



MULTIMAX™ 4G

Up to 6-in-1 High Performance External IP66 Antenna

A rugged outdoor antenna, MULTIMAX 4G is designed to provide high performance connectivity for Fleet and Public Safety vehicles and assets. Equipped with up to 6 ports, this antenna connects to virtually any vehicular router or modem.

The MULTIMAX 4G builds on the best-in-class RF performance, leading design features, and extended operational life of Airgain's highly successful Fleet and Public Safety Antenna products. This product's rugged low-profile design provides greater protection against the most common natural hazards a vehicle can face, including (but not limited to): vibration, hot, cold, ice, salt, dirt, car washes, and tree branch sweeps.

FEATURES

- Up to six embedded antenna elements with powerful MIMO technology that operate over multiple bands in one IP66 rated housing
- Up to 2 x Wideband Cellular LTE elements with multiple carrier switching, including support for FirstNet™ on LTE Band 14
- Up to 3 x 2.4 & 4.9-6 GHz Wi-Fi elements
- Optional GNSS element
- Available in black or white

ADVANTAGES

- High gain provides bigger cellular and Wi-Fi 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 <https://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>*Requires EZConnect Cable Harness</small>	DESCRIPTION
6-in-1	2	3	Yes	*AP-MF4G-C2W3G-[x]-B1	EZConnect Antenna with MIMO Cell/LTE x 2, Wi-Fi x 3 & GNSS, Black, 1 foot coax (magnetic mount not available)
				Inquire to distributor	EZConnect Cable Harness with MIMO/Cell x 2, Wi-Fi x 3, GNSS, SMA on Cell & GNSS, RP-SMA on Wi-Fi, 14 feet length
				AP-MMF-CCWWWG-[x]-S222222-RP345-BL	MIMO Cell/LTE x 2, Wi-Fi x 3 & GNSS, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax (magnetic mount not available)

5-in-1	2	2	Yes	*AP-MF4G-C2W2G-[x]-B1	EZConnect Antenna with MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with MIMO/Cell x 2, Wi-Fi x 2, GNSS, SMA on Cell & GNSS, RP-SMA on Wi-Fi, 14 feet length
				AP-MMF-CCWWG-[x]-S22222- RP34-BL	MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
4-in-1	1	1	Yes	*AP-MF4G-C2WG-[x]-B1	EZConnect Antenna with MIMO Cell/LTE x 2, Wi-Fi & GNSS, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with MIMO/Cell x 2, Wi-Fi, GNSS, SMA on Cell & GNSS, RP-SMA on Wi-Fi, 14 feet length
				AP-MMF-CCWG-[x]-S2222-RP3-BL	Cell/LTE x 2, Wi-Fi x 1 & GNSS, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
3-in-1	2	0	Yes	*AP-MF4G-C2G-[x]-B1	EZConnect Antenna with MIMO Cell/LTE x 2 & GNSS, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with MIMO/Cell x 2 & GNSS, SMA on Cell & GNSS, 14 feet length
				AP-MMF-CCG-[x]-S222-BL	MIMO Cell/LTE x 2 & GNSS, SMA on Cell/ LTE & GNSS, Black, 15ft coax
3-in-1	1	1	Yes	*AP-MF4G-CWG-[x]-B1	EZConnect Antenna with Cell/LTE, Wi-Fi & GNSS, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with Cell, Wi-Fi, GNSS, SMA on Cell, Wi-Fi & GNSS, 14 feet length
				AP-MMF-CWG-[x]-S222-BL	Cell/LTE x 1, Wi-Fi x 1 & GNSS, SMA on Cell/LTE & GNSS, Black, 15ft coax
3-in-1	0	3	No	*AP-MF4G-W3-[x]-B1	EZConnect Antenna with MIMO Wi-Fi x 3 Black, 1 foot coax (magnetic mount not available on this version)
				Inquire to distributor	EZConnect Cable Harness with Wi-Fi x 3, RP-SMA on Wi-Fi, 14 feet length
				AP-MMF-WWW-[x]-S222-RP-BL	Wi-Fi x 3, RP-SMA on Wi-Fi, Black, 15ft coax (magnetic mount not available on this version)
2-in-1	2	0	No	*AP-MF4G-C2-[x]-B1	EZConnect Antenna with MIMO Cell/LTE x 2, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with MIMO/Cell x 2, SMA on Cell, 14 feet length
				AP-MMF-CC-[x]-S22-BL	MIMO Cell/LTE x 2, SMA on Cell/LTE, Black, 15ft coax
2-in-1	1	0	Yes	*AP-MF4G-CG-[x]-B1	EZConnect Antenna with Cell/LTE & GNSS, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with Cell, GNSS, SMA on Cell & GNSS, 14 feet length
				AP-MMF-CG-[x]-S22-BL	Cell/LTE x 1, SMA on Cell/LTE & GNSS, Black, 15ft coax

