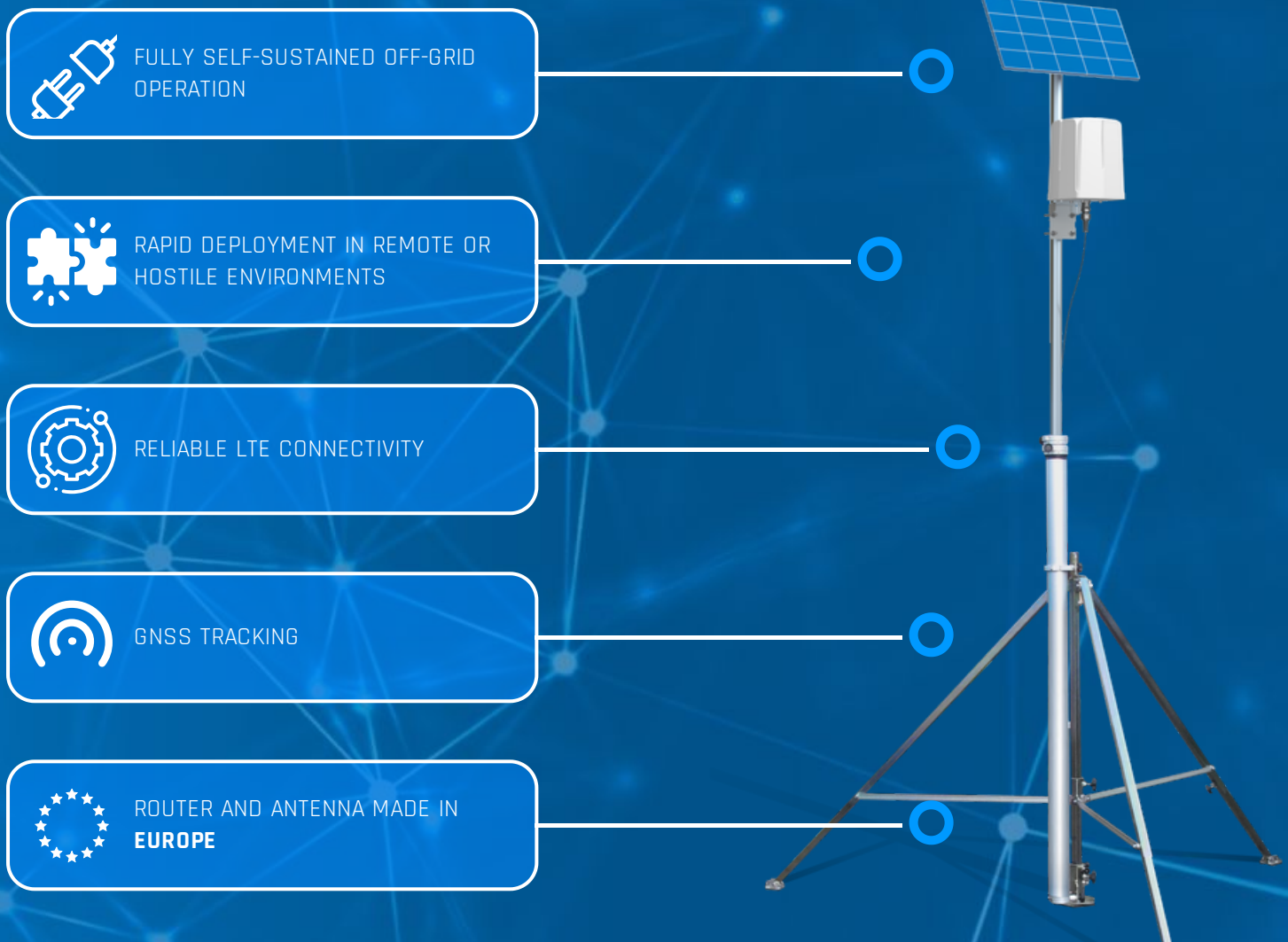


# QuWireless Solar Connectivity Hub

**INTEGRATED MULTI-BAND LTE OMNI ANTENNA + WI-FI 6E OMNI ANTENNA + GPS ANTENNA + 40W SOLAR PANEL + 10AH BATTERY + TELTONIKA 955 (ALL-IN-ONE)**

