

# QuPanel 5G/LTE MIMO 2x2

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

QuPanel 5G/LTE directional MIMO 2x2 high gain antenna is predicted for 5G and 4G LTE mainly, but is compatible with 3G and 2G as well. The antenna improves the signal in rural/suburban and locations where the mobile signal is weak. That antenna is predicted to be installed on the buildings (on the pole or on the wall). Due to very wide working frequency range, the antenna is universal client for 5G bands n77, n78 and LTE bands like LTE700 / 800 / 1800 / 1900 / 2100 / 2300 / 2600 / 3400 / 3800. It's compatible with Teltonika 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 SMA 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
CABLE LENGTH	5m (P/N: AP5G2) or 10m (P/N: AP5G2-1) or Nf connector (P/N: AP5G2-N)
CABLE TYPE	LMR195 white
CONNECTOR TYPE	2x integrated cables with SMA plug or 2x Nf connectors
MAST DIAMETER	25-60mm 0.98-2.36 inch

# **FREQUENCY BANDS**

**LTE / 4G**

694  
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
48	49	52	53	65	66	67
68	69	85	103	106		

3800  
MHz

**5G**

694  
MHz

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

3800  
MHz

## COMPATIBLE ROUTERS

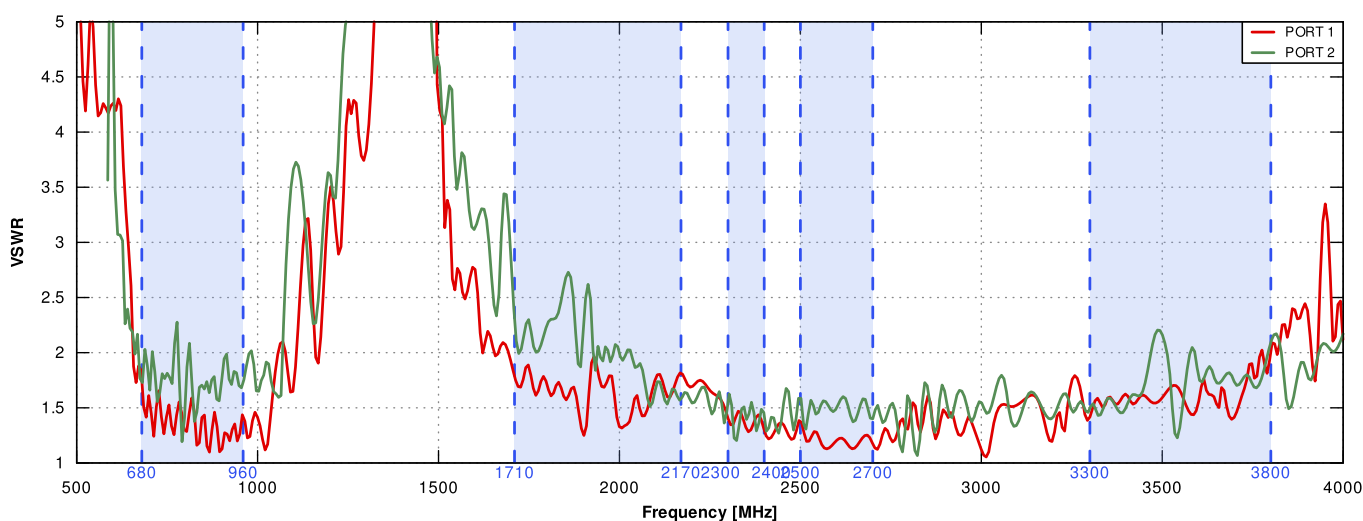
VARIANTS: AP5G2, AP5G2-1

TELTONIKA	RUT200, RUT230, RUT240, RUT241, RUT260, RUT900, RUT901, RUT950, RUT951, RUT955, RUT956, RUTM09, RUTM11, RUTX09, RUTX11
DIGI	6310-DX, 6330-MX, EX12, EX15, IX10, IX15, IX20, IX30, WR31
ROBUSTEL	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
ACKSYS	AirBox LTE, AirWan
ADVANTECH	ICR-2031
ANYBUS	Wireless Router WLAN
COMSET	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
CRADLEPOINT	CBA550, E100, E102, IBR200, IBR600C, IBR900, L950, R500, R920, S700
D-LINK	DWR-960, G415 AX1500, G416 AX1500, N300 4G
DIGI	6310-DX, 6330-MX, EX12, EX15, IX10, IX15, IX20, IX30, WR31
FORTINET	FEX-101F, FEX-201F, FEX-211E, FEX-212F, FortiGate Rugged 60F-3G4G, FortiGate Rugged 70F-3G4G
FOUR-FAITH	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

