



M2MAX®

Up to 5-in-1 High Performance 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

- Powerful MIMO technology
- Up to 2 x Wideband Cellular LTE elements
- Up to 2 x Wi-Fi 6 (2.4 & 5-6 GHz) elements
- Optional GNSS element
- IP67 ingress protection
- Available in black or white

ADVANTAGES

- Omni-directional radiation pattern provides uniform coverage
- Compatible 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 <https://airgain.com/antenna-plus-support/>

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

COMMON PART NUMBERS (Inquire to Airgain for other configurations)

CONFIGURATION	CELLULAR ELEMENTS	Wi-Fi ELEMENTS	GNSS	PART NUMBER <small>*Requires EZConnect Cable Harness</small>	DESCRIPTION
5-in-1	2	2	Yes	*AP-MM4G-C2W2G-[x]-B1	EZConnect Antenna with MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, Black, 1 foot coax
				[z]-C2W2G-1-2-1-5	EZConnect Cable Harness with MIMO Cell/LTE x 2, Wi-Fi x 2, & GNSS, SMA on Cell/LTE & GNSS, RP SMA on Wi-Fi, 5 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	EZConnect Antenna with MIMO Cell/LTE x 2, Wi-Fi & GNSS, Black, 1 foot coax
				[z]-C2WG-1-2-1-5	EZConnect Cable Harness with MIMO Cell/LTE x 2, Wi-Fi, & GNSS, SMA on Cell/LTE & GNSS, RP SMA on Wi-Fi, 5 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	EZConnect Antenna with MIMO Cell/LTE x 2 & GNSS, Black, 1 foot coax
				[z]-C2G-1-1-5	EZConnect Cable Harness with MIMO Cell/LTE x 2 & GNSS, SMA on Cell/LTE & GNSS, 5 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	EZConnect Antenna with MIMO Cell/LTE x 2 & Wi-Fi, Black, 1 foot coax
				[z]-C2W-1-2-5	EZConnect Cable Harness with MIMO Cell/LTE x 2 & Wi-Fi, SMA on Cell/LTE, RP SMA on Wi-Fi, 5 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	EZConnect Antenna with Cell/LTE, Wi-Fi & GNSS, Black, 1 foot coax
				[z]-CWG-1-2-1-5	EZConnect Cable Harness with Cell/LTE, Wi-Fi, & GNSS, SMA on Cell/LTE & GNSS, RP SMA on Wi-Fi, 5 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	EZConnect Antenna with MIMO Cell/LTE x 2, Black, 1 foot coax
				[z]-C2-1-5	EZConnect Cable Harness with MIMO Cell/LTE x 2, SMA on Cell/LTE, 5 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	EZConnect Antenna with Cell/LTE & GNSS, Black, 1 foot coax
				[z]-CG-1-1-5	EZConnect Cable Harness with Cell/LTE & GNSS. SMA on Cell/LTE & GNSS, 5 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	EZConnect Antenna with MIMO Wi-Fi x 2, Black, 1 foot coax
				[z]-W2-2-5	EZConnect Cable Harness with MIMO Wi-Fi x 2, RP SMA on Wi-Fi, 5 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	EZConnect Antenna with Wi-Fi, Black, 1 foot coax
				[z]-W-2-5	EZConnect Cable Harness with Wi-Fi, RP SMA on Wi-Fi, 5 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
EZConnect CABLE HARNESS [z]	DESCRIPTION
CH	Inquire to distributor for select SKUs
CCH	Custom Cable Harness with cable lengths up to 34 feet, and other variations

Also available in color white. For mounting instructions please visit <https://www.airgain.com/installation-and-removal-guides/>.

TECHNICAL SPECIFICATIONS

Performance results are measured in a test chamber with 1' LMR-100 cables and over a 2'x2' ground plane, results are more reliable than data from software simulations

ELECTRICAL (Performance results are measured in a test chamber with 1' LMR-195 cables and over a 2'x2' ground plane)

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, 6.5 dBi
		5.5 GHz, 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
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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

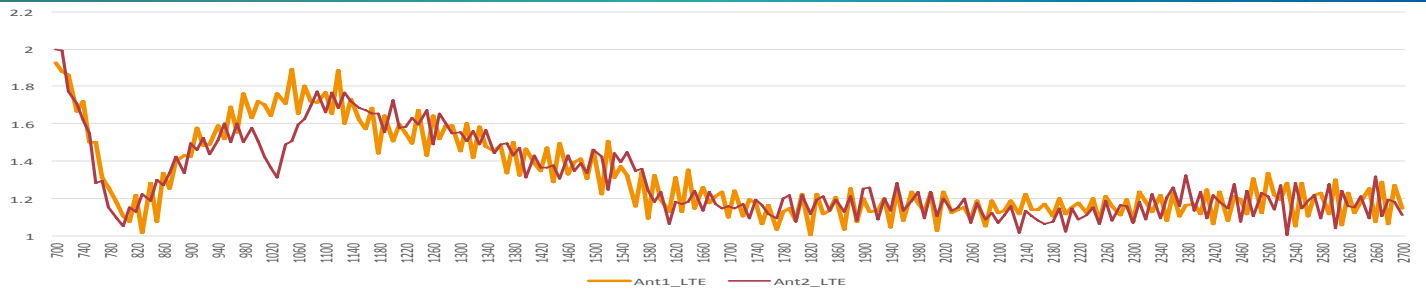
GNSS		
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Ceramic Patch Antenna Specification	Bandwidth	1561-1602 MHz
	Gain@Zenith	2.5 dBi
	Polarization	R.H.C.P.
	Axial Ratio	3.0 dB Typ.

