



M2MAX®

Up to 5-in-1 High Performance External IP67 Antenna

A rugged outdoor antenna, M2MAX is designed to provide high performance connectivity for wireless machine-to-machine applications. This antenna mounts to virtually any M2M or IoT enabled asset and requires no servicing through its lifetime.

FEATURES

- Up to five embedded antenna elements with powerful MIMO technology that operate over multiple bands in one IP67 rated housing
- Up to 2 x Wideband Cellular LTE elements
- Up to 2 x 2.4 & 4.9-6 GHz Wi-Fi elements
- Optional GNSS element
- Available in black or white

ADVANTAGES

- High gain provides bigger cellular footprint
- EZConnect™ configuration option allows for compatibility with customized EZConnect Cable Harness from a USA factory ensuring fast turnaround
- 5 year limited warranty included¹
- Covered by one or more patents and pending applications²

¹See terms and conditions at airgain.com/antenna-plus-support/

²For a list of the patents covering this product please visit <https://airgain.com/product-support/patents/>

PART NUMBER(S)

CONFIGURATION	CELLULAR ELEMENTS	Wi-Fi ELEMENTS	GNSS	PART NUMBER <small>*Indicates EZConnect configuration option</small>	DESCRIPTION
5-in-1	2	2	Yes	*AP-MM4G-C2W2G-[x]-B1	MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, Black, 1 foot coax
				APC-C2W2G-1-2-1-6	EZConnect Cable Harness with MIMO Cell/LTE x 2, Wi-Fi x 2, & GNSS, SMA on Cell/LTE & GNSS, RP SMA on Wi-Fi, 6 feet length
				AP-M2M2-CCWWG-[x]-S22222-RP34-BL-6	MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 6 feet coax

4-in-1	2	1	Yes	*AP-MM4G-C2WG-[x]-B1	MIMO Cell/LTE x 2, Wi-Fi & GNSS, Black, 1 foot coax
				APC-C2WG-1-2-1-6	EZConnect Cable Harness with MIMO Cell/LTE x 2, Wi-Fi, & GNSS, SMA on Cell/LTE & GNSS, RP SMA on Wi-Fi, 6 feet length
				AP-M2M2-CCWG-[x]-S2222-RP3-BL-6	MIMO Cell/LTE x 2, Wi-Fi x 1 & GNSS, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 6 feet coax
3-in-1	2	0	Yes	*AP-MM4G-C2G[x]-B1	MIMO Cell/LTE x 2 & GNSS, Black, 1 foot coax
				APC-C2G-1-1-6	EZConnect Cable Harness with MIMO Cell/LTE x 2 & GNSS, SMA on Cell/LTE & GNSS, 6 feet length
				AP-M2M2-CCG-[x]-S222-BL-6	MIMO Cell/LTE x 2 & GNSS, SMA on Cell/ LTE & GNSS, Black, 6 feet coax
3-in-1	2	1	No	*AP-MM4G-C2W-[x]-B1	MIMO Cell/LTE x 2 & Wi-Fi, Black, 1 foot coax
				APC-C2W-1-2-6	EZConnect Cable Harness with MIMO Cell/LTE x 2 & Wi-Fi, SMA on Cell/LTE, RP SMA on Wi-Fi, 6 feet length
				AP-M2M2-CCW-[x]-S222-RP3-BL-6	MIMO Cell/LTE x 2 & Wi-Fi, SMA on Cell/ LTE, RP-SMA on Wi-Fi, Black, 6 feet coax
3-in-1	1	1	Yes	*AP-MM4G-CWG-[x]-B1	Cell/LTE, Wi-Fi & GNSS, Black, 1 foot coax
				APC-CWG-1-2-1-6	EZConnect Cable Harness with Cell/ LTE, Wi-Fi, & GNSS, SMA on Cell/LTE & GNSS, RP SMA on Wi-Fi, 6 feet length
				AP-M2M2-CWG-[x]-S222-RP2-BL-6	Cell/LTE x 1 & Wi-Fi, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 6 feet coax
2-in-1	2	0	No	*AP-MM4G-C2-[x]-B1	MIMO Cell/LTE x 2, Black, 1 foot coax
				APC-C2-1-6	EZConnect Cable Harness with MIMO Cell/LTE x 2, SMA on Cell/LTE, 6 feet length
				AP-M2M2-CC-[x]-S22-BL-6	MIMO Cell/LTE x 2, SMA on Cell/LTE, Black, 6 feet coax
2-in-1	1	0	Yes	*AP-MM4G-CG-[x]-B1	Cell/LTE & GNSS, Black, 1 foot coax
				APC-CG-1-1-6	EZConnect Cable Harness with Cell/ LTE & GNSS. SMA on Cell/LTE & GNSS, 6 feet length
				AP-M2M2-CG-[x]-S22-BL-6	Cell/LTE x 1, SMA on Cell/LTE & GNSS, Black, 6 feet coax
2-in-1	0	2	No	*AP-MM4G-W2-[x]-B1	MIMO Wi-Fi x 2, Black, 1 foot coax
				APC-W2-2-6	EZConnect Cable Harness with MIMO Wi-Fi x 2, RP SMA on Wi-Fi, 6 feet length
				AP-M2M2-WW-[x]-S22-RP-BL-6	Wi-Fi x 2, RP-SMA on Wi-Fi, Black, 6 feet coax