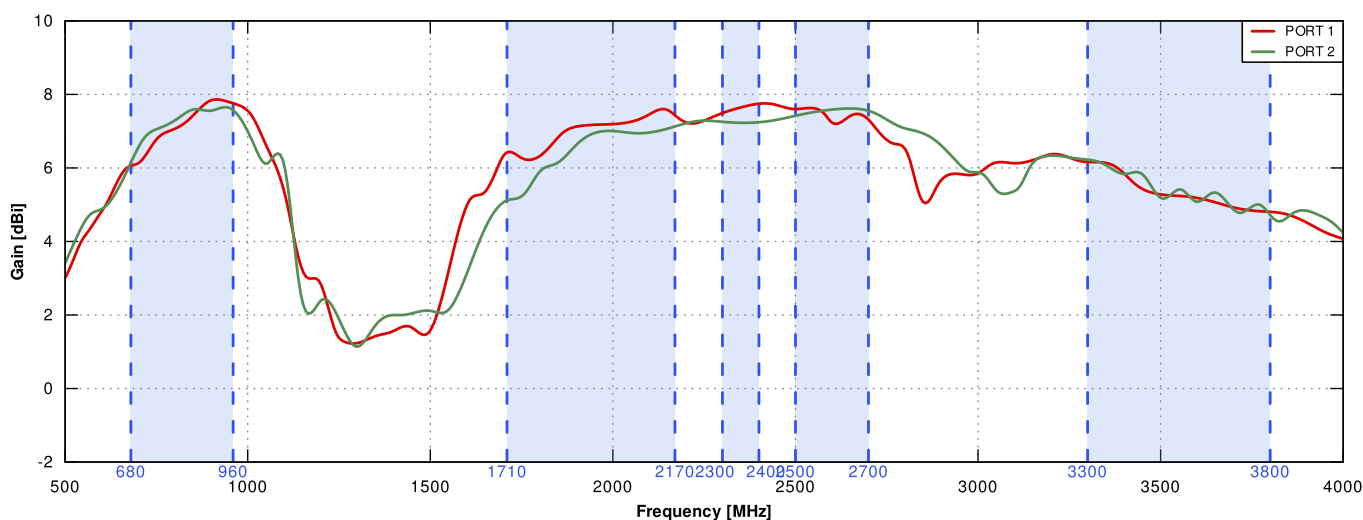
<b>MIKROTIK</b>	RB912, RB922, RBM11G, RBM33G
<b>MILESIGHT</b>	UR32
<b>OPTION</b>	CloudGate LTE WW CAT4
<b>PEPLINK</b>	Balance 20X, Balance 310 5G, MAX BR1 Classic, MAX BR1 ENT, MAX BR1 IP55, MAX BR1 M2M, MAX BR1 Mini, MAX BR1 Mini (HW3), MAX BR1 Mini Core (HW3), MAX BR1 Mini M2M, MAX BR1 MK2, MAX BR1 Pro, MAX BR1 Slim
<b>PROROUTE</b>	H685 4G Router, H685 LTE 4G CAT6 Router, H820 M2M 4G Router
<b>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>SIEMENS</b>	6GK5876-4AA00-2BA2, 6GK5876-4AA00-2DA2, 6GK5876-4AA10-2BA2
<b>SIERRA WIRELESS</b>	AirLink LX40, AirLink LX60, AirLink MP70, AirLink RV50X, AirLink RV55, AirLink RX55
<b>TELTONIKA</b>	RUT200, RUT230, RUT240, RUT241, RUT260, RUT900, RUT901, RUT950, RUT951, RUT955, RUT956, RUTM09, RUTM11, RUTX09, RUTX11
<b>WAVETEL</b>	W2400 LTE , W3600 4G/LTE Dual WAN, W3604 Multi-WAN, W3608 Multi-WAN, W421, W4600, W4600-S2
<b>WLINK</b>	ER120, G200, G510, G520, R210, R220, R520
<b>ZYXEL</b>	LTE3202-M437, LTE3301-PLUS, LTE5388-M804, LTE5398-M904, NR5101
<b>OTHER</b>	2 * SMA, 3 * SMA