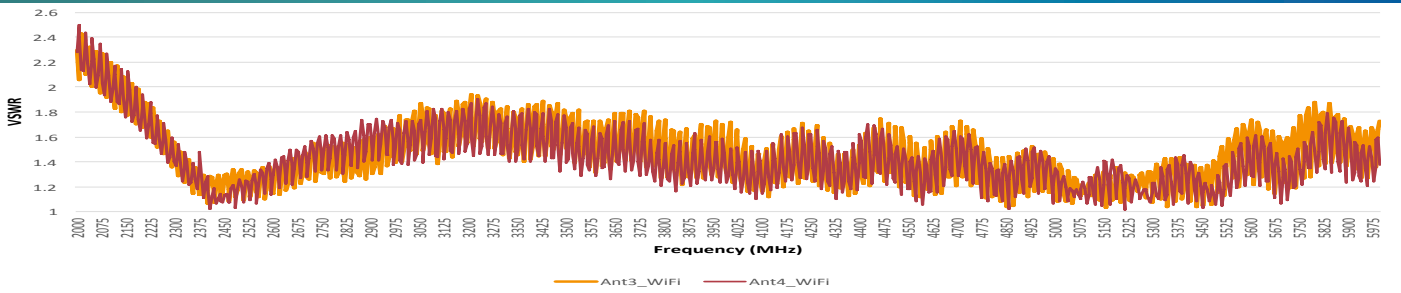
LNA Specification	Noise Figure	1.2 dB
	Gain	28 dBi
	Voltage	3.3V~5.6V
	Current	9.6±1mA@3.3V

Guidance for interpreting the data sheet is available on our website: <https://www.airgain.com/resources/datasheet-term-guide/>

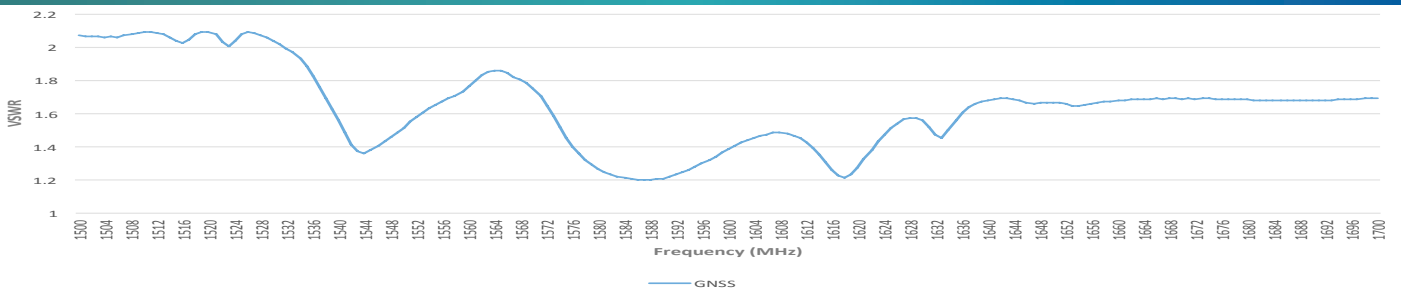
VSWR of LTE Antennas



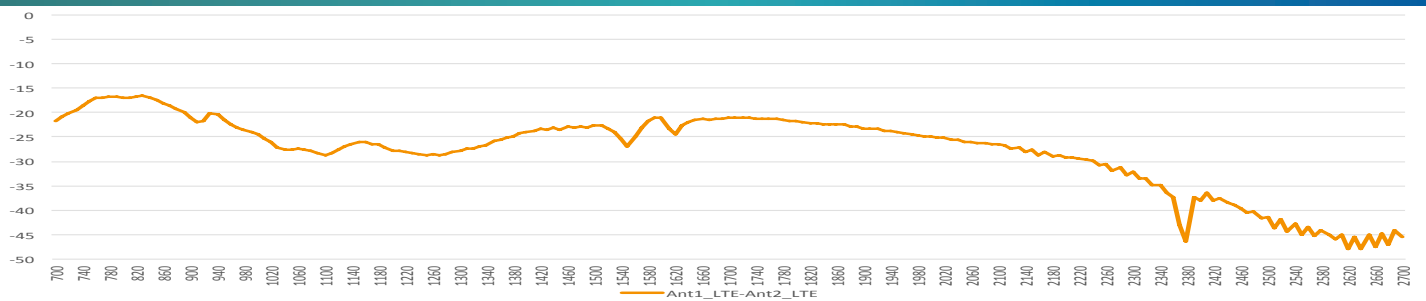
VSWR of Wi-Fi Antennas



VSWR of GNSS Antennas



Isolation of LTE Antennas



Isolation of Wi-Fi Antenna

