TGA128V1-PRO

5G Wideband Omnidirectional Router Antenna

Description

The TGA128V1-PRO is a high-performance wide-band 4G and 5G antenna with excellent performance in the bands listed below. This model is specialised in the 4G and 5G low band and will perform especially in rural areas.

Pattern

The antenna has an omnidirectional pattern, which means it radiates roughly equally in all directions, like a sphere. There is a slight gain depending on the frequency. Gain refers to the antenna's ability to receive more directionally; every 3 dBi added doubles the received or transmitted signal. An omnidirectional antenna can still achieve some gain by flattening the sphere in which it receives. The reception pattern can be visualised as a doughnut; with higher gain, the sphere becomes flatter. This means the antenna will receive less at its top and bottom but more at its sides.

Polarisation

This antenna is horizontally polarised, meaning it radiates its energy in a horizontal direction. 4G and 5G equipment is ±45° polarised, so for optimal performance, the antenna should match the sender's 45° polarisation. 4G and 5G use multiple transmit and receive paths (MIMO); therefore, you need to angle one antenna at +45° and the other at -45°. If you have a modern quad MIMO router, you should angle TX1 at +45°, TX2 at -45°, RX1 at +45°, and RX2 at -45°. Please consult our "How to Install and Position TigerAntennas" document, available at tigerantennas.com.

Usage

Please read our manual, "How to Install and Position TigerAntennas." As a quick start, you can follow these steps:

- Connect the antennas to your router's SMA connector, tightening them by hand only.
- Rotate and angle the antennas so that one is at +45° and the other at -45°.
- For quad MIMO (e.g. 4 antennas), angle TX1 at +45° and TX2 at -45°.
- For quad MIMO (e.g. 4 antennas), angle RX1 at +45° and RX2 at -45°.

About our Products

TigerAntennas sell high-quality, honest products. We have noticed that the market is full of fake products claiming physically impossible performance values. We work with several vendors to produce very high-quality products. These products are manufactured in China and validated and tested in Germany. The data sheets and measurements are independently created to ensure that the claimed performance is achieved.