## PLOTS

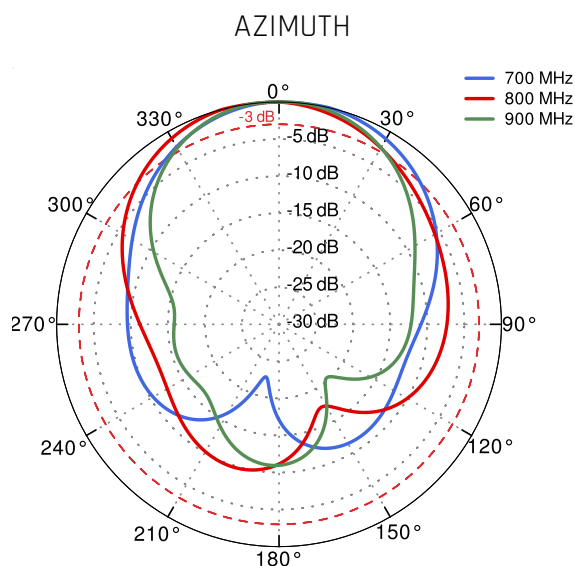
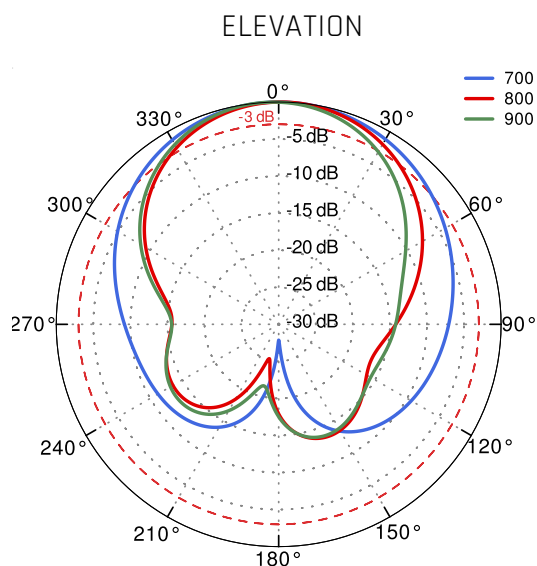
VSWR



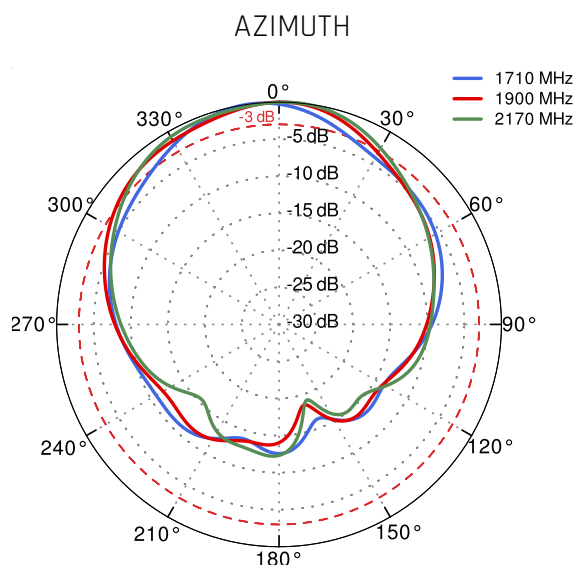
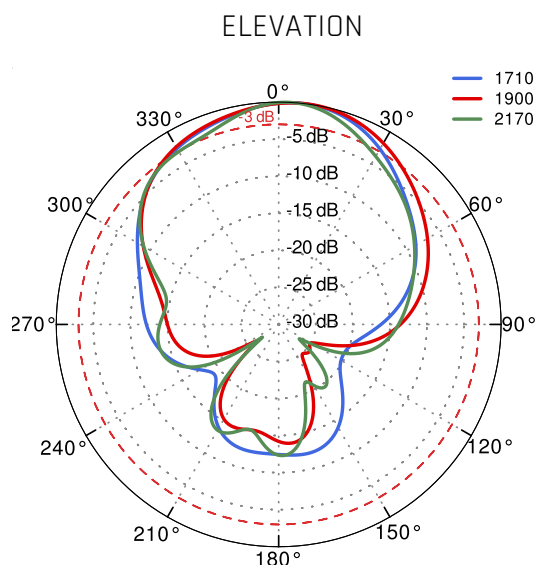
Gain



