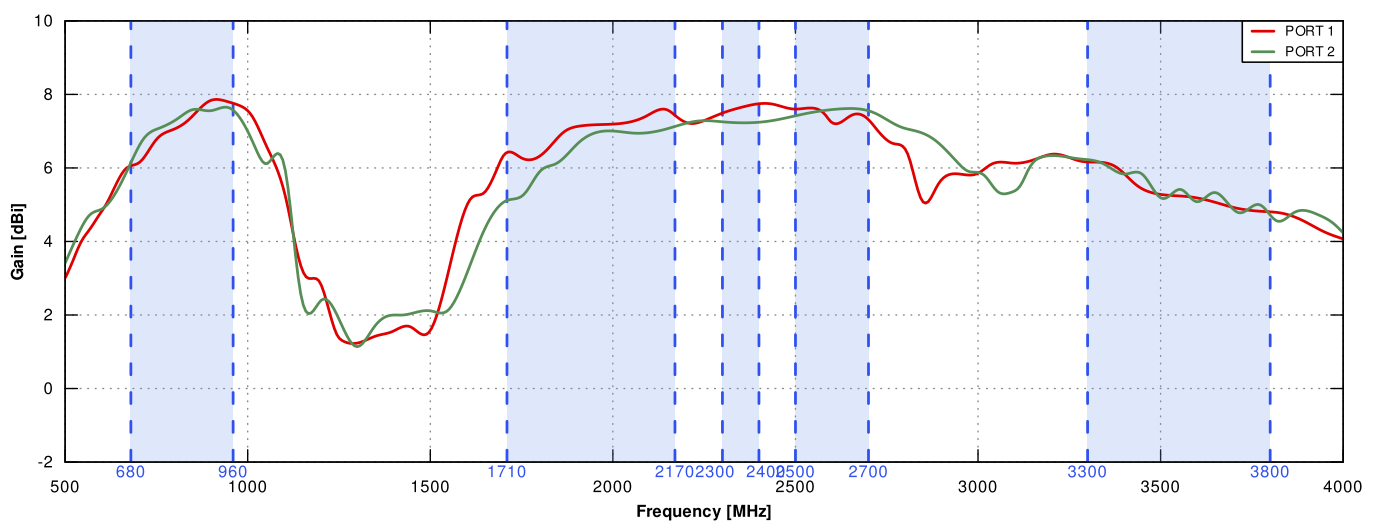
<b>PROROUTE</b>	H685 4G Router, H685 LTE 4G CAT6 Router, H820 M2M 4G Router
<b>QUECTEL</b>	LTE-A EM060K-EA, LTE-A EM060K-GL, LTE-A EM061K-GL, LTE-A EM120K-GL, LTE-A EM120R-GL
<b>RAJANT</b>	Peregrine LTE BreadCrumb FE1-2455LS, Peregrine LTE BreadCrumb FE1-2455LW
<b>ROBUSTEL</b>	EG5100, LG5100, R1500, R1510, R1511P, R151x, 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 MiniPCle, A7906E-M2, SIM7600X-H MiniPCle, SIM7600X-H-M2, SIM7600X-MiniPCle, SIM7906A-M2, SIM7906E-M2, SIM7906G-M2, SIM7912A-M2, SIM7912E-M2
<b>TELIT CINTERION</b>	FN920C04, LE910Cx Linux mPCle Series, LE910Cx ThreadX mPCle 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
<b>ZYXEL</b>	LTE3202-M437, LTE3301-PLUS, LTE5388-M804, LTE5398-M904, NR5101
<b>OTHER</b>	2 * SMA, 3 * SMA