**QuWireless Solar Connectivity Hub** is a self-sustained, off-grid networking solution for remote or tactical deployments. It combines the Teltonika **RUT955** router with a **40W solar panel**, **10Ah battery**, and **solar charge controller** in a compact, weatherproof enclosure. With an average router consumption of 4W, it can **run continuously on solar energy**, while the battery provides around **22 hours at 4W** or 9 hours of backup at 10W peak load. The Solar Hub turns the RUT955 into a robust, autonomous communication node, providing reliable connectivity and situational awareness wherever power is unavailable.



## LTE ANTENNA SPECIFICATION

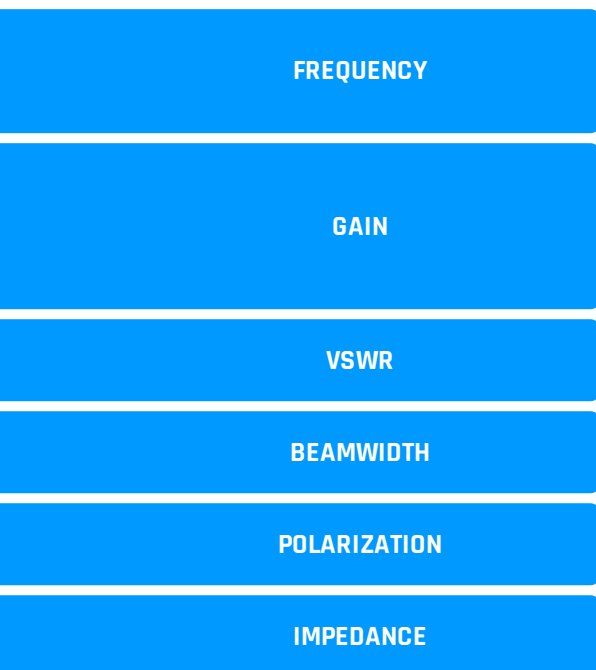
<b>FREQUENCY</b>	617 - 960 MHz 1.7 - 2.7 GHz 3.3 - 4.7 GHz 5.2 - 6.0 GHz
<b>GAIN</b>	617 - 960 MHz : 3 dBi 1.7 - 2.2 GHz : 4 dBi 3.3 - 4.7 GHz : 4.5 dBi 5.2 - 6.0 GHz : 2.5dBi
<b>SUPPORTED LTE BANDS</b>	1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13, 14, 17, 18, 19, 20, 22, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 47, 48, 49, 52, 53, 65, 66, 67, 68, 69, 71, 85, 103, 106
<b>VSWR</b>	<1.80, max <2.00
<b>BEAMWIDTH</b>	360°/35° ±5°
<b>POLARIZATION</b>	Vertical
<b>IMPEDANCE</b>	50 Ω

## ☎ LTE ANTENNA FREQUENCY BANDS



	1	2	3	4	5	7	8	
	9	10	12	13	14	17	18	
	19	20	22	25	26	27	28	
617 MHz	29	30	33	34	35	36	37	6000 MHz
	38	39	40	41	42	43	44	
	47	48	49	52	53	65	66	
	67	68	69	71	85	103	106	

## ☎ WI-FI ANTENNA SPECIFICATION



FREQUENCY	2.4 - 2.5 GHz 5.0 - 7.2 GHz
GAIN	2.4 - 2.5 GHz: 6dBi 5 GHz: 7.5dBi 7 GHz: 7.5dBi
VSWR	< 1.50, max < 2.00
BEAMWIDTH	360°/25°
POLARIZATION	Vertical
IMPEDANCE	50 Ω

