

# **QuMax for Teltonika TRB500**

INTEGRATED MULTI-BAND LTE & 5G PANEL ANTENNA + POE SPLITTER + PLACE TO INSTALL TELTONIKA TRB500 (ALL-IN-ONE)

**QuMax for TRB500** is a high performance directional antenna designed for use in a variety of wireless communication applications. This all-in-one product consists of multi-band 5G antennas and PoE splitter integrated in IP68 enclosure. It offers 7.5 dBi gain and wide beamwidth, which makes it suitable for use in both urban and rural environments.

The set contains a <u>Passive PoE splitter</u>, allowing you to split data and power from a single Ethernet cable and maintain gigabit transfer speeds while protecting the LAN port from damage caused by overvoltage, short circuit or improper connection. **NOTE:** should only be used with a 24V (or lower voltage) Passive PoE power supply it is not compatible with an 802.3af/at power source!

Combining QuMax with TRB500 inside the antenna housing gives you complete outdoor solution with mulitple use scenarios such as transportation public, energy, mining IoT and more.





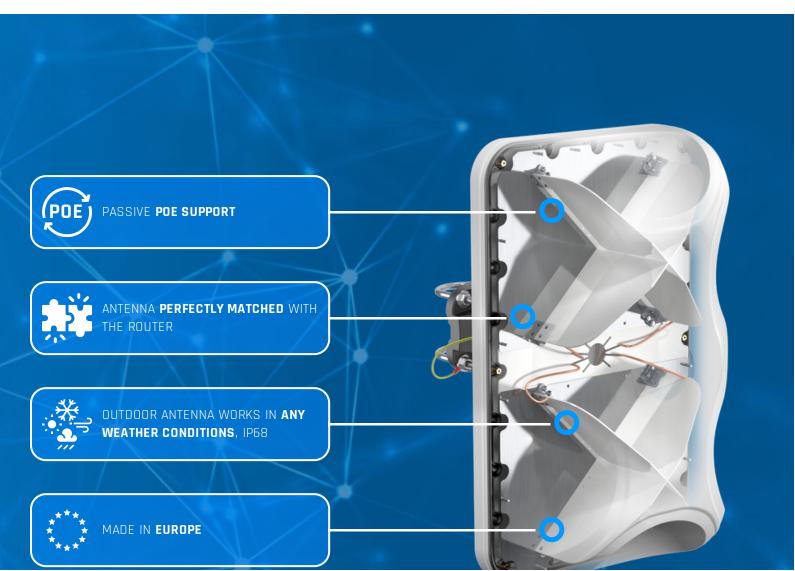














## **6 5G / LTE ANTENNA SPECIFICATION**

**FREQUENCY** 

0.617 - 0.96 GHz

1.7 - 2.7 GHz

3.3 - 4.5 GHz

4.7 - 6.0 GHz

GAIN

0.617 - 0.96 GHz: 6 dBi

1.7 - 2.7 GHz: 7 dBi

3.3 - 4.6 GHz: 7 dBi

4.7 - 6.0 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, 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, 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 Ω



### **(\* MECHANICAL SPECIFICATION**

MATERIALS ABS, aluminum, PTFE, Fiberglass

CONNECTOR TYPE RJ45

INGRESS PROTECTION IP68

486.0 x 292.2 x 175.4 mm 19.13 x 11.50 x 6.87 inch

**WEIGHT** 2.8 kg 6.17 lbs

OPERATING TEMPERATURE

From -40°C to 80°C

From -40°F to 176°F

ENCLOSURE RECOMMENDED
TIGHTENING TORQUE

0.6 - 0.8 Nm

**MAST DIAMETER**25-66mm
0.98-2.60 inch

## **(\* POE SPECIFICATION**

**POE TYPE** 

Passive PoE up to 24V, not compatible with an 802.3af/at power source!