## PLOTS

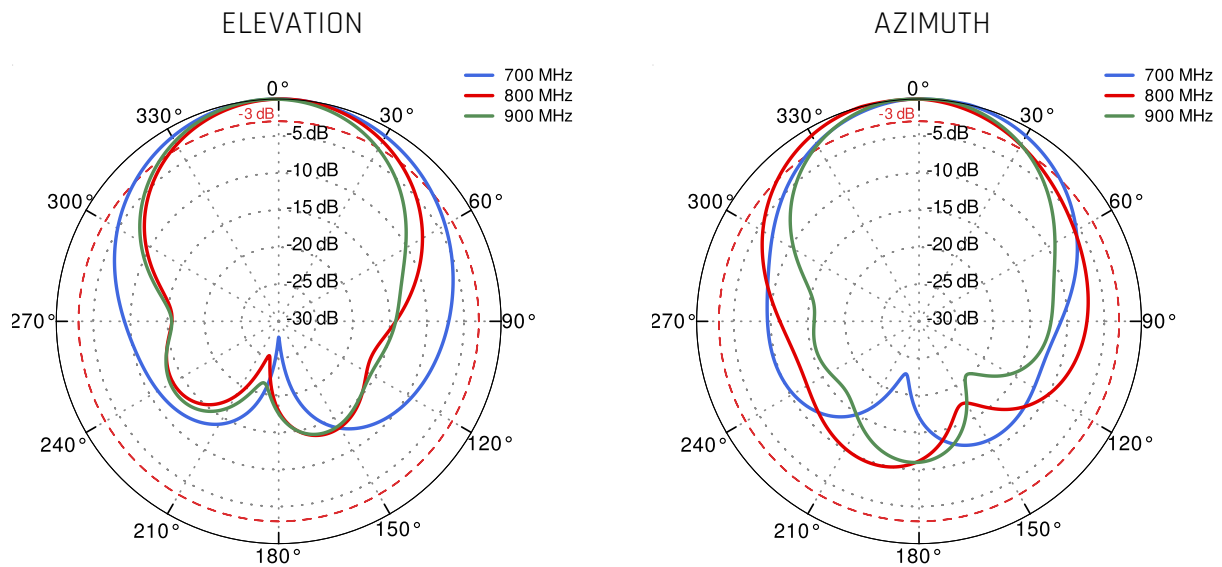
VSWR



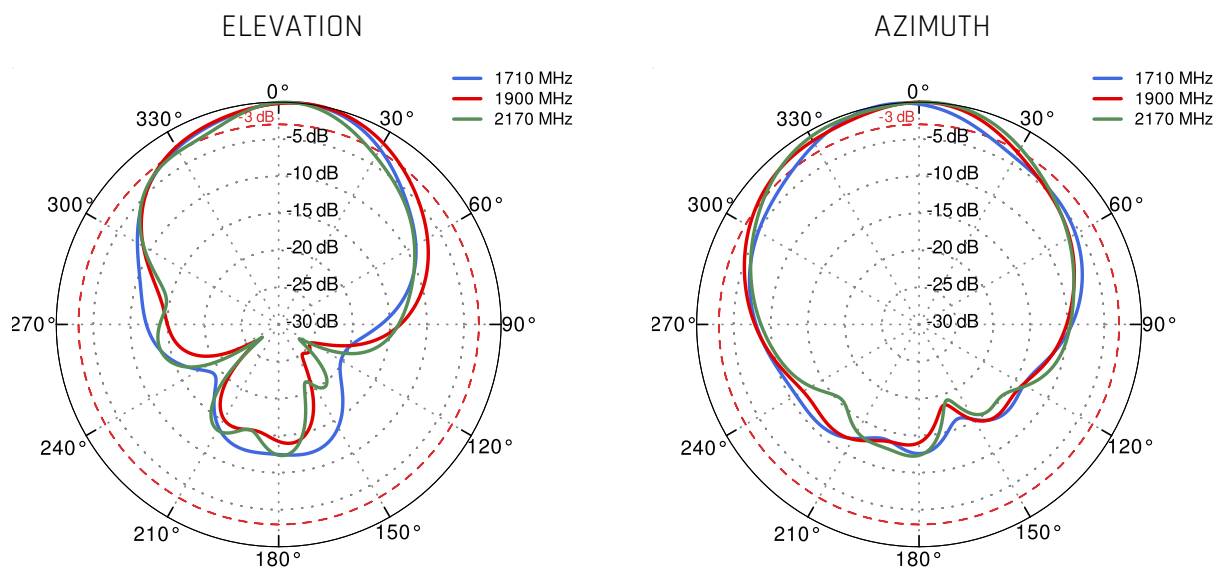
Gain



## Port 1 700MHz to 900MHz

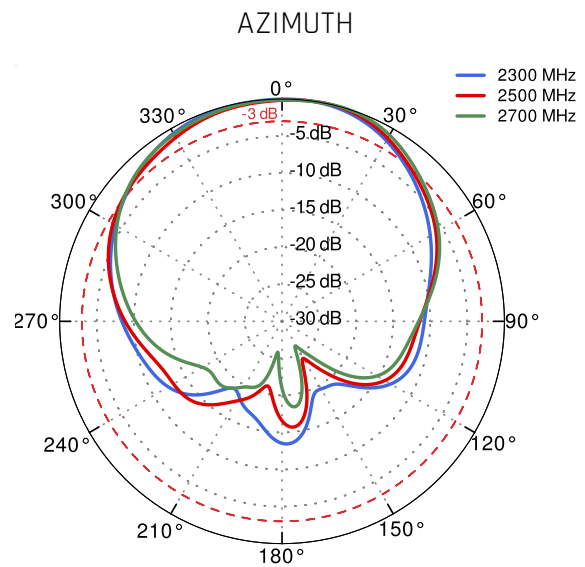