## SOLAR AND BATTERY SPECIFICATION

**SOLAR PANEL POWER**

40W

**BATTERY CAPACITY**

10 Ah

**BATTERY BACKUP TIME**22 hours at 4W  
9 hours at 10W peak load

## MECHANICAL SPECIFICATION

**MATERIALS**

ABS, aluminum, PTFE

**CONNECTOR TYPE**

1x QuRJ45

**INGRESS PROTECTION**

IP68

**OPERATING TEMPERATURE**From -40°C to 80°C  
From -40°F to 176°F

## RUT955 SUPPORTED BANDS

**SUPPORTED 4G (LTE-FDD) BANDS**

B1, B3, B5, B7, B8, B20

**SUPPORTED 4G (LTE-TDD) BANDS**

B38, B40, B41

**SUPPORTED 3G BANDS**

B1, B6, B8, B19

## RUT955 MOBILE SPECIFICATION

<b>MOBILE MODULE</b>	4G LTE Cat 4 up to 150 DL/50 UL Mbps; 3G up to 21 DL/5.76 UL Mbps; 2G up to 236.8 DL/236.8 UL kbps
<b>SIM SWITCH</b>	2 SIM cards, auto-switch cases: weak signal, data limit, SMS limit, roaming, no network, network denied, data connection fail, SIM idle protection
<b>STATUS</b>	IMSI, ICCID, operator, operator state, data connection state, network type, bandwidth, connected band, signal strength (RSSI), SINR, RSRP, RSRQ, EC/IO, RSCP, data sent/received, LAC, TAC, cell ID, ARFCN, UARFCN, EARFCN, MCC, and MNC
<b>SMS</b>	SMS status, SMS configuration, EMAIL to SMS, SMS to EMAIL, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
<b>USSD</b>	Supports sending and reading Unstructured Supplementary Service Data messages
<b>BLOCK/ALLOW LIST</b>	Operator block/allow list (by country or separate operators)
<b>MULTIPLE PDN</b>	Possibility to use different PDNs for multiple network access and services
<b>BAND MANAGEMENT</b>	Band lock, Used band status display
<b>SIM IDLE PROTECTION SERVICE</b>	Provides the possibility to configure the router to periodically switch to the unused SIM card and establish a data connection in order to prevent the SIM card from being blocked
<b>APN</b>	Auto APN
<b>BRIDGE</b>	Direct connection (bridge) between mobile ISP and device on LAN
<b>PASSTHROUGH</b>	Router assigns its mobile WAN IP address to another device on LAN

## RUT955 WIRELESS SPECIFICATION

<b>WIRELESS MODE</b>	802.11b/g/n (Wi-Fi 4), Access Point (AP), Station (STA)
<b>WI-FI SECURITY</b>	WPA2-Enterprise: PEAP, WPA2-PSK, WPA-EAP, WPA-PSK, WPA3-SAE, WPA3-EAP, OWE; AES-CCMP, TKIP, Auto-cipher modes, client separation, EAP-TLS with PKCS#12 certificates, disable auto-reconnect, 802.11w Protected Management Frames (PMF)
<b>SSID/ESSID</b>	SSID stealth mode and access control based on MAC address
<b>WI-FI USERS</b>	Up to 100 simultaneous connections
<b>WIRELESS CONNECTIVITY FEATURES</b>	Wireless mesh (802.11s), fast roaming (802.11r), Relayd, BSS transition management (802.11v), radio resource measurement (802.11k)
<b>WIRELESS MAC FILTER</b>	Allowlist, blocklist