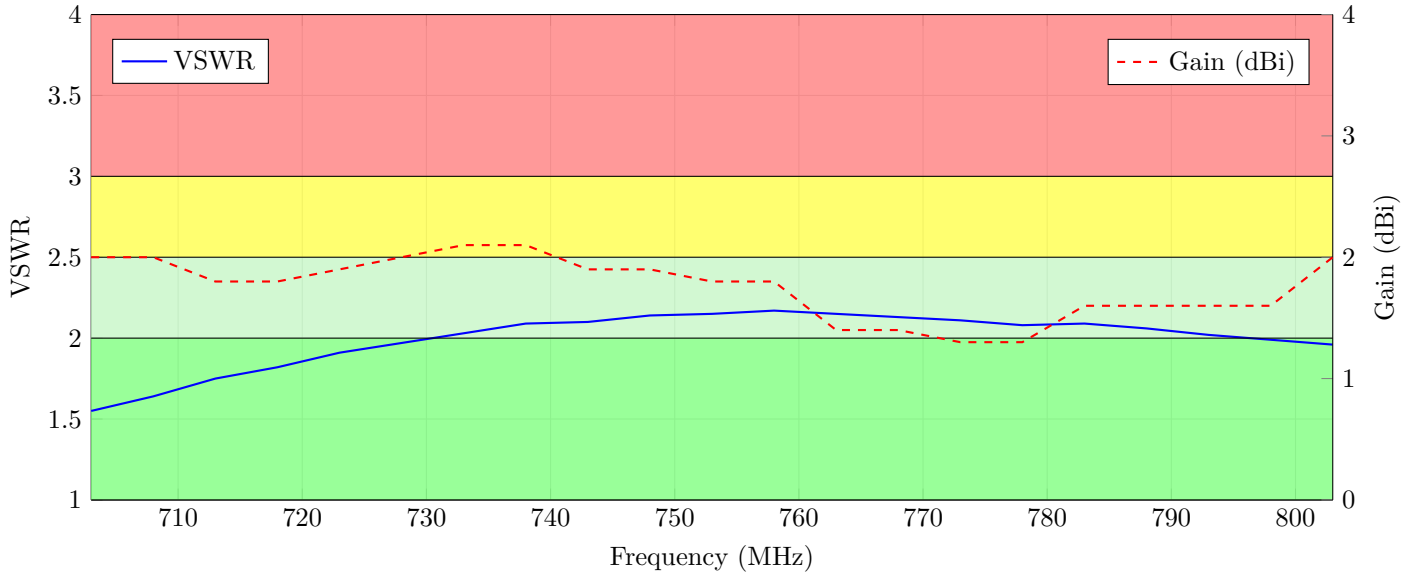
Technical Specifications

Polarisation	Vertical
Radiation Pattern	Omnidirectional
Connector	SMA-M
Coating	Plastic
Color	Black or White
Positioning	0°, 45°, 90°

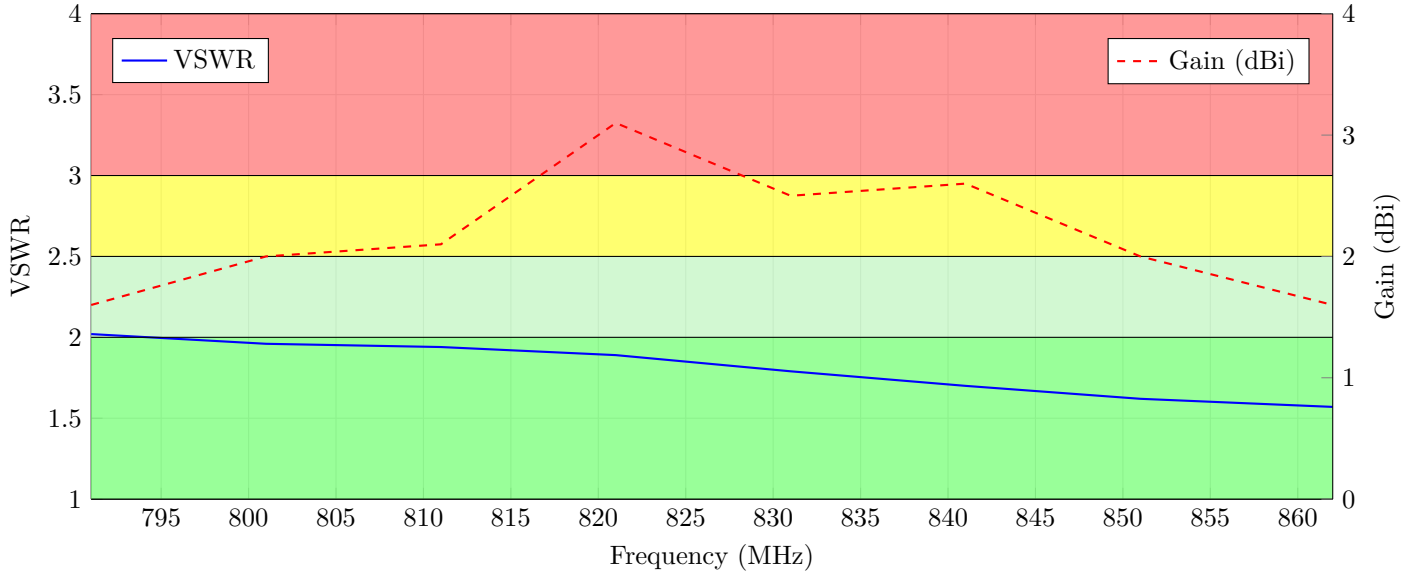
4G and 5G Band Performance Summary

Band	Lower Freq.	Upper Freq.	Avg. Gain	Avg. VSWR	max. VSWR	Performance
n28,n67 / B28,B67	703 MHz	803 MHz	1.8 dBi	1.9	2.2	very good
n20/B20	791 MHz	862 MHz	2.2 dBi	1.8	2.0	excellent
n8/B8	880 MHz	980 MHz	1.3 dBi	1.5	1.6	excellent
n75/B75	1432 Mhz	1517 MHz	1.6 dBi	1.3	1.6	excellent
n3/B3	1710 MHz	1880 MHz	2.0 dBi	1.5	1.7	excellent
n1/B1	1920 MHz	2170 MHz	1.8 dBi	1.9	2.0	excellent
n40/B40	2300 MHz	2400 MHz	2.2 dBi	1.7	1.8	excellent
n7,n38 / B7,B38	2500 MHz	2690 MHz	1.9 dBi	1.5	1.6	excellent
n78/B78	3300 MHz	3800 MHz	3.5 dBi	1.5	1.6	excellent