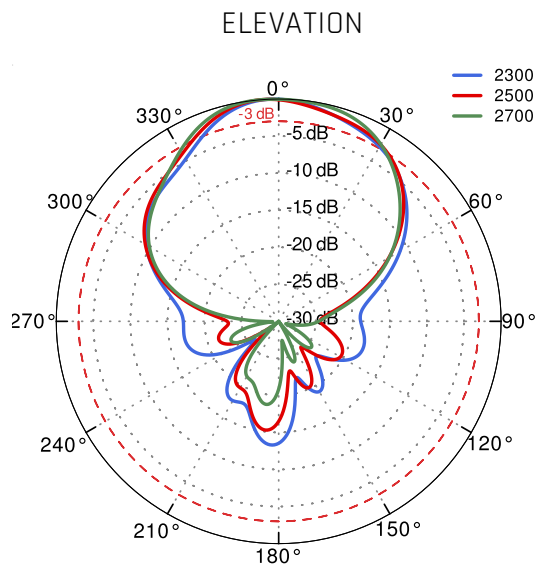


## Port 1 1.71GHz to 2.17GHz

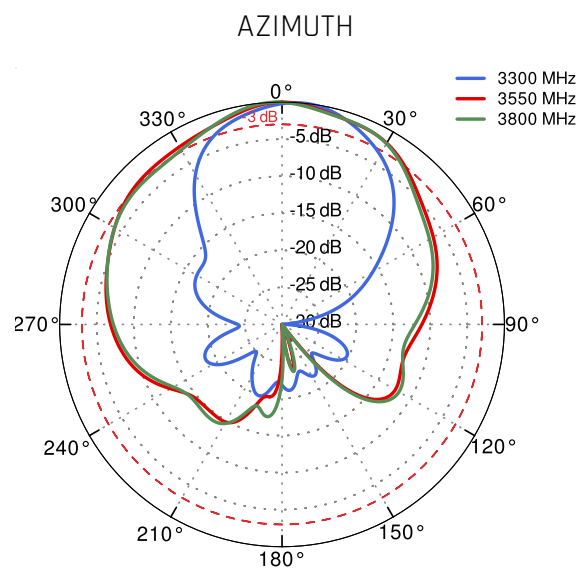
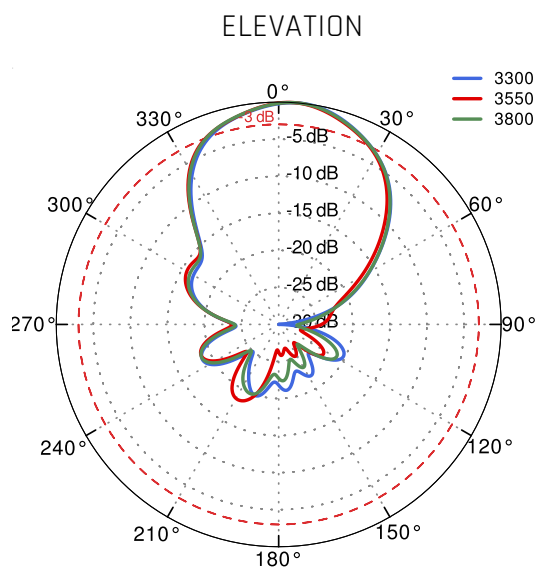