## RUT955 OTHER SPECIFICATION

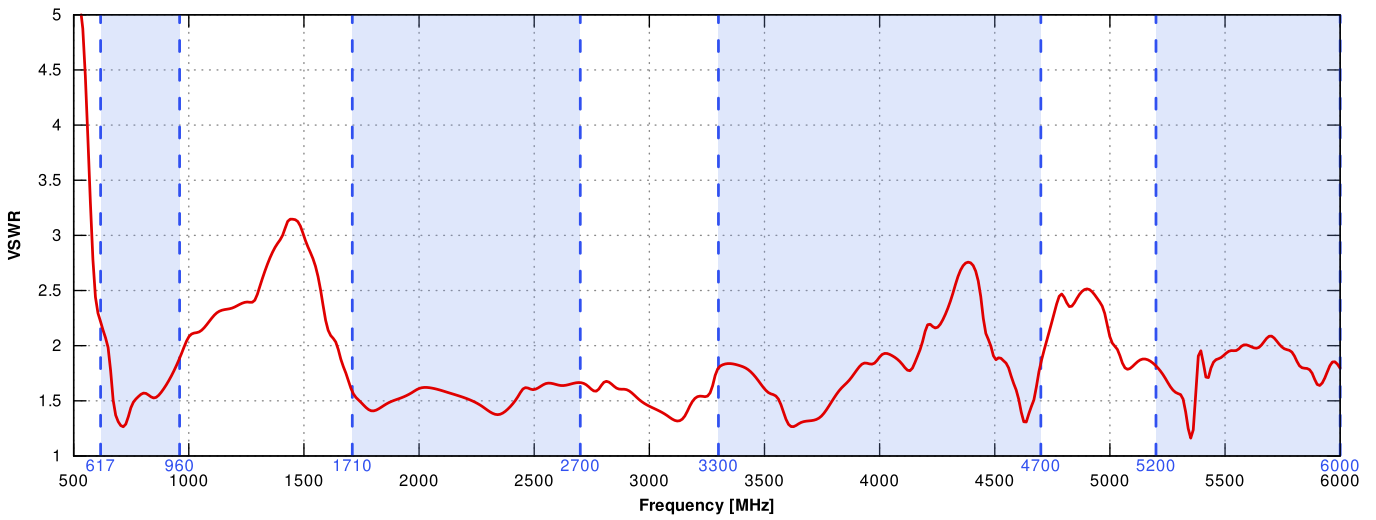
<b>RUT955 VERSION</b>	RUT955T7V417 - dedicated to: Europe, the Middle East, Africa, Thailand, India
<b>MORE INFORMATION</b>	Detailed information about the router can be found in its separate datasheet.