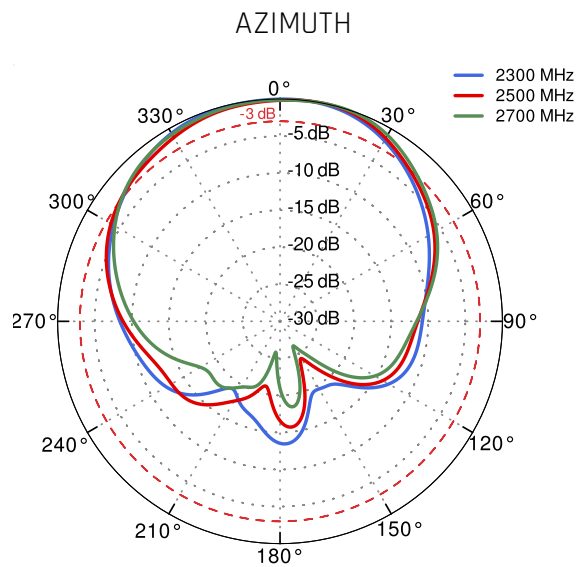
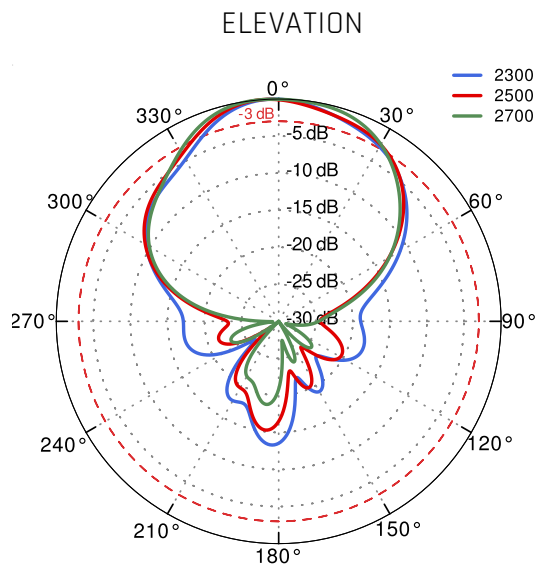
## Port 1 700MHz to 900MHz



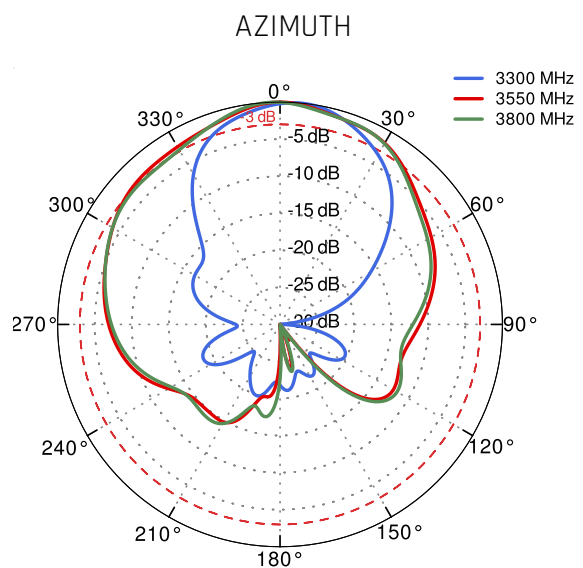
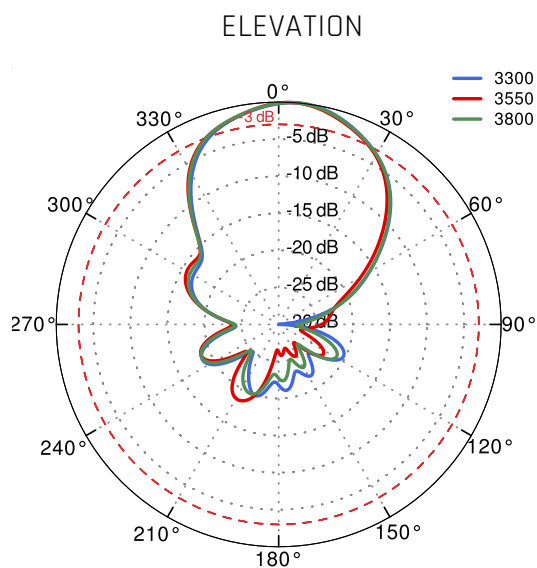
## Port 1 1.71GHz to 2.17GHz