2-in-1	1	1	No	*AP-MF4G-CW-[x]-B1	EZConnect Antenna with Cell/LTE, & Wi-Fi, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with Cell, Wi-Fi, SMA on Cell, RP-SMA on Wi-Fi, 14 feet length
				AP-MMF-CW-[x]-S22-RP2-BL	Cell/LTE x 1, Wi-Fi x 1, SMA on Cell/LTE, RP-SMA on Wi-Fi, Black, 15ft coax
2-in-1	0	2	No	*AP-MF4G-W2-[x]-B1	EZConnect Antenna with MIMO Wi-Fi x 2, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with Wi-Fi x 2, RP-SMA on Wi-Fi, 14 feet length
				AP-MMF-WW-[x]-S22-RP-BL	Wi-Fi x 2, RP-SMA on Wi-Fi, Black, 15ft coax
Single 4G Cellular	1	0	No	*AP-MF4G-C-[x]-B1	EZConnect Antenna with Cell/LTE, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with Cell, SMA on Cell, 14 feet length
				AP-MMF-C-[x]-S2-BL	Cell/LTE x 1, SMA on Cell/LTE, Black, 15ft coax
Single GNSS	0	0	Yes	*AP-MF4G-G-[x]-B1	EZConnect Antenna with GNSS, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with GNSS, SMA on GNSS, 14 feet length
				AP-MMF-G-[x]-S2-BL	GNSS, SMA on GNSS, Black, 15ft coax
Single Wi-Fi	0	1	No	*AP-MF4G-W-[x]-B1	EZConnect Antenna with Wi-Fi, Black, 1 foot coax
				Inquire to distributor	EZConnect Cable Harness with Wi-Fi, RP-SMA on Wi-Fi, 14 feet length
				AP-MMF-W-[x]-S2-RP-BL	Wi-Fi x 1, RP-SMA on Wi-Fi, Black, 15ft coax

MOUNTING OPTIONS [x] (Must be mounted on metal)	DESCRIPTION
Q	Threaded Bolt Mount
QR	Threaded Bolt Mount with Modified Gasket for 2020 Ford Explorer
A	Adhesive Mount
AR	Adhesive Mount with Modified Gasket for 2020 Ford Explorer
M	Magnetic Mount

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

TECHNICAL SPECIFICATIONS

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 5	2.4/4.9-6.0 GHz
	Element 6 (optional)	1550~1610 MHz
Operational Bands	Elements 1 up to 2	LTE/Cellular
	Elements 3 up to 5	Wi-Fi
	Element 6 (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, 6.5 dBi
	Elements 3 up to 5	2.4 GHz, 5.5 GHz, 8 dBi, 7 dBi
	Element 6 (optional)	30.50 dBi
Isolation	Elements 1 up to 2	>3 dB
	Elements 3 up to 5	>6 dB
Correlation Co-efficient	Elements 1 up to 2	<0.1

ENVIRONMENTAL

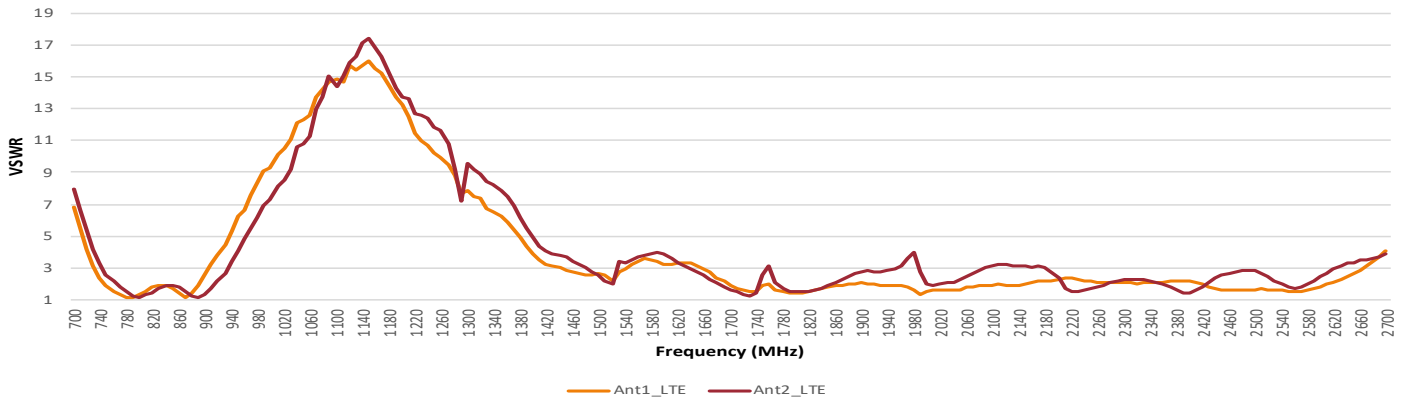
Hazardous Substances	RoHS Compliant
Temperature	-55°C to 85°C (-67°F to + 185°F) Operating and Storage conformance to MIL-STD 810G Method 501.5
Humidity (Non-Condensing)	5% to 96% Operating and Storage conformance to IEC 60068
Water Ingress	IP66
Military Spec	MIL-STD 810 conformance to vibration

