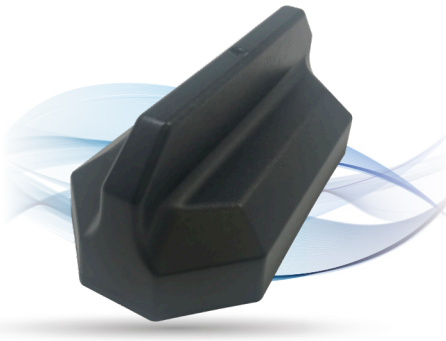
ANTENNAPLUS by Airgain

M2M SOLUTIONS

M2MAX® CCWG

Double Cell IP67 Antenna with Wi-Fi & GNSS



M2MAX CCWG is a fully rugged outdoor antenna designed specifically for M2M applications. This antenna provides best in class performance and is configurable, providing two high gain cellular/LTE, Wi-Fi and GNSS antennas inside a single robust and compact housing.

- 2 x Wideband Cellular/LTE Elements (MIMO)
- 1 x 2.4 & 4.9-6 GHz Wi-Fi Element
- 1 x GNSS Antenna
- Leading LTE performance while in coexistence with multiple other embedded antenna technologies
- Lower profile and smaller footprint than competing solutions
- Must be mounted on metal
- Available in black or white
- US Patent 10109918

Optimal MIMO Performance for LTE

Compact and Robust UV Resistant Housing

Full Outdoor Installation Ready

Customizable Cables and Connectors to Connect to Any Modem

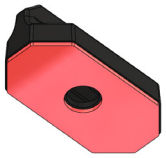
Flexible Mounting Options

Fast custom turnaround time

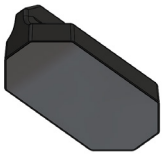
Low loss cable accessories

Descriptions/Applications

The M2MAX CCWG 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.



Adhesive Mount



Magnetic Mount

Bolt Mount

Standard Configurations

AP-M2M2-CCWG-Q-S2222-RP3-BL-15	MIMO Cell/LTE x 2, Wi-Fi & GNSS, Threaded bolt mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
AP-M2M2-CCWG-A-S2222-RP3-BL-15	MIMO Cell/LTE x 2, Wi-Fi & GNSS, Adhesive mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
AP-M2M2-CCWG-M-S2222-RP3-BL-15	MIMO Cell/LTE x 2, Wi-Fi & GNSS, Magnetic mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax

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

Electrical Data

Frequency Range	Antennas 1 & 2	698-960/1700-2700 MHz	
	Antenna 3	2.4/4.9-6.0 GHz	
	Antenna 4	1550~1610 MHz	
Operational Bands	Antennas 1 & 2	LTE/Cellular	
	Antenna 3	Wi-Fi	
	Antenna 4	GPS L1/GALILEO E1/GLONASS G1/BeiDou B1/ QZSS L1	
Peak Gain: Isotropic	Antennas 1 & 2	698-960 MHz	3.0 dBi
		1710-2700 MHz	6.0 dBi
	Antenna 3	2.4 GHz, 5.5 GHz	6.5 dBi, 4.2 dBi
	Antenna 4	30.5 dBi	
Isolation	Antennas 1 & 2	> 10 dB	
Correlation Co-efficient	Antennas 1 & 2	< 0.1	

Environmental Data

Hazardous Substances	RoHS Compliant
Temperature	-40ºC to 65ºC (-40ºF to + 149ºF) 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

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- Cell/LTE

Type	CFD195 Low Loss
Diameter	0.195” (4.953 mm)
Length	1 feet (0.3 m)
Termination	SMA Male

Cable Data- Wi-Fi

Type	CFD195 Low Loss
Diameter	0.195” (4.953 mm)
Length	1 feet (0.3 m)
Termination	RP-SMA Male

Cable Data- GNSS

Type	RG-174U
Diameter	0.100” (2.54 mm)
Length	1 feet (0.3 m)
Termination	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