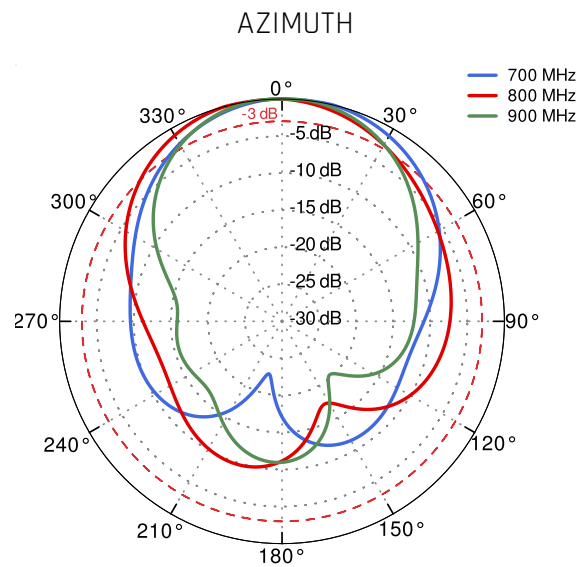
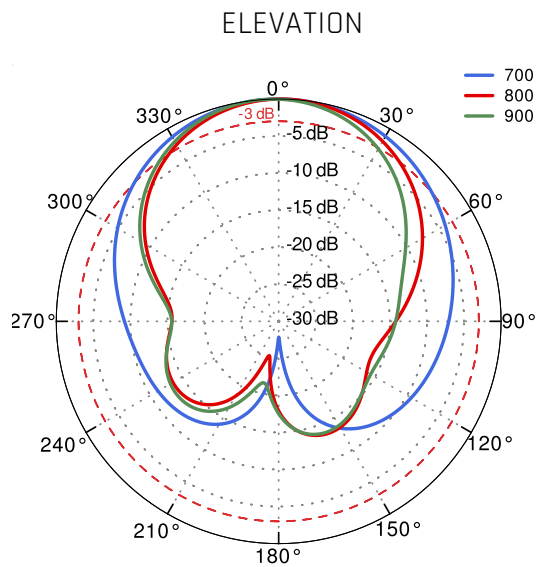
## Port 1 2.3GHz to 2.7GHz



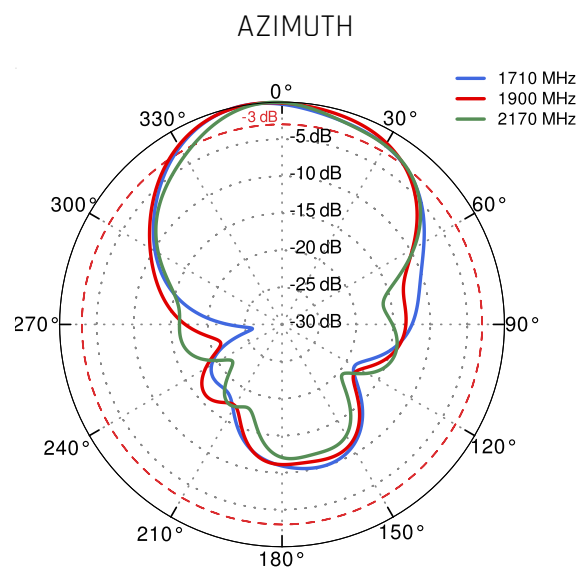
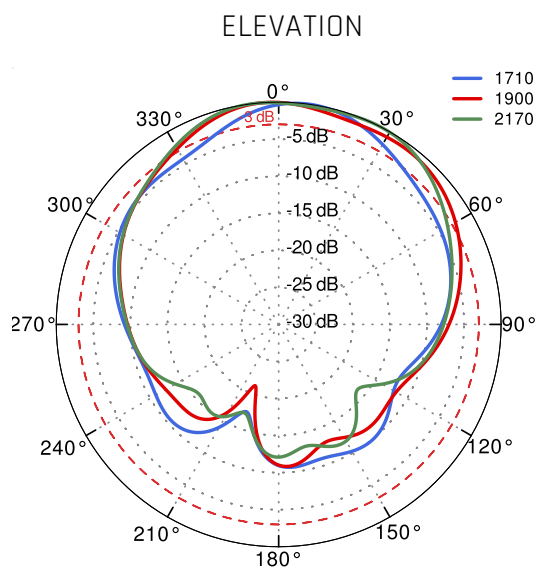
## Port 1 3.3GHz to 3.8GHz



