

Page



Powertec Wireless Technology  
ABN: 42 082 948 463  
PO Box 1034, Ashmore City  
Queensland, Australia, 4214  
sales@powertec.com.au  
1300 769 378

# **Taoglas TLS.01 Shockwave Wideband 4G-5G Stud Antenna**

SKU  
ANT-TG-00007  
MPN  
TLS.01.305111

## **Description**

The Taoglas Shockwave TLS.01.305111 is a permanent mount, waterproof, external 4G 5G wideband antenna operating across the full 600 to 6000 MHz range. The antenna has a 3 metre cable with an SMA male connector making it ideal for monitoring, outdoor media, and other IoT applications. It has been designed to be used on a Ground Plane.

This antenna has superior performance over wide-bands compared to traditional whip antennas. Up to 77% efficiency and with a minimum 2.2 dBi peak gain over all cellular bands result when mounted on a 300 x 300 mm ground plane. Stable radiation patterns over low angles provides consistent gain in the horizontal plane, making it especially suitable for cellular applications.

[Read More](#)

The TLS.01 antenna is IP67 waterproof and IP69K resistant against high pressure water jets in commercial cleaning environments, which makes the antenna ideal for 4G applications either in indoor or in harsh outdoor environments.

While the antenna states operation up to 6000 MHz, it should be clarified that radiated efficiency drops to below 9% above 5150 MHz. 5G 3.5 GHz performance is marginally impacted by the use of a 3 metre cable when contrasted to the N Bulkhead TLS.01 variant.



## Taoglas

Taoglas provides a comprehensive range of external, embedded and base station antenna solutions for M2M applications such as Telematics / Automotive, Smart-Grid, Metering / Telemetry, Home Automation, Remote Monitoring and Medical applications.

Taoglas' cross-cultural business-solutions approach means research, design, production and customer support services are based at our world-class technology ...

# RF Specification

Start Frequency

600 MHz

Stop Frequency

6000 MHz

Max. Input Power

100 W

Polarisation

[Vertical \(V\)](#)

Input Impedance

50 Ω

RF Connectors

**Ports RF Interface Body Shape Cable Series Length**

1      [SMA Male](#)      [Straight](#)      [L-200](#)      3000 mm

Frequency Test Data

**Start Freq. Stop Freq. Peak Gain VSWR Avg. Gain Efficiency**

617 MHz	698 MHz	-1 dBi	< 3.5:1	-3.2 dBi	43%
698 MHz	806 MHz	3.1 dBi	< 1.5:1	-0.2 dBi	58%
824 MHz	960 MHz	3.2 dBi	< 2:1	-0.7 dBi	71%
1427 MHz	1518 MHz	2.9 dBi	< 2:1	-1.4 dBi	57%
1710 MHz	2200 MHz	2.7 dBi	< 2:1	-1.8 dBi	46%
2300 MHz	2690 MHz	3.4 dBi	< 2:1	-2 dBi	43%
3300 MHz	3800 MHz	2.5 dBi	< 2.5:1	-4.1 dBi	27%
5150 MHz	5925 MHz	5.3 dBi	< 3:1	-3.4 dBi	9%

# Physical Specification

Subtype

[Fin / Stud / Combo](#)

Input Ports

1

MIMO

[1x1 SISO](#)

Min. Operating Temperature

-40 °C

Max. Operating Temperature

85 °C

Dimensions

79.4 x 42 (H x Dia)

Ingress Protection

[IP69K](#)

Materials

[ABS Plastic](#), [Zinc Alloy](#)

Mounting

[M14 Stud](#)

Weight

0.27 kg

Compliance/Certifications

ISO 9001 Quality Management

Disclaimer: Although care has been taken to ensure the accuracy, completeness and reliability of the information provided, Powertec assumes no responsibility therefore. The user of the information agrees that the information is subject to change without notice. Powertec assumes no responsibility for the consequences of use of such information, nor for any infringement of third party intellectual property rights which may result from its use. IN NO EVENT SHALL POWERTEC BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, OR INCIDENTAL DAMAGE RESULTING FROM, ARISING OUT OF OR IN CONNECTION WITH THE USE OF THE INFORMATION.