Single Wi-Fi	0	1	No	*AP-MM4G-W-[x]-B1	Wi-Fi, Black, 1 foot coax
				APC-W-2-6	EZConnect Cable Harness with Wi-Fi, RP SMA on Wi-Fi, 6 feet length
				AP-M2M2-W-[x]-S2-RP-BL-6	Wi-Fi x 1, RP-SMA on Wi-Fi, Black, 6 feet coax
MOUNTING OPTIONS [x] (Must be mounted on metal)		DESCRIPTION			
Q		Threaded Bolt Mount			
A		Adhesive Mount			
M		Magnetic Mount			

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

TECHNICAL SPECIFICATIONS

ELECTRICAL

Frequency Range	Elements 1 up to 2	689-960/1700-2700 MHz
	Elements 3 up to 4	2.4/4.9-6.0 GHz
	Element 5 (optional)	1550~1610 MHz
Operational Bands	Elements 1 up to 2	LTE/Cellular
	Elements 3 up to 4	Wi-Fi
	Element 5 (optional)	GPS L1/GALILEO E1/GLONASS G1/BeiDou B1/QZSS L1
Peak Gain: Isotropic	Elements 1 up to 2	698-960 MHz, 3 dBi
		1710-2700 MHz, 6 dBi
	Elements 3 up to 4	2.4 GHz, 5.5 GHz, 6.5 dBi, 4.2 dBi
	Element 5 (optional)	30.50 dBi
Isolation	Elements 1 up to 2	>10 dB
	Elements 3 up to 4	>30 dB
Correlation Co-efficient	Elements 1 up to 2	<0.1

ENVIRONMENTAL

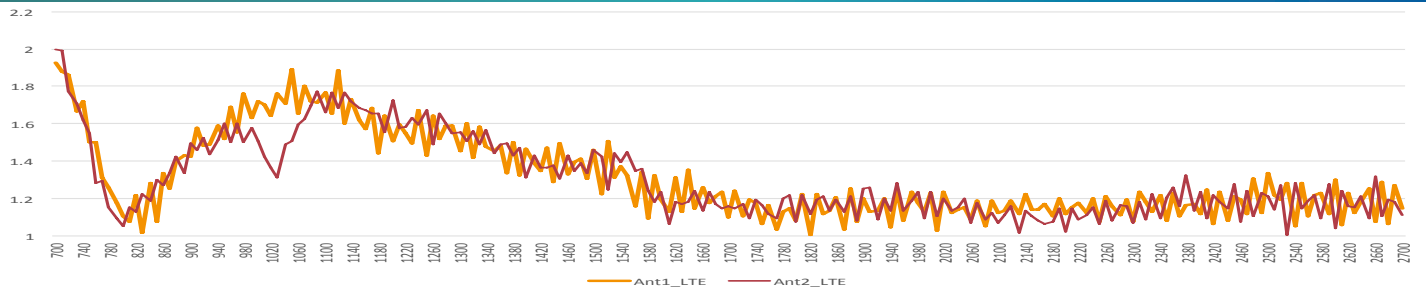
Hazardous Substances	RoHS Compliant
Temperature	-40°C to 65°C (-40°F to + 149°F) Operating and Storage conformance to IEC 60068
Humidity (Non-Condensing)	5% to 96% Operating and Storage conformance to IEC 60068
Water Ingress	IP67
Military Spec	MIL-STD 810 conformance to vibration

MOUNTING

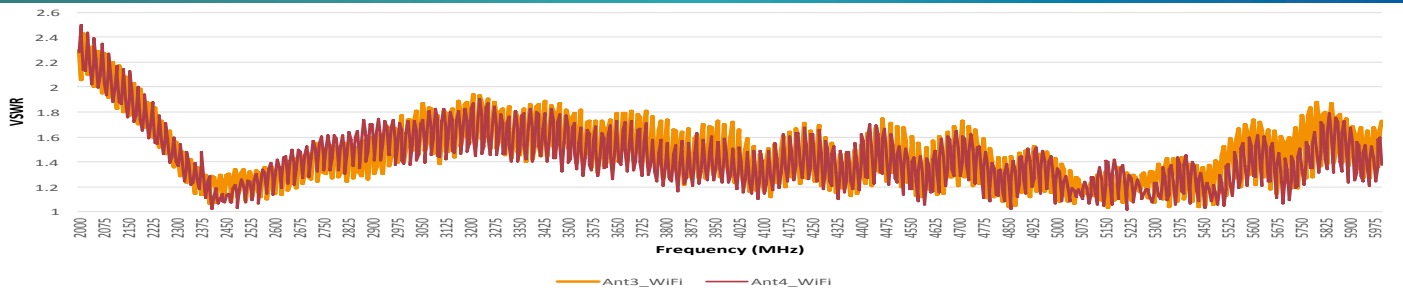
Dimensions	Height	2.19" (55.5mm)
	Width	2.56" (65mm)
	Length	4.84" (122.9mm)
Color	Black (BL) or White (WH)	

