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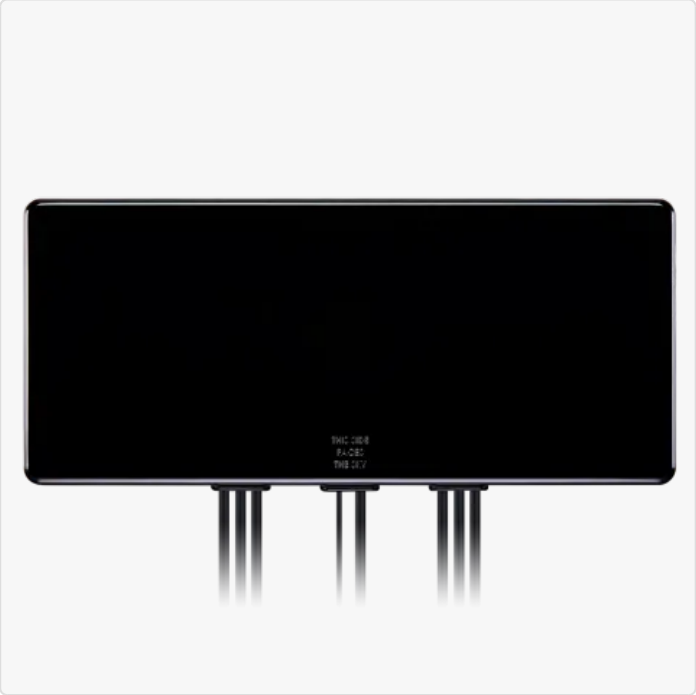
Taoglas MA9908 Guardian 4x4 MIMO 5G + 3x3 WiFi Adhesive Antenna

SKU: ANT-TG-00005
MPN: MA9908.A.001



Description

The Taoglas GuardianX MA9908 is a low profile heavy duty, fully IP67 waterproof external antenna. It incorporates eight elements under a single housing, supporting the following technologies concurrently:

- 4x4 MIMO 4G LTE / 5G NR from 600 to 6000 MHz
- 3x3 MIMO Dual Band WiFi (2.4 + 5 GHz)
- Active GNSS for GPS/GLONASS/Galileo operation

When paired with a good quality modem this one antenna unit is capable of establishing a high throughput data connection over the 4G or 5G network, providing high speed dual-band WiFi network, while being tracked over GPS.

Read More

Variable performance is typical of highly compact antennas with limited VSWR and isolation performance. Datasheet must be studied carefully to ensure you recognise the limitations of this antenna, particularly on 5G bands. If in doubt please discuss your application with our team prior to purchasing.

Typical applications include:

- Passenger Bus / Rail / Air Applications.
- Automotive and Heavy Equipment Vehicle Tracking and Telematics

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-5G Cellular

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	1000 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	VSWR	Avg. Gain	Efficiency	Inter-Port Iso.
617 MHz	698 MHz	2.7 dBi	< 4.5:1	-2.69 dBi	54%	> 8 dB
698 MHz	824 MHz	2.3 dBi	< 4.5:1	-2.53 dBi	55%	> 8 dB
824 MHz	960 MHz	3.5 dBi	< 4.5:1	-2.6 dBi	55%	> 8 dB
1427 MHz	1518 MHz	3.8 dBi	< 4.5:1	-0.18 dBi	83%	> 13 dB
1710 MHz	1880 MHz	3.8 dBi	< 2.5:1	-1.81 dBi	66%	> 13 dB
1850 MHz	1990 MHz	4 dBi	< 2.5:1	-2.48 dBi	56%	> 13 dB
1920 MHz	2170 MHz	5.2 dBi	< 2.5:1	-2.63 dBi	55%	> 13 dB
2300 MHz	2690 MHz	5.1 dBi	< 4.5:1	-2.76 dBi	53%	> 16 dB
3300 MHz	3800 MHz	2.4 dBi	< 4.5:1	-4.43 dBi	36%	> 16 dB
5150 MHz	5925 MHz	3.8 dBi	< 4.5:1	-2.55 dBi	56%	> 24 dB

Dual-Band WiFi

Start Frequency:	2400 MHz	Polarisation:	Linear
Stop Frequency:	5850 MHz	Input Impedance:	50
Max. Input Power:	2 W		

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	Inter-Port Iso.
2400 MHz	2500 MHz	4.08 dBi	< 3:1	-1.46 dBi	72%	> 30 dB
5150 MHz	5850 MHz	3.47 dBi	< 3:1	-2.23 dBi	60%	> 30 dB

GNSS Antenna

Gain (Zenith):	0 dBic	Input Impedance:	50
Start Frequency:	1575.42 MHz	Polarisation:	Right Hand Circular (RHCP)
Stop Frequency:	1602 MHz		

Low Noise Amplifier (LNA)

LNA Gain:	30 dBic	Min. Operating Voltage:	1.8 V
Noise Figure:	≤ 3 dB	Max. Operating Voltage:	5.5 V
Power Consumption:	< 10 mW		

RF Connectors

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

Physical Specification

Subtype:	Fin / Stud / Combo	Dimensions:	360 x 160 x 16.5
Input Ports:	8	Ingress Protection:	IP67
MIMO:	4x4 MIMO	Materials:	Polycarbonate (PC)
Min. Operating Temperature:	-40 °C	Mounting:	Adhesive
Max. Operating Temperature:	85 °C	Weight:	0.75 kg

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