

---

# Taoglas MA963 Guardian 4x4 MIMO 4G-5G Adhesive Antenna

## Description

The Taoglas MA963 Guardian is a next-generation 4x4 MIMO antenna. It is the world-first panel antenna designed for gateway and router devices with multiple wireless technologies. This antenna delivers powerful MIMO antenna technology for LTE and Sub-6 GHz 5G bands covering 600 MHz to 6 GHz.

This antenna is designed for 4G and 5G bands worldwide (including 3G fallback) for access points, terminals, and routers. CAT-M1 and NB-IoT and the recently introduced 600 MHz Extended LTE Band 71 are also covered. This wide bandwidth enables designers to cover a wide range of technologies by installing a single antenna installation. It is a heavy-duty, fully IP67 waterproof external M2M antenna available in both wall and adhesive mount versions.

5G wireless applications demand high-speed data uplink and downlink. High efficiency and high gain MIMO antennas are necessary to achieve the required signal to noise ratio and throughput required to solve ...

[Read More](#)

The Taoglas MA963 Guardian 4x4 MIMO 4G-5G Adhesive Antenna is a cutting-edge panel antenna designed for gateway and router devices across multiple wireless technologies. Supporting global 4G and 5G bands, including 3G fallback, CAT-M1, NB-IoT, and the 600 MHz Extended LTE Band 71, this antenna is ideal for access points, terminals, and routers. It offers broad bandwidth coverage from 600 MHz to 6 GHz, allowing for versatile application in a single installation.

Engineered for high-speed data demands of 5G, the MA963 ensures high efficiency and gain, providing robust signal-to-noise ratios and throughput. Its design includes high isolation to prevent self-interference and utilises low loss cables to maintain performance over extended lengths. This antenna is both IP67 waterproof and available in wall and adhesive mount versions, suitable for both internal and external vehicle installations.

Measuring 146 x 134 x 20 mm and weighing 0.45 kg...



### 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:	617 MHz	Polarisation:	Linear
Stop Frequency:	6000 MHz	Input Impedance:	50
Max. Input Power:	2 W		

## RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
4	SMA Male	Straight	L-200	3000 mm

## Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	VSWR	Avg. Gain	Efficiency	Inter-Port Iso.
617 MHz	698 MHz	1.4 dBi	< 3.5:1	-4.8 dBi	33%	> 9 dB
698 MHz	806 MHz	1.3 dBi	< 3.5:1	-3.7 dBi	43%	> 8 dB
824 MHz	960 MHz	3.6 dBi	< 3.5:1	-2.6 dBi	54%	> 8 dB
1427 MHz	1518 MHz	3.2 dBi	< 3.5:1	-2.5 dBi	56%	> 12 dB
1710 MHz	1880 MHz	3.6 dBi	< 3.5:1	-2 dBi	63%	> 12 dB
1850 MHz	1990 MHz	3.2 dBi	< 3.5:1	-2.37 dBi	58%	> 11 dB
1920 MHz	2170 MHz	3.2 dBi	< 3.5:1	-2.55 dBi	56%	> 11 dB
2490 MHz	2690 MHz	3.1 dBi	< 3.5:1	-2.44 dBi	57%	> 12 dB
3300 MHz	3500 MHz	3.1 dBi	< 3.5:1	-3.6 dBi	43%	> 15 dB
5150 MHz	5925 MHz	3.8 dBi	< 3.5:1	-4.9 dBi	32%	> 13 dB

# Physical Specification

Subtype:	Fin / Stud / Combo	Dimensions:	146 x 134 x 20
Input Ports:	4	Materials:	ASA Plastic
MIMO:	4x4 MIMO	Mounting:	Adhesive
Min. Operating Temperature:	-40 °C	Weight:	0.45 kg
Max. Operating Temperature:	85 °C	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.

