

Page



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Taoglas MA750 Pantheon 5-in-1 2x2 MIMO 4G + WiFi Antenna

SKU
ANT-TG-00017
MPN
MA750.A.ABICG.003

Description

The MA750 Pantheon antenna is an omnidirectional heavy-duty, fully IP67 waterproof external IoT antenna for use in telematics, transportation and remote monitoring applications. It has two mobile (3G / 4G) antennas operating in 2x2 MIMO, two dual-band WiFi antennas (2.4 + 5 GHz), and integrated GNSS GPS.

Five antennas are integrated into an extremely robust IP67 direct/permanent mount antenna package with excellent isolation (20 dB+). The antenna has its own ground-plane and can radiate on any mounting environment like metal or plastic without affecting performance. The cables are low loss allowing for lengths of up to 10 meters, critical for buses, trains and other commercial transport applications.

This unique antenna delivers powerful MIMO antenna technology for 4G LTE and Wi-Fi 802.11n/ac/ax, plus GPS/GLONASS for next generation multiple wireless technology systems, such as telematics. The GPS/GLONASS antenna has a Front End SAW ...

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The Taoglas MA750 Pantheon 5-in-1 Antenna is an IP67-rated, omnidirectional solution ideal for telematics, transportation, and remote monitoring applications. This robust, external IoT antenna integrates five distinct elements: dual 4G LTE 2x2 MIMO antennas, dual-band WiFi 2x2 MIMO antennas, and a GPS/GLONASS antenna with a front-end SAW filter. Its compact, low-profile design ensures reliable performance even in harsh environments, making it suitable for installation on various surfaces such as metal and plastic.

Designed for optimal connectivity, the MA750 supports next-generation wireless technology systems, including telematics. The antenna's low-loss cables extend up to 10 metres, which is essential for installations in buses, trains, and other commercial vehicles. With a super low profile and vandal-resistant housing, it is built to withstand demanding conditions.

Operating across a wide temperature range of -40 °C to 85 °C, the...

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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

4G Cellular

Start Frequency

698 MHz

Stop Frequency

2700 MHz

Max. Input Power

5 W

Polarisation

[Linear](#)

Input Impedance

50 Ω

RF Connectors

Ports RF Interface Body Shape Cable Series Length

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

Frequency Test Data

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

698 MHz 960 MHz -2 dBi < 3:1 -4 dBi 50%

1710 MHz 2700 MHz 1 dBi < 3:1 -3.5 dBi 40%

Dual-Band WiFi

Start Frequency

2400 MHz

Stop Frequency

5850 MHz

Max. Input Power

5 W

Polarisation

[Linear](#)

Input Impedance

50 Ω

RF Connectors

Ports RF Interface Body Shape Cable Series

2 [RP-SMA Male](#) [Straight](#) [L-200](#)

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	VSWR	Avg. Gain	Efficiency
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2400 MHz	2500 MHz	2 dBi	< 3:1	-3.5 dBi	45%
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4900 MHz	5850 MHz	2 dBi	< 2:1	-4 dBi	40%
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GNSS Antenna

Gain (Zenith)

4 dBic

Start Frequency

1575.42 MHz

Stop Frequency

1602 MHz

Input Impedance

50 Ω

Polarisation

[Right Hand Circular \(RHCP\)](#)

Low Noise Amplifier (LNA)

LNA Gain

29 dBic

Noise Figure

≤ 3.4 dB

Min. Operating Voltage

3.3 V

Max. Operating Voltage

5.5 V

RF Connectors

Ports	RF Interface	Body Shape	Cable Series
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1	SMA Male	Straight	RG-174
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Physical Specification

Subtype

[Fin / Stud / Combo](#)

Input Ports

5

MIMO

[2x2 MIMO](#)

Min. Operating Temperature

-40 °C

Max. Operating Temperature

85 °C

Dimensions

143.2 x 84.5 (H x Dia)

Materials

[Polycarbonate \(PC\)](#)

Mounting

[Adhesive](#)

Weight

1.16 kg

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