POE IN MODE Mode type: B

IEEE STANDARD IEEE 802.3ab 1000Base-T Gigabit Ethernet



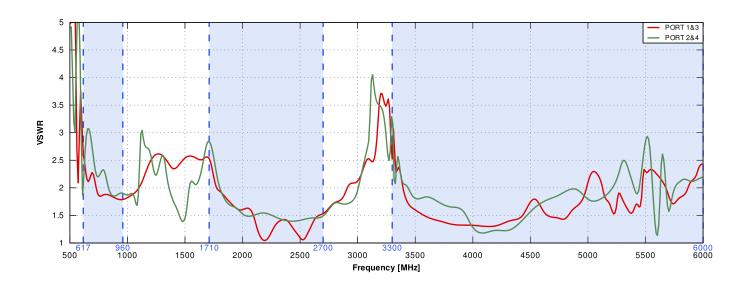
## **(\* FREQUENCY BANDS**

| 1   2   3   4   5   7   8  |            |  |     |      |      |      |     |     |     |             |
|--|------------|--|-----|------|------|------|-----|-----|-----|-------------|
| 19 20 22 25 26 27 28  Hz  19 30 33 34 35 36 37 6000M  Hz  46 47 48 49 52 53 65  105  106  107 108 112  190 100 103 103 105 107 108 112  190 100 103 103 105 105 105 105 105 105 105 105 105 105  | LTE / 4G   |  | 1   | 2    | 3    | 4    | 5   | 7   | 8   |             |
| LTE / 4G  HZ  ABOUND  HZ  ABOUND  ABOUND  ABOUND  HZ  ABOUND  HZ  ABOUND  ABOUND  HZ  ABOUND  ABOUND  HZ  ABOUND  HZ  ABOUND  ABOUND  HZ  ABOUND  ABOUND  HZ  ABOUND  ABOU |            |  | 9   | 10   | 12   | 13   | 14  | 17  | 18  |             |
| 11E / 4G  MHz  38 39 40 41 42 43 44 Hz  46 47 48 49 52 53 65  106  106  107  108 102  108 103  109 109 109 109 109 109 109 109 109 109   |            |  | 19  | 20   | 22   | 25   | 26  | 27  | 28  |             |
| MHZ 38 39 40 41 42 43 44 HZ  46 47 48 49 52 53 65  66 67 68 69 71 85 103  106  107 108 112  108 109 109 109 109 109 109 109 109 109 109  |            |  | 29  | 30   | 33   | 34   | 35  | 36  | 37  |             |
| 106   66   67   68   69   71   85   103  |            |  | 38  | 39   | 40   | 41   | 42  | 43  | 44  |             |
| 106  1106  1106  1106  1107  1108  1109  1 |            |  | 46  | 47   | 48   | 49   | 52  | 53  | 65  |             |
| No.    |            |  | 66  | 67   | 68   | 69   | 71  | 85  | 103 |             |
| 100 miles   mi |            |  | 106 |      |      |      |     |     |     |             |
| 1029 n30 n34 n38 n39 n40 n41 n38 n39 n40 n41 n38 n39 n40 n41 n38 n39 n40 n41 n38 n53 n65 n66 n67 n67 n42 n71 n77 n78 n80 n80 n81 n82 n83 n83 n84 n85 n86 n89 n90 n95 n97   | <b>5</b> G |  | n1  | n2   | n3   | n5   | n7  | n8  | n12 | 6000<br>MHz |
| 5G       617 MHz       n46 n47 n48 n53 n65 n66 n67 MHz         n71 n77 n78 n80 n80 n81 n82 n83         n84 n85 n86 n89 n90 n90 n95 n97   |            |  | n13 | n14  | n18  | n20  | n25 | n26 | n28 |             |
| MHz  |            |  | n29 | n30  | n34  | n38  | n39 | n40 | n41 |             |
| n84 n85 n86 n89 n90 n95 n97  |            |  | n46 | n47  | n48  | n53  | n65 | n66 | n67 |             |
|  |            |  | n71 | n77  | n78  | n80  | n81 | n82 | n83 |             |
| n98 n100 n101 n256   |            |  | n84 | n85  | n86  | n89  | n90 | n95 | n97 |             |
|  |            |  | n98 | n100 | n101 | n256 |     |     |     |             |