## COMPATIBLE ROUTERS

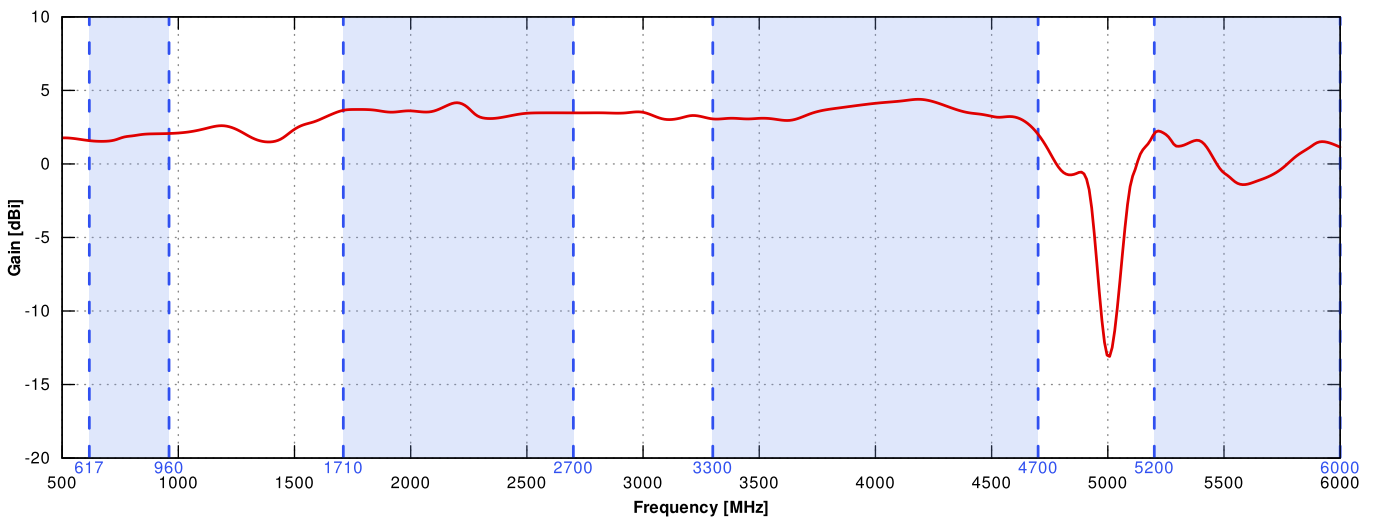
VARIANT: - \_\_\_\_\_

# PLOTS

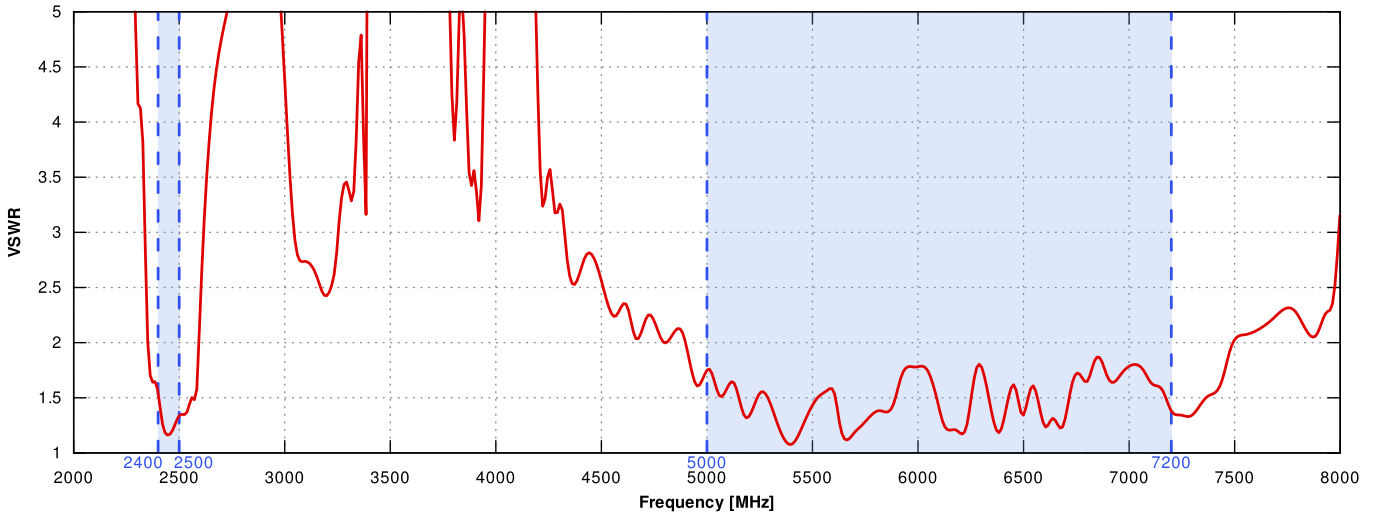
