

M2MAX[®] WG

IP67 Antenna with Wi-Fi & GNSS

M2MAX WG is a fully rugged outdoor antenna designed specifically for M2M applications. This antenna provides best in class performance providing high gain dual band Wi-Fi and GNSS antennas inside a single robust and compact housing.

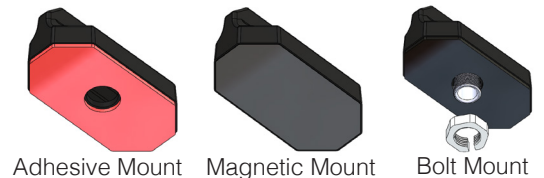
- 1 x 2.4 & 4.9-6 GHz Wi-Fi Element
- 1 x GNSS Antenna
- Lower profile and smaller footprint than competing solutions
- Must be mounted on metal
- Available in black or white
- US Patent 10109918

Descriptions/Applications

The M2MAX WG antenna builds on the best in class RF performance, leading design, features, and extended product life tradition of this highly successful product line. Ideal for kiosks, digital signage, wireless ATMs, vending machines, NEMA enclosures, industrial metering and other wireless machine to machine applications. This antenna has been designed to mount externally to an M2M or IoT enabled asset, and requires no servicing through its life time.



Full Outdoor Installation Ready	Compact and Robust UV Resistant Housing
Flexible Mounting Options	Customizable Cables and Connectors to Connect to Any Modem
Low loss cable accessories	Fast custom turnaround time



Standard Configurations

AP-M2M2-WG-Q-S22-RP1-BL-15	Wi-Fi & GNSS, Threaded bolt mount, RP-SMA on Wi-Fi, SMA on GNSS, Black, 15ft coax
AP-M2M2-WG-A-S22-RP1-BL-15	Wi-Fi & GNSS, Adhesive mount, RP-SMA on Wi-Fi, SMA on GNSS, Black, 15ft coax
AP-M2M2-WG-M-S22-RP1-BL-15	Wi-Fi & GNSS, Magnetic mount, RP-SMA on Wi-Fi, SMA on GNSS, Black, 15ft coax

Also available in color white, customizable cable lengths up to 35 feet, and other connector variations.

Electrical Data

Frequency Range	Antenna 1	2.4/4.9-6.0 GHz	
	Antenna 2	1550~1610 MHz	
Operational Bands	Antenna 1	Wi-Fi	
	Antenna 2	GPS L1/GALILEO E1/GLONASS G1/BeiDou B1/ QZSS L1	
Peak Gain: Isotropic	Antenna 1	2.4 GHz, 5.5 GHz	6.5 dBi, 4.2 dBi
	Antenna 2	30.5 dBi	

Environmental Data

Hazardous Substances	RoHS Compliant
Temperature	-40°C to 65°C (-40°F to + 149°F) Operating and Storage conformance to IEC 60068
Humidity (Non-Condensing)	5% to 96% Operating and Storage conformance to IEC 60068
Water Ingress	IP67
Military Spec	MIL-STD 810 conformance to vibration
Housing Material	Glass-filled Polypropylene (Analene)

Mounting Data

Dimensions	Height	2.19" (55.5mm)
	Width	2.56" (65mm)
	Length	4.84" (122.9mm)
Color	Black (BL) or White (WH)	

Cable Data

GNSS	Type	RG-174U	Wi-Fi	CFD195 Low Loss
	Diameter	0.100" (2.54 mm)		0.195" (4.953 mm)
	Length	1 feet (0.3 m)		1 feet (0.3 m)
	Termination	SMA Male		RP-SMA Male

GNSS Data - Ceramic Patch Antenna Specification

Bandwidth	1561 – 1602 MHz
Gain@Zenith	2.5 dBi
Polarization	R.H.C.P.
Axial Ratio	3.0 dB Typ.

GNSS Data - LNA Specification

Noise Figure	1.2 dB
Gain	28 dBi
Voltage	3.3V~5.6V
Current	9.6±1mA@3.3V