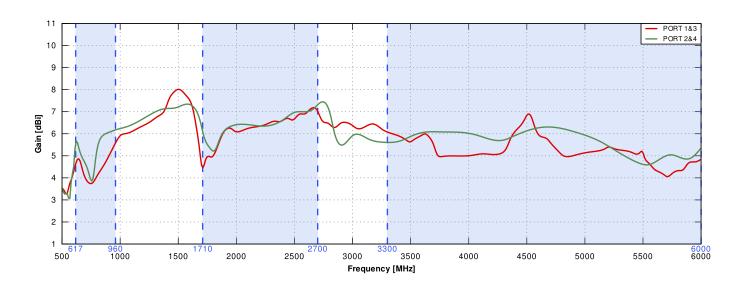


## **(\* PLOTS**

#### VSWR for 5G/LTE antenna

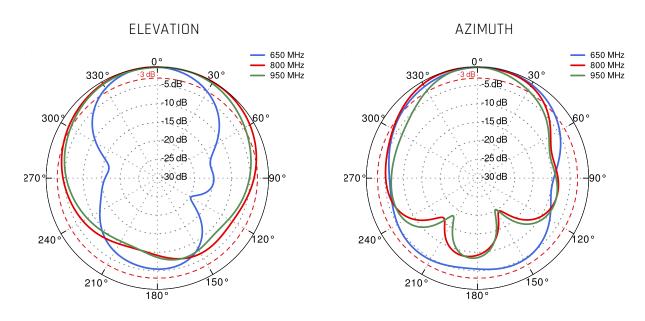


#### Gain for 5G/LTE antenna

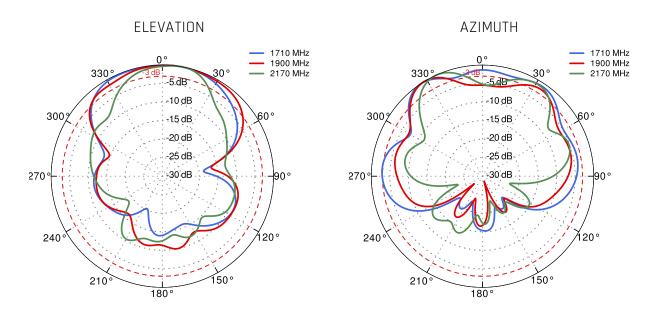




#### PORT 1&3 - 5G/LTE from 650MHz to 950MHz

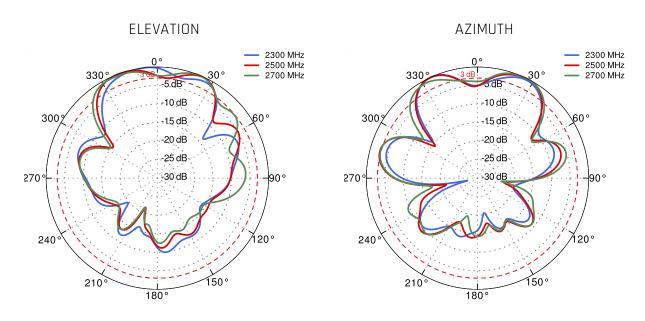


PORT 1&3 - 5G/LTE from 1.71GHz to 2.17GHz

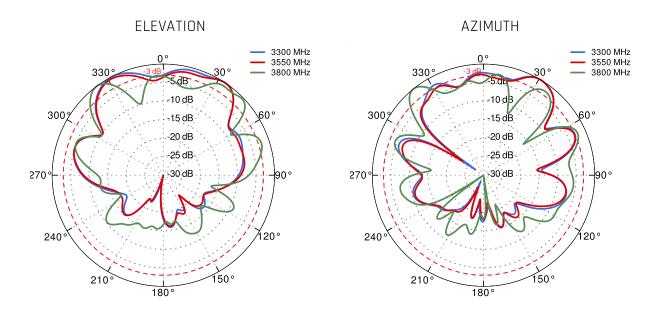




#### PORT 1&3 - 5G/LTE from 2.3GHz to 2.7GHz

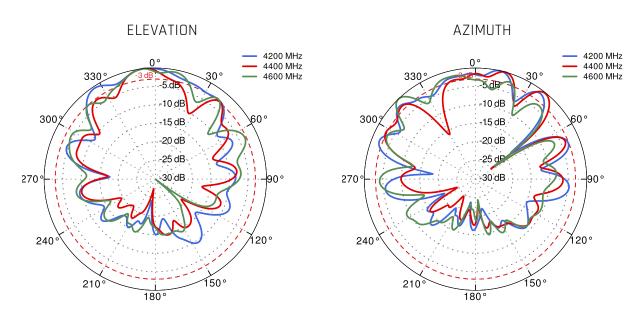


PORT 1&3 - 5G/LTE from 3.3GHz to 3.8GHz

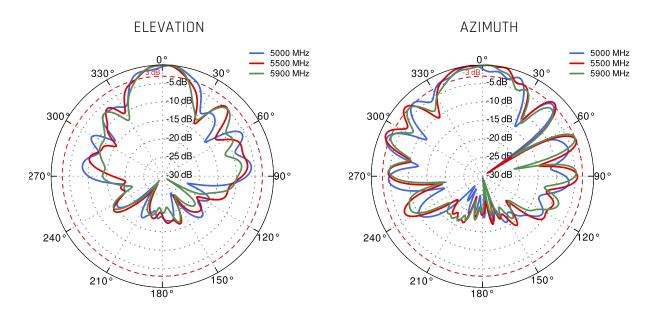




#### PORT 1&3 - 5G/LTE from 4.2GHz to 4.6GHz

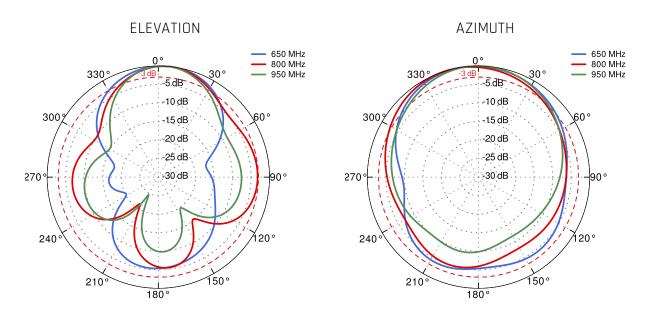


PORT 1&3 - 5G/LTE from 5.0GHz to 5.9GHz

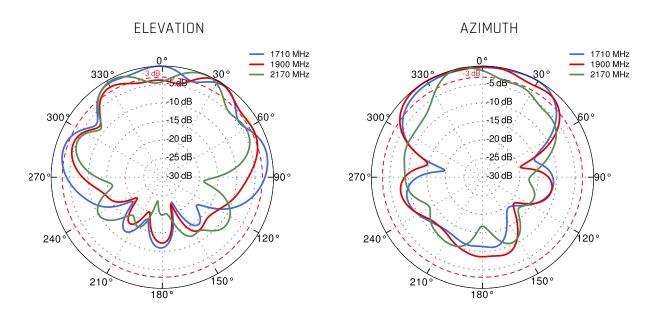