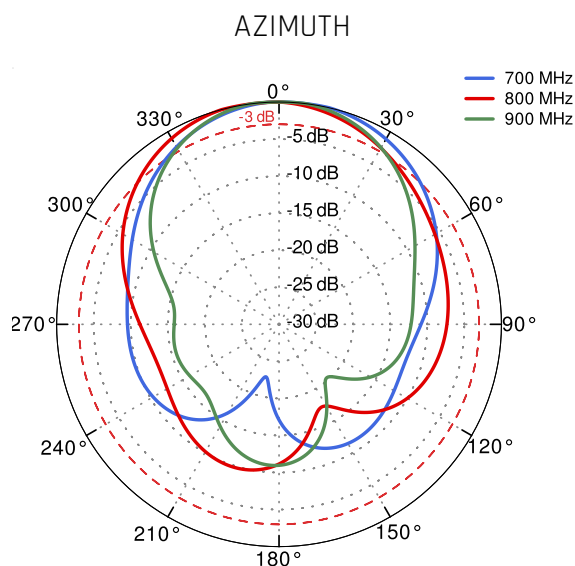
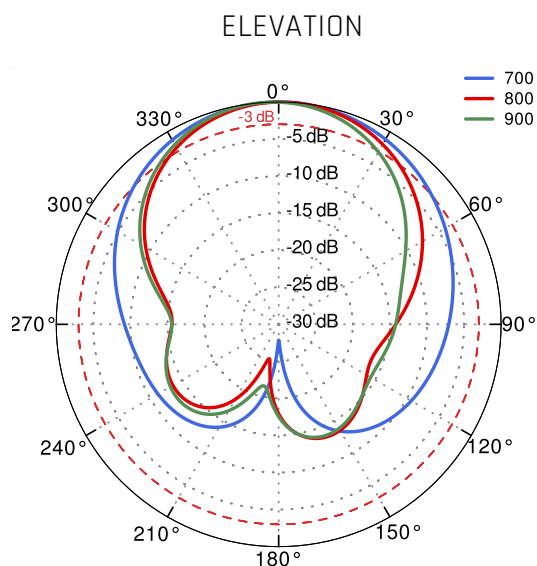
## Port 1 2.3GHz to 2.7GHz



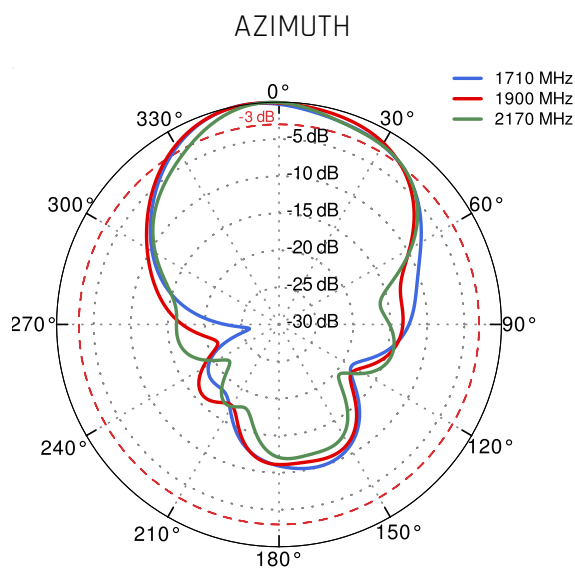
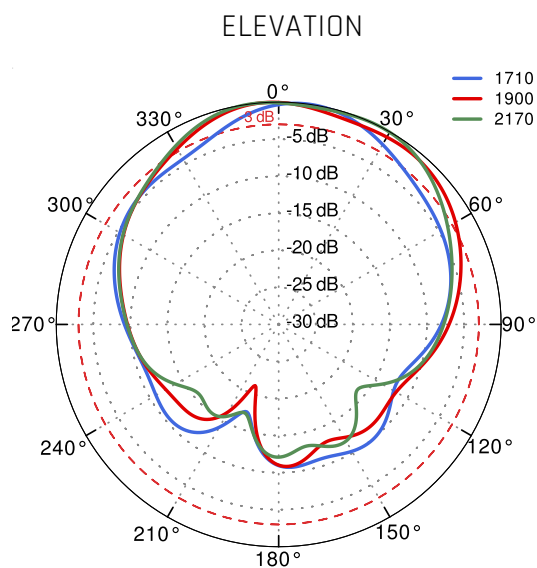
## Port 1 3.3GHz to 3.8GHz