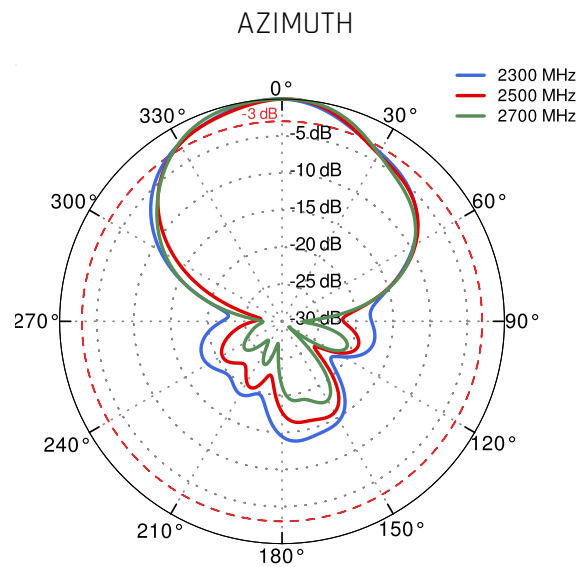
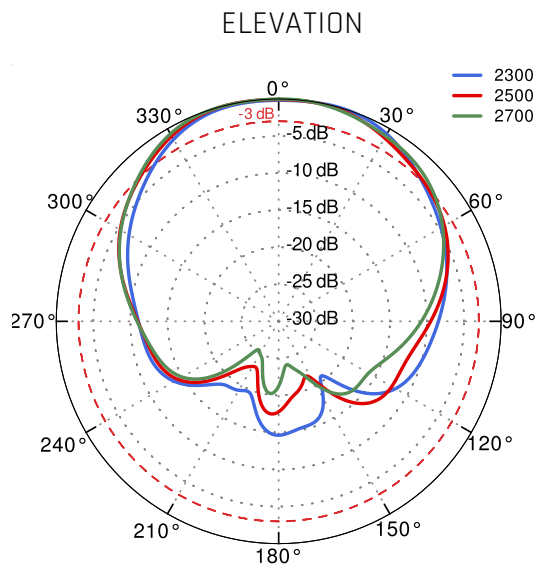
## Port 2 700MHz to 900MHz



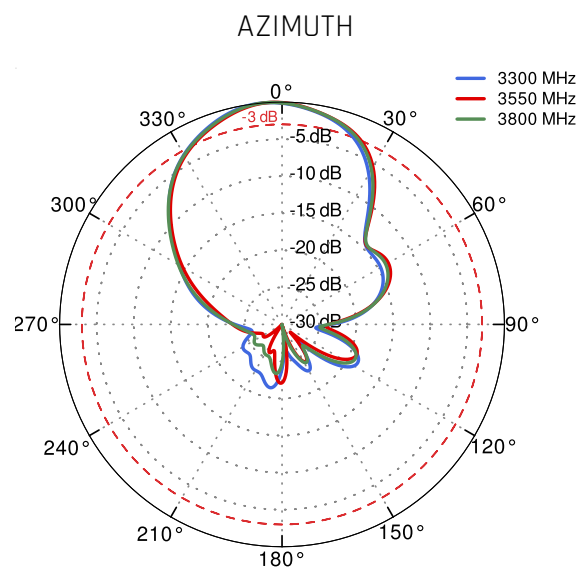
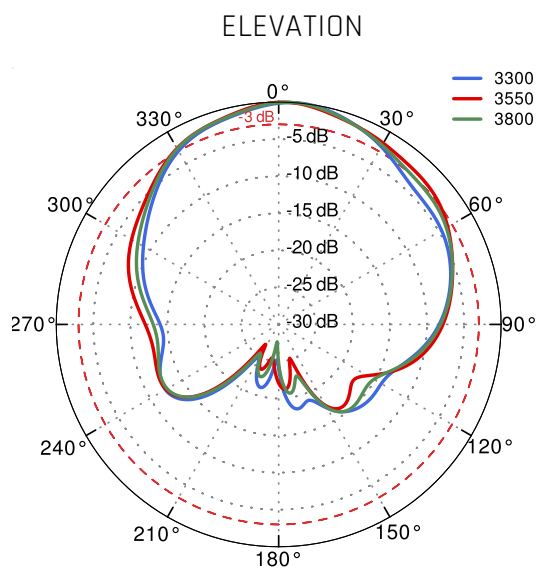
## Port 2 1.71GHz to 2.17GHz



## Port 2 2.3GHz to 2.7GHz



## Port 2 3.3GHz to 3.8GHz



## DIMENSIONS

