



## MULTIMAX™ 5G

### Up to 7-in-1 High Performance IP67/IP69K Antenna

A rugged outdoor antenna, MULTIMAX 5G is designed to provide high performance LTE and 5G connectivity for Fleet and Public Safety vehicles and assets. Equipped with up to 7 ports, this antenna connects to virtually any vehicular router or modem.

#### FEATURES

- Powerful MIMO technology
- Up to 2 x LTE/5G (600 MHz - 6 GHz) elements
- Up to 4 x Wi-Fi 6/6E/7 (2.4 & 5-7.1 GHz) elements
- Optional GNSS element
- IP67 and IP69K ingress protection
- Available in black or white

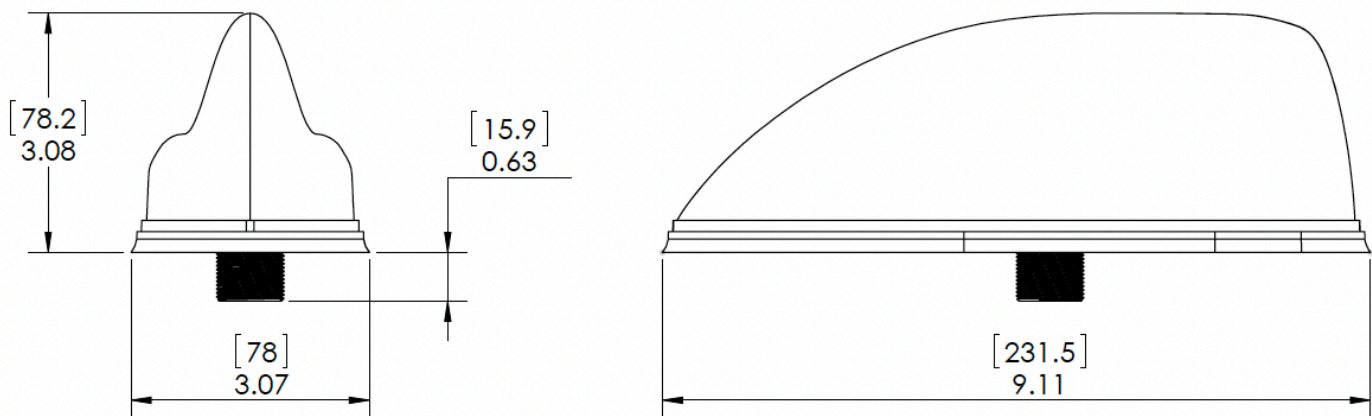
#### ADVANTAGES

- High efficiency provides better performance
- Omni-directional radiation pattern provides uniform coverage
- Compatible with customized EZConnect™ Cable Harness from a USA factory ensuring fast turnaround
- 5 year limited warranty included<sup>1</sup>
- Covered by one or more patents and pending applications<sup>2</sup>

<sup>1</sup>See terms and conditions at <https://airgain.com/antenna-plus-support/>

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

#### DIMENSIONS



**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
7-in-1	2	4	Yes	*AP-MF5G-C2W4G-[x]-B1	EZConnect Antenna with MIMO LTE/5G x 2, Wi-Fi x 4 & GNSS, Black, 1 foot coax
				[z]-C2W4G-1-2-1-14	EZConnect Cable Harness with Cell x 2, Wi-Fi x 4, GNSS, SMA on Cell & GNSS, RP-SMA on Wi-Fi, 14 feet length
6-in-1	2	3	Yes	*AP-MF5G-C2W3G-[x]-B1	EZConnect Antenna with MIMO LTE/5G x 2, Wi-Fi x 3 & GNSS, Black, 1 foot coax
				[z]-C2W3G-1-2-1-14	EZConnect Cable Harness with Cell x 2, Wi-Fi x 3, GNSS, SMA on Cell & GNSS, RP-SMA on Wi-Fi, 14 feet length
5-in-1	2	2	Yes	*AP-MF5G-C2W2G-[x]-B1	EZConnect Antenna with MIMO LTE/5G x 2, Wi-Fi x 2 & GNSS, Black, 1 foot coax
				[z]-C2W2G-1-2-1-14	EZConnect Cable Harness with Cell x 2, Wi-Fi x 2, GNSS, SMA on Cell & GNSS, RP-SMA on Wi-Fi, 14 feet length
4-in-1	2	1	Yes	*AP-MF5G-C2WG-[x]-B1	EZConnect Antenna with MIMO LTE/5G x 2, Wi-Fi & GNSS, Black, 1 foot coax
				[z]-C2WG-1-2-1-14	EZConnect Cable Harness with Cell x 2, Wi-Fi, GNSS, SMA on Cell & GNSS, RP-SMA on Wi-Fi, 14 feet length
3-in-1	2	0	Yes	*AP-MF5G-C2G-[x]-B1	EZConnect Antenna with MIMO LTE/5G x 2 & GNSS, Black, 1 foot coax
				[z]-C2G-1-1-14	EZConnect Cable Harness with MIMO/Cell x 2 & GNSS, SMA on Cell & GNSS, 14 feet length
3-in-1	1	1	Yes	*AP-MF5G-CWG-[x]-B1	EZConnect Antenna with LTE/5G, Wi-Fi & GNSS, Black, 1 foot coax
				[z]-CWG-1-1-1-14	EZConnect Cable Harness with Cell, Wi-Fi, GNSS, SMA on Cell, Wi-Fi & GNSS, 14 feet length
2-in-1	2	0	No	*AP-MF5G-C2-[x]-B1	EZConnect Antenna with MIMO LTE/5G x 2, Black, 1 foot coax
				[z]-C2-1-14	EZConnect Cable Harness with Cell x 2, SMA on Cell, 14 feet length
2-in-1	1	0	Yes	*AP-MF5G-CG-[x]-B1	EZConnect Antenna with LTE/5G & GNSS, Black, 1 foot coax
				[z]-CG-1-1-14	EZConnect Cable Harness with Cell, GNSS, SMA on Cell & GNSS, 14 feet length
2-in-1	1	1	No	*AP-MF5G-CW-[x]-B1	EZConnect Antenna with LTE/5G & Wi-Fi, Black, 1 foot coax
				[z]-CW-1-2-14	EZConnect Cable Harness with Cell, Wi-Fi, SMA on Cell, RP-SMA on Wi-Fi, 14 feet length

MOUNTING OPTIONS [x] (Must be mounted on metal)	DESCRIPTION
Q	Threaded Bolt Mount (includes pre-attached mounting foam for uneven surfaces) <sup>3</sup>
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/>.

<sup>3</sup>Cross section with mounting foam on uneven surface  
(cannot be mounted between ribs of 2020+ Ford Explorer)



## 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

Frequency Range	Elements 1 up to 2	617-960/1700-2700/3300-4200/5150-5850 MHz
	Elements 3 up to 6	2.4/5.15-7.125 GHz
	Element 7 (optional)	1550~1610 MHz
Operational Bands	Elements 1 up to 2	5G (Band 71, LTE, CBRS, LAA)
	Elements 3 up to 6	Wi-Fi 6E
	Element 7 (optional)	GPS L1/GALILEO E1/GLONASS G1/BeiDou B