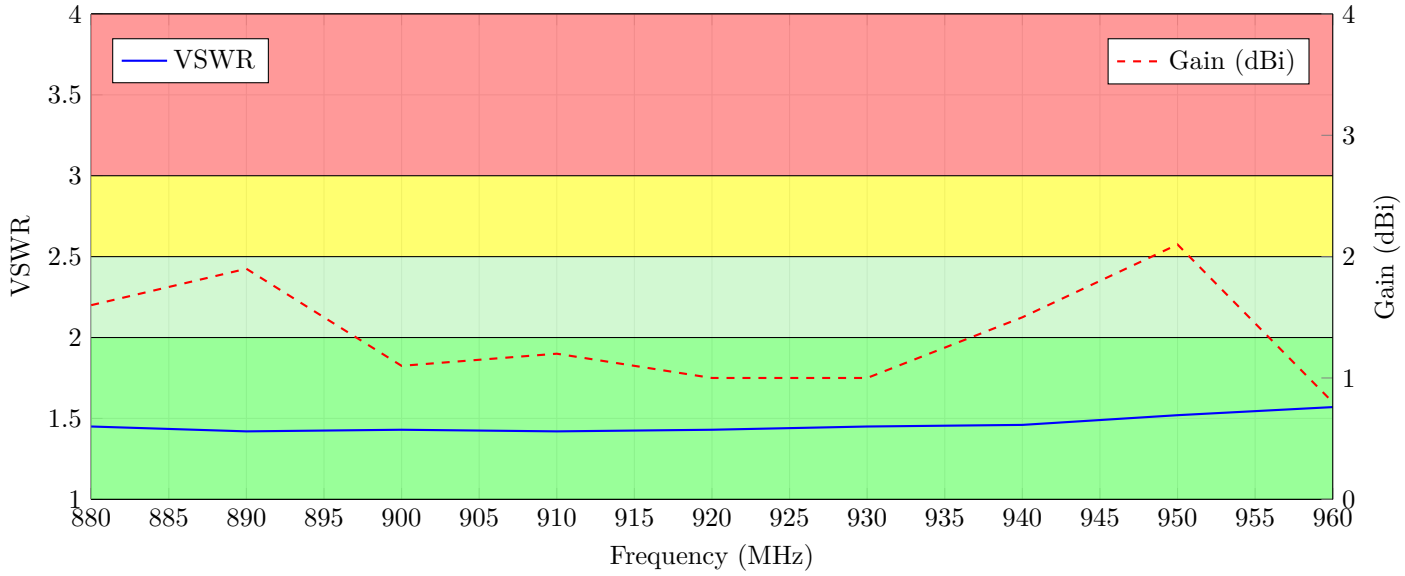
VSWR & Gain Chart 703-803MHz (n28,n67 / B28,B67)