## LTE VSWR



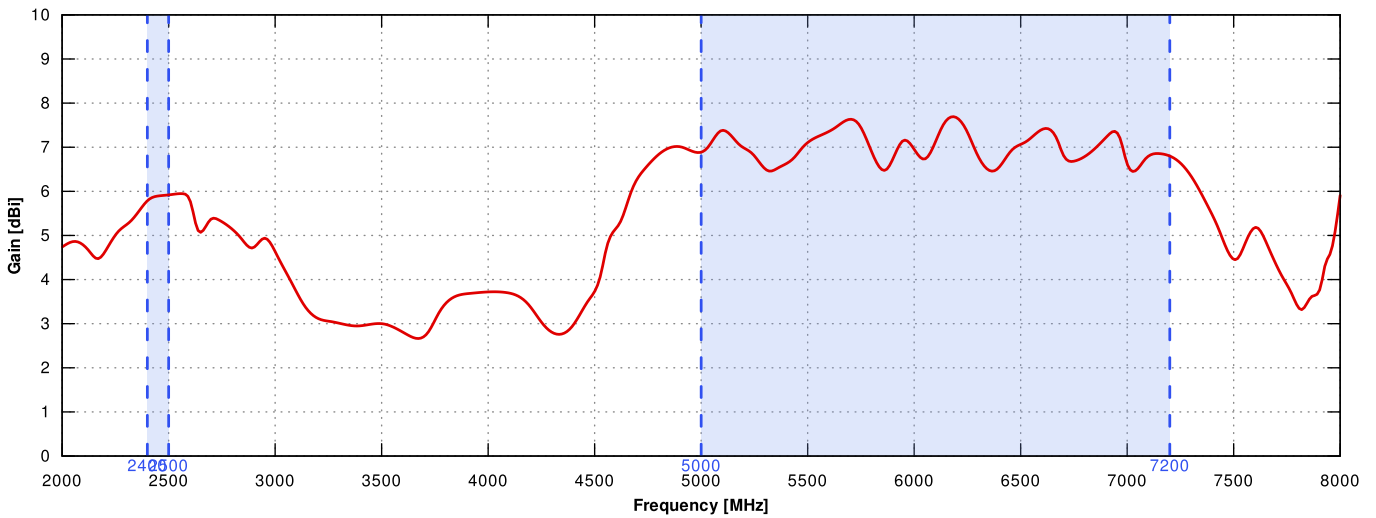
## LTE Gain



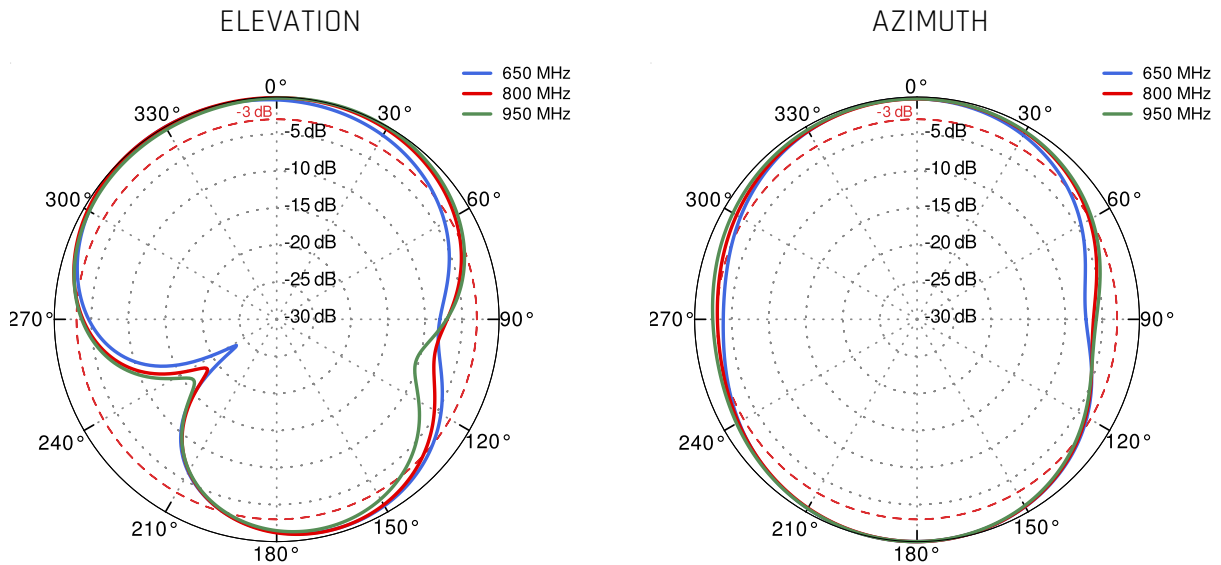
## WI-FI VSWR



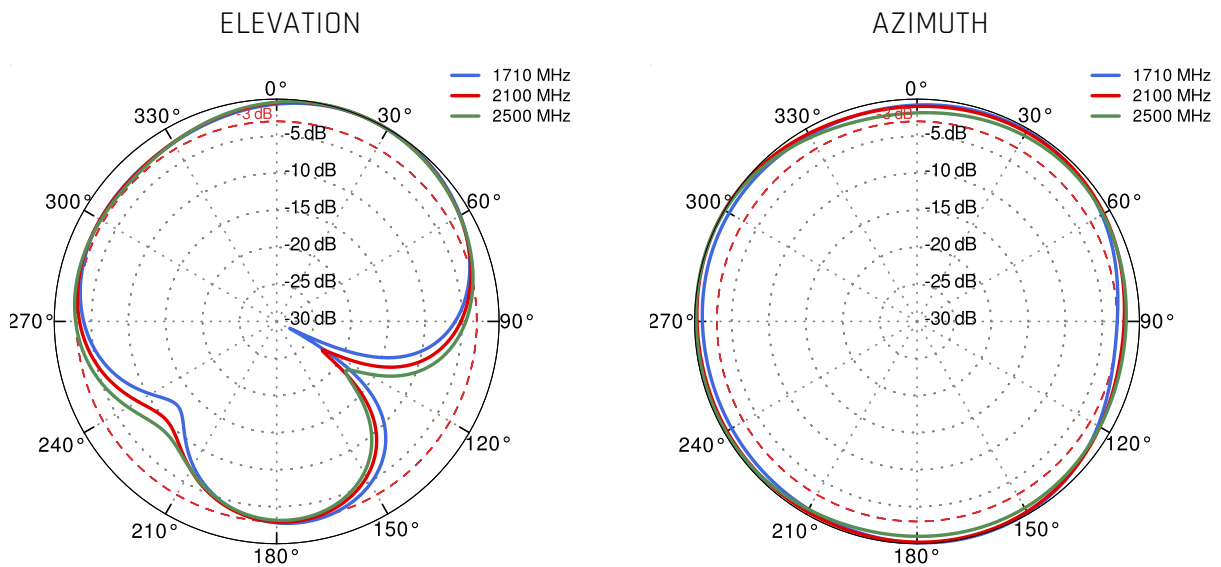