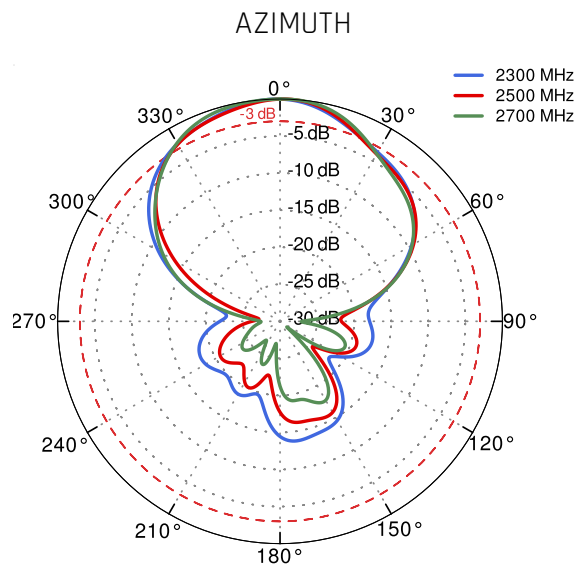
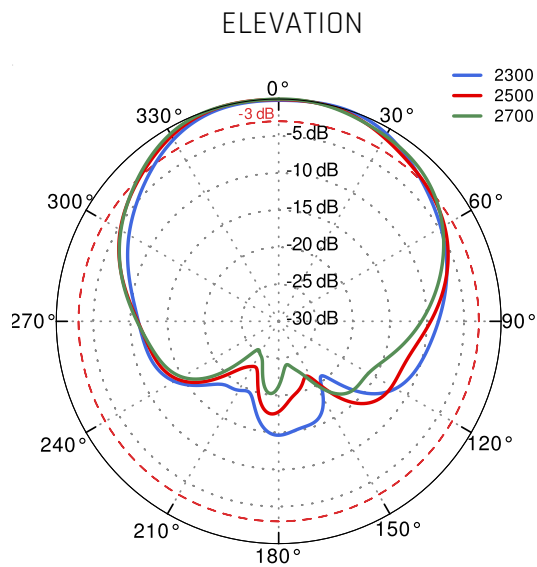
## Port 2 700MHz to 900MHz



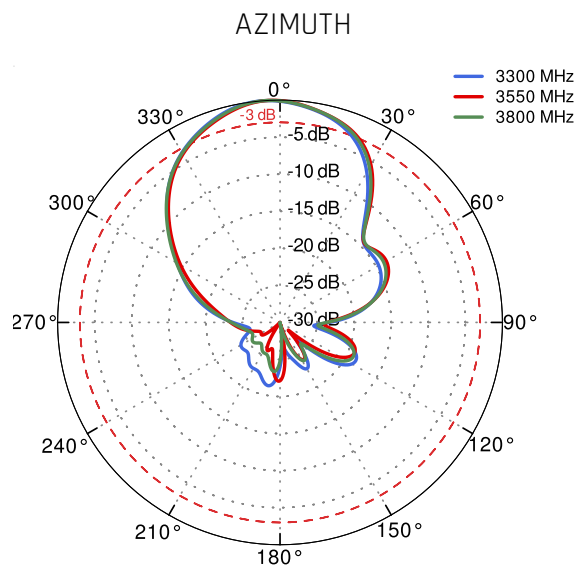
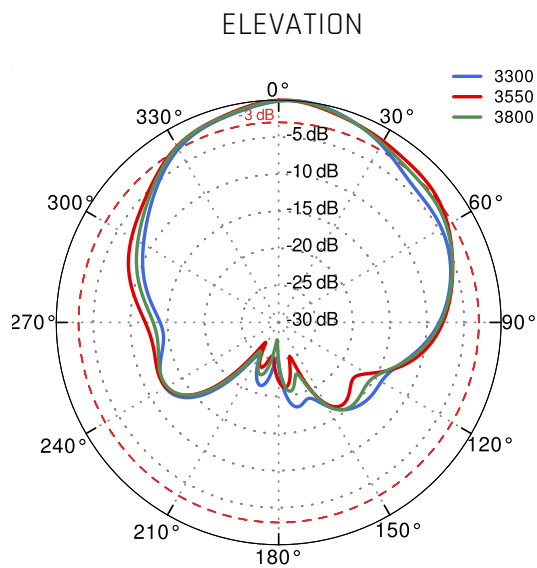
## Port 2 1.71GHz to 2.17GHz



## Port 2 2.3GHz to 2.7GHz



## From 3.3GHz to 3.8GHz



## DIMENSIONS