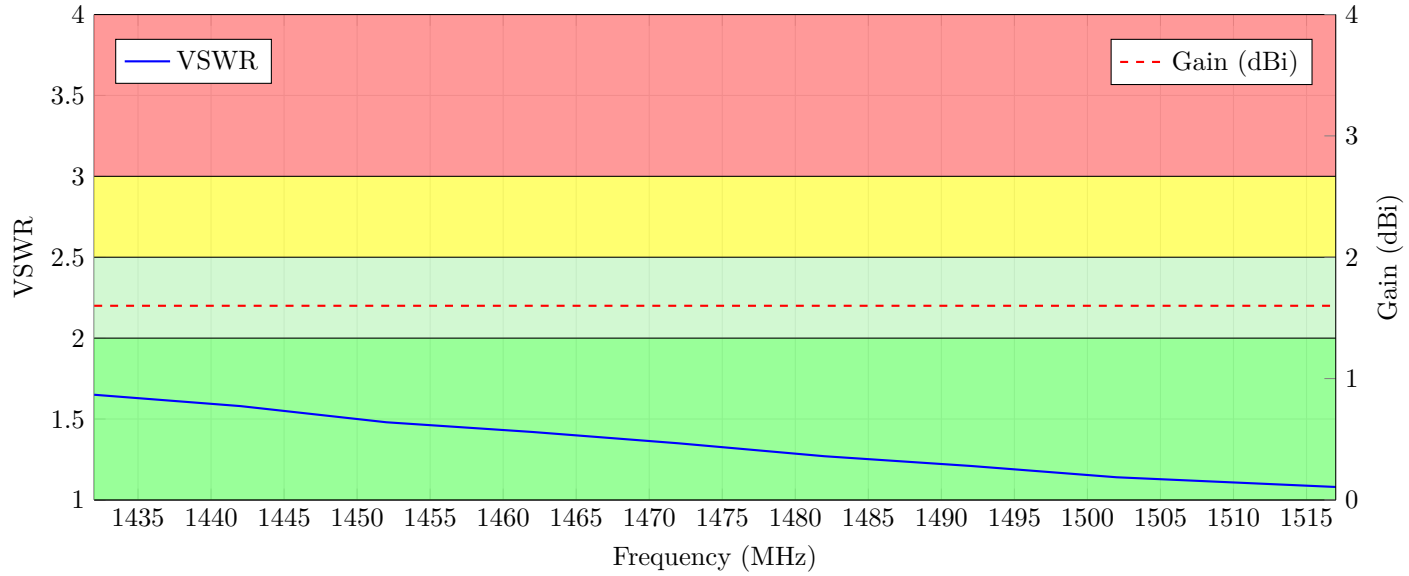
VSWR & Gain Chart 791-862MHz (n20/B20)



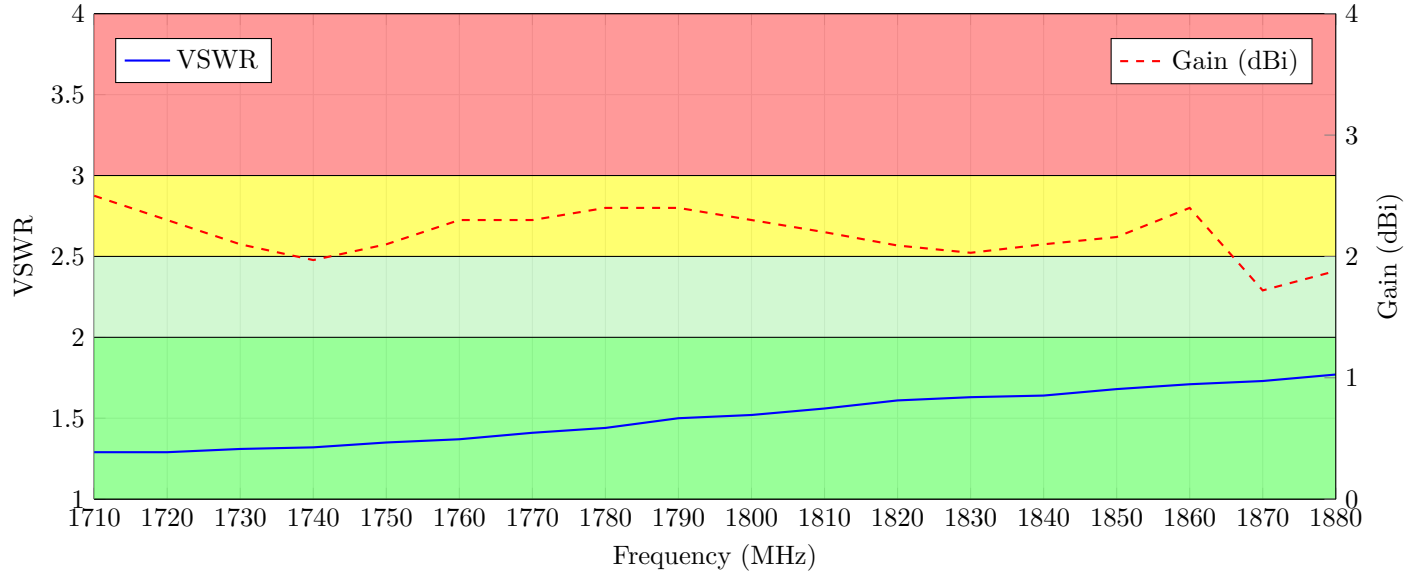
VSWR & Gain Chart 880-960MHz (n8/B8)