## WI-FI Gain



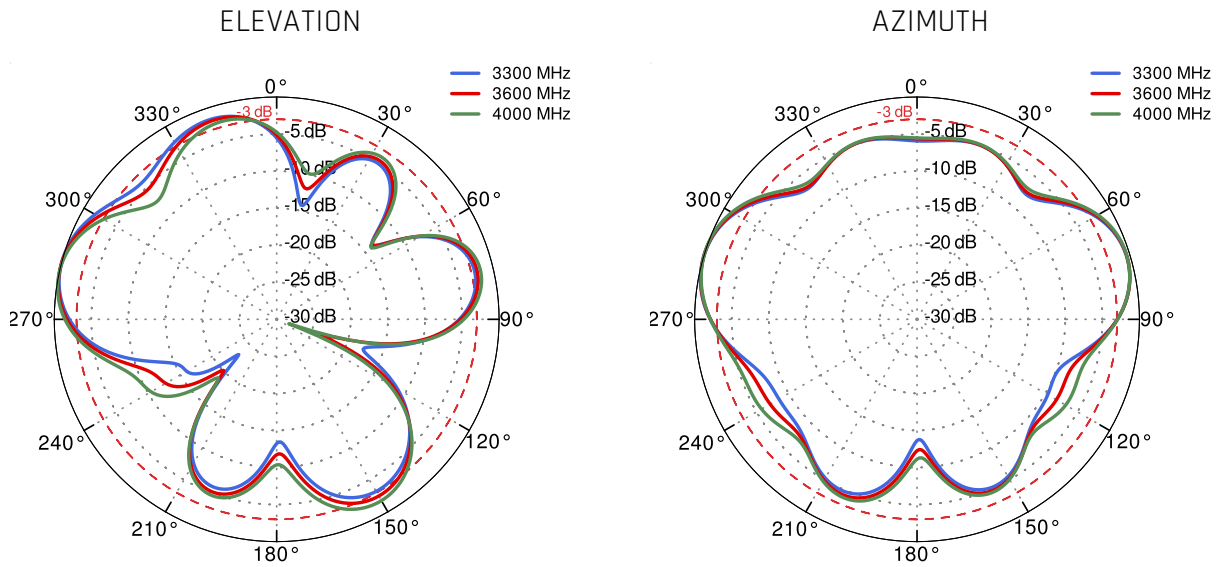
### LTE From 650MHz to 950MHz



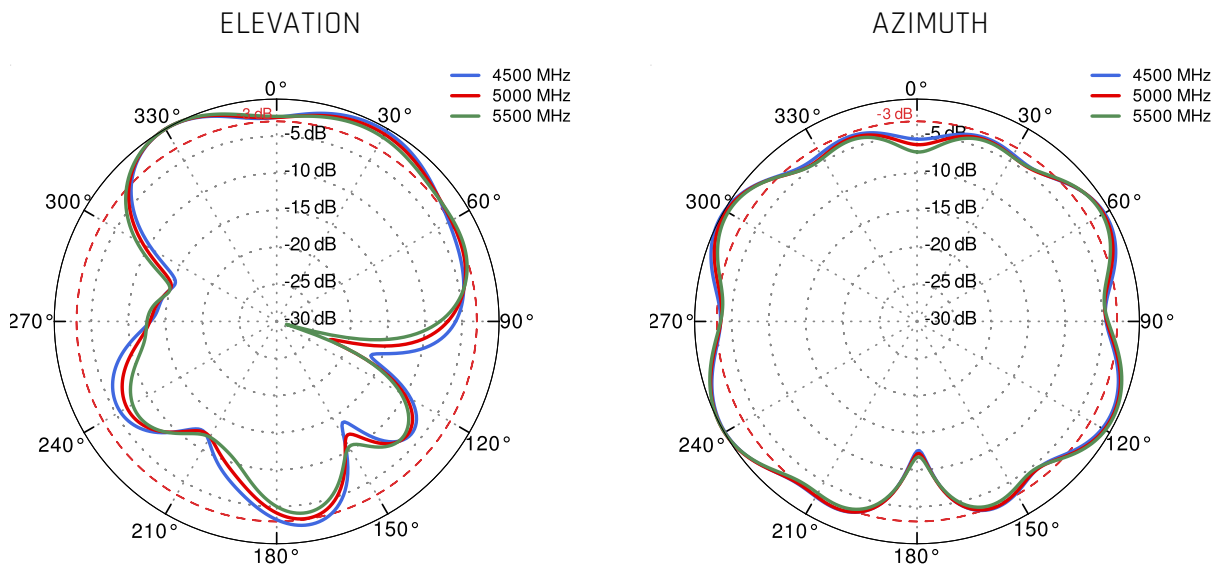
### LTE From 1.71GHz to 2.5GHz



### LTE From 3.3GHz to 4.0GHz



### LTE From 4.6GHz to 5.5GHz



## Wi-Fi From 2.4 GHz to 6.5 GHz