CABLE		STANDARD	EZConnect
Cell	Type	LMR-195 Low Loss	LMR-100 Low Loss
	Diameter	0.195" (4.953mm)	0.110" (2.79mm)
	Length	1 ft (0.3m)	1 ft (0.3m)
	Termination	SMA Male	SMA Male
Wi-Fi	Type	LMR-195 Low Loss	LMR-100 Low Loss
	Diameter	0.195" (4.953mm)	0.110" (2.79mm)
	Length	1 ft (0.3m)	1 ft (0.3m)
	Termination	RP-SMA Male	SMA Female
GNSS	Type	RG-174U	LMR-100 Low Loss
	Diameter	0.100" (2.54mm)	0.110" (2.79mm)
	Length	1 ft (0.3m)	1 ft (0.3m)
	Termination	SMA Male	FME Female
GNSS			
Ceramic Patch Antenna Specification	Bandwidth	1561-1602 MHz	
	Gain@Zenith	2.5 dBi	
	Polarization	R.H.C.P.	
	Axial Ratio	3.0 dB Typ.	
LNA Specification	Noise Figure	1.2 dB	
	Gain	28 dBi	
	Voltage	3.3V~5.6V	
	Current	9.6±1mA@3.3V	

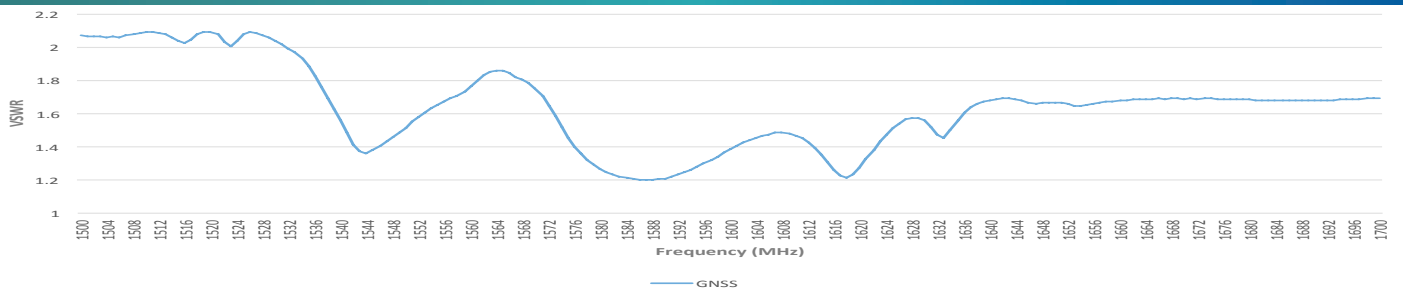
VSWR of LTE Antennas



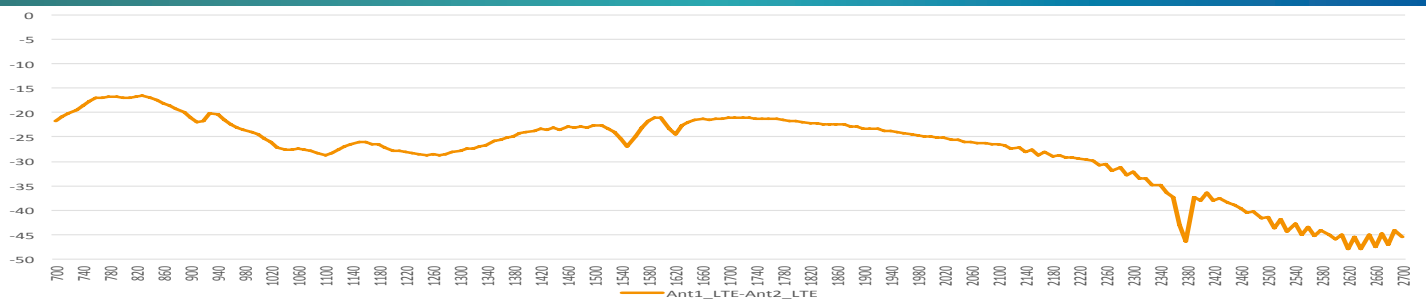
VSWR of Wi-Fi Antennas



VSWR of GNSS Antennas



Isolation of LTE Antennas



Isolation of Wi-Fi Antenna