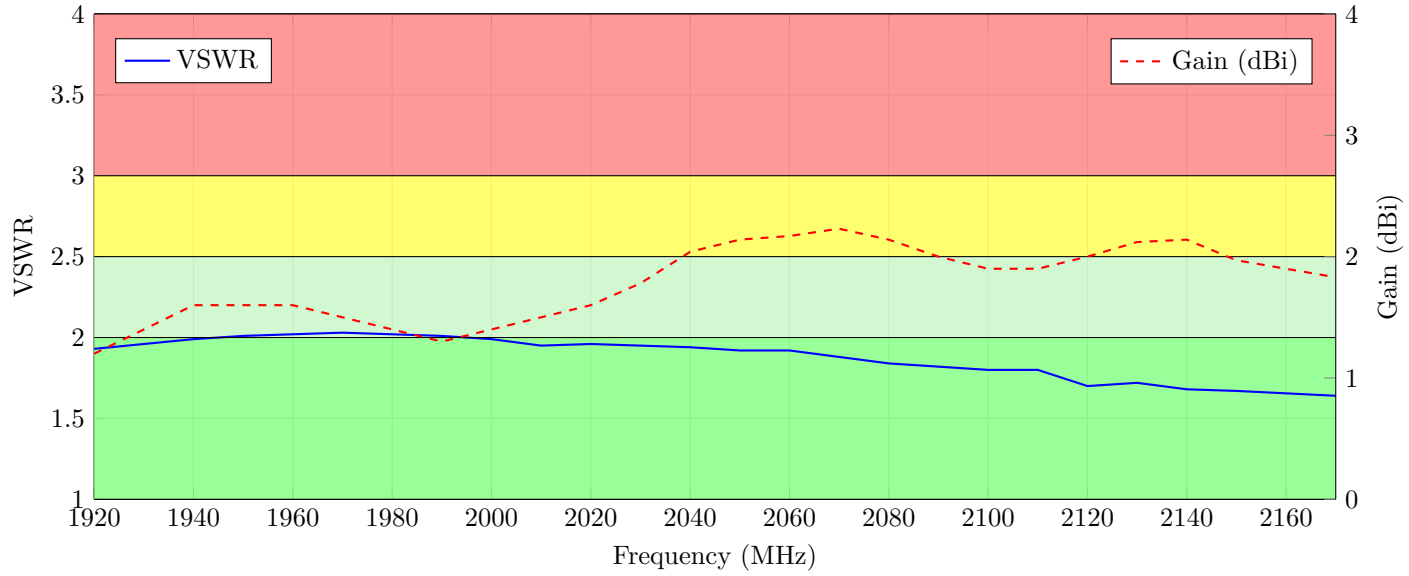
VSWR & Gain Chart 1432-1517MHz (n75/B75)



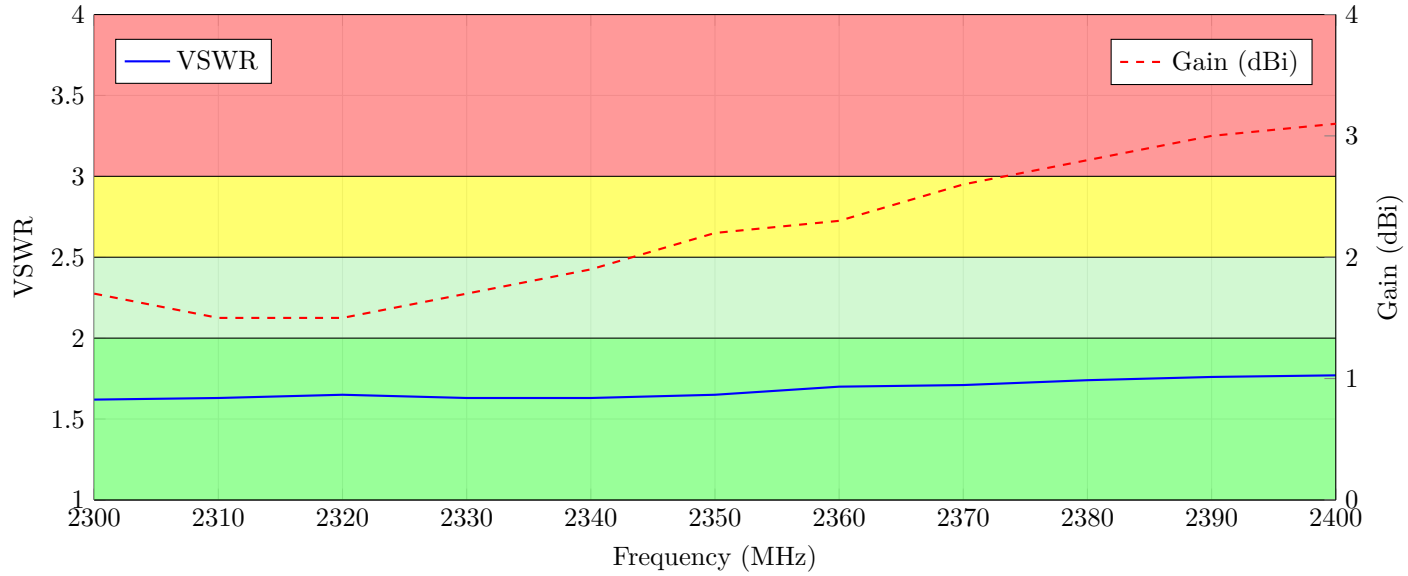
VSWR & Gain Chart 1710-1880MHz (n3/B3)