#### PORT 2&4 - 5G/LTE from 650MHz to 950MHz

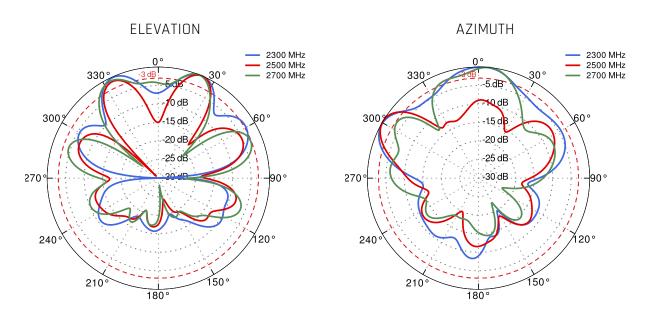


PORT 2&4 - 5G/LTE from 1.71GHz to 2.17GHz

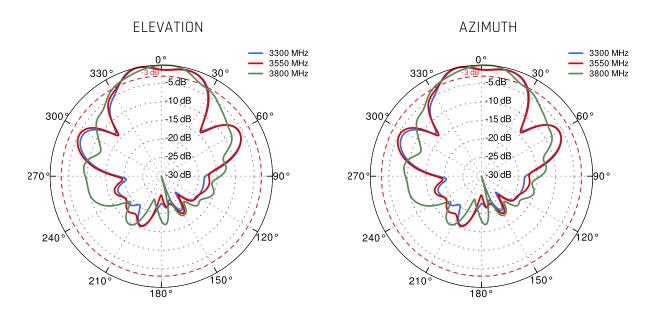




#### PORT 2&4 - 5G/LTE from 2.3GHz to 2.7GHz

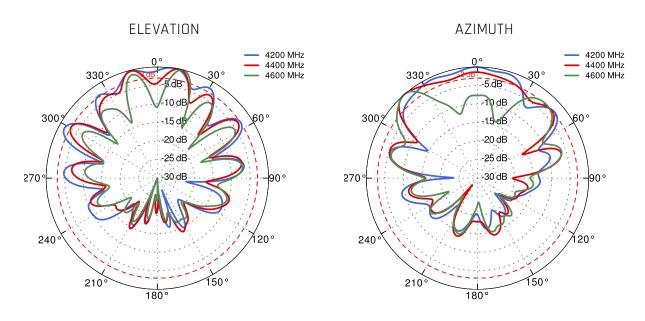


PORT 2&4 - 5G/LTE from 3.3GHz to 3.8GHz

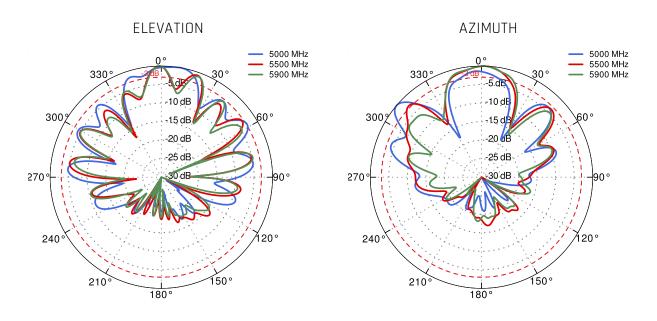




#### PORT 2 - 5G/LTE from 4.2GHz to 4.6GHz



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





## **(\* DIMENSIONS**





WWW.QUWIRELESS.COM

**Sales email:** sales@quwireless.com **Support email:** support@quwireless.com

Tel: +48 513 900 416

Website: www.quwireless.com

Address: Wireless Instruments Sp. z o.o., ul. Kościuszki 27, 52-116 Iwiny, Poland