MOUNTING

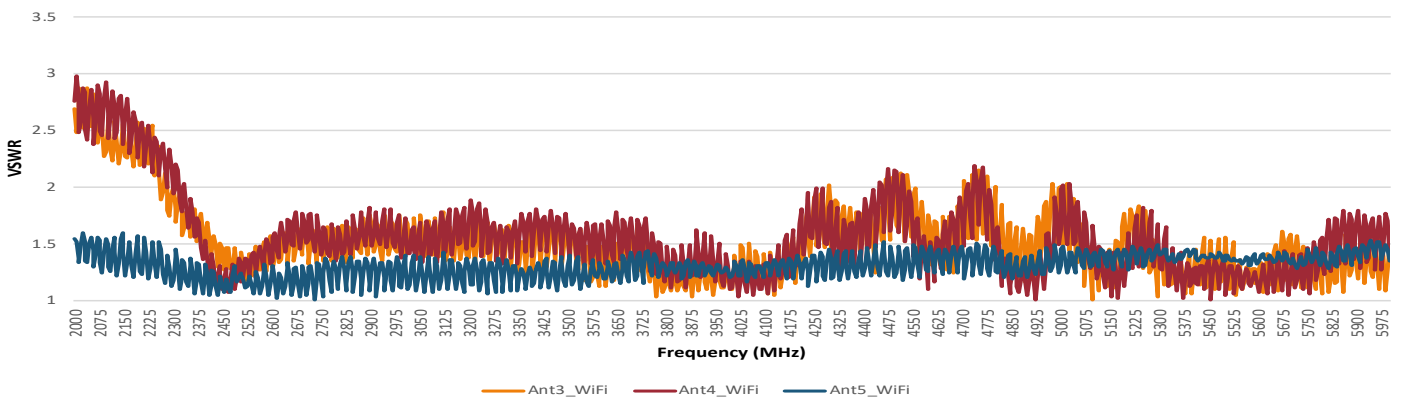
Dimensions	Height	2.47" (62.6mm)
	Width	2.44" (62.1mm)
	Length	6.34" (161mm)
Color	Black (BL) or White (WH)	

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	

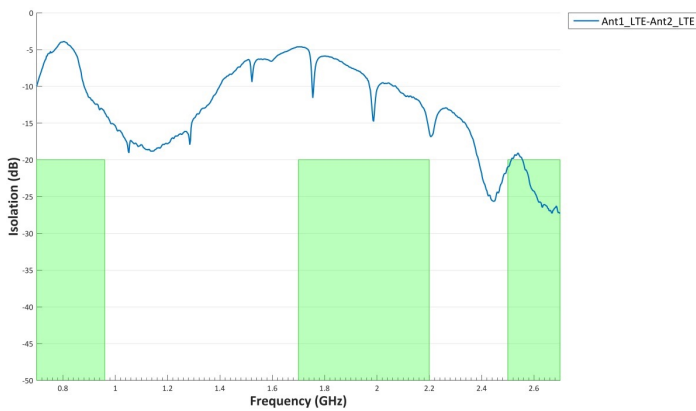
VSWR of LTE Antennas



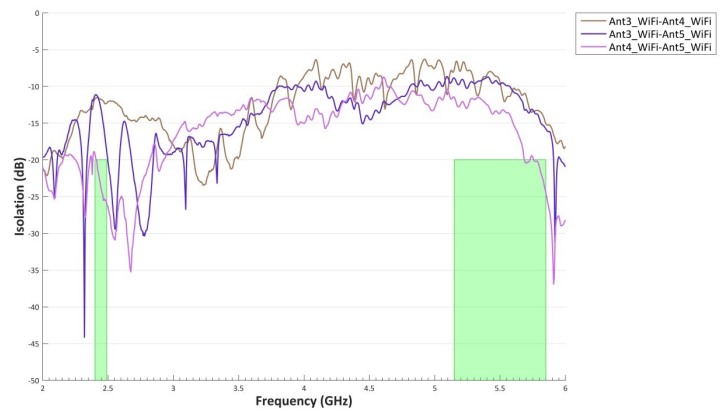
VSWR of Wi-Fi Antennas



Isolation of LTE Antennas



Isolation of Wi-Fi Antennas



VSWR of GNSS Antenna