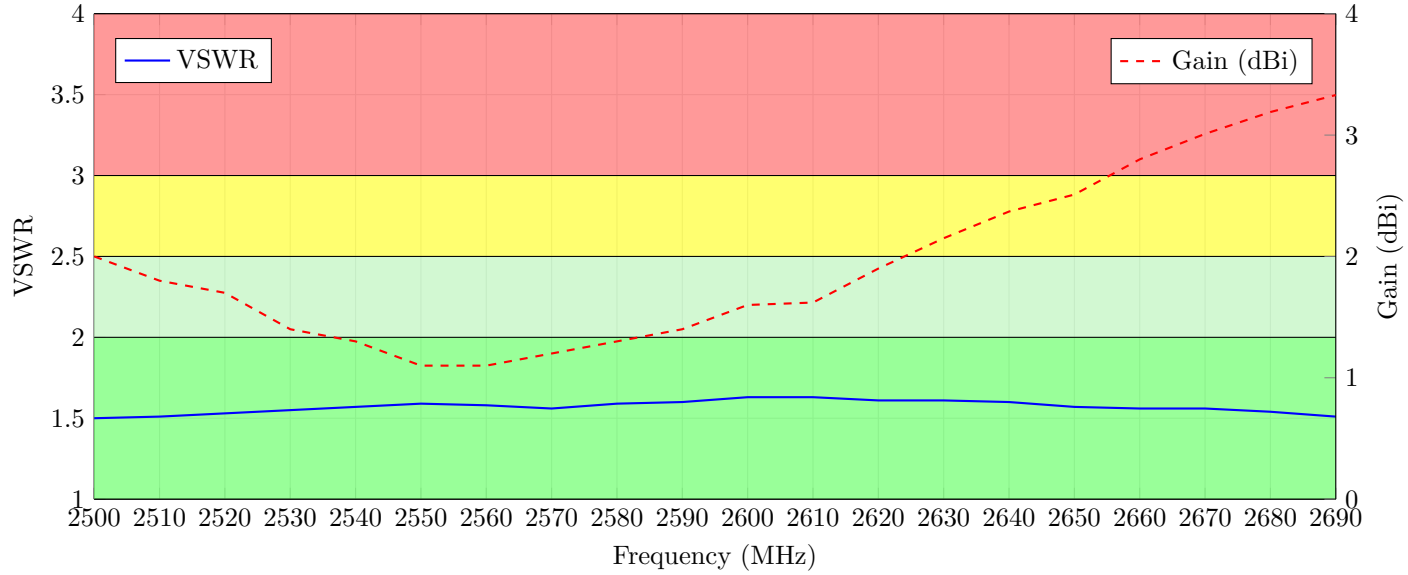
VSWR & Gain Chart 1920-2170MHz (n1/B1)



VSWR & Gain Chart 2300-2400MHz (n40/B40)



VSWR & Gain Chart 2500-2690MHz (n7,n38 / B7,B20)



VSWR & Gain Chart 3300-3800MHz (n78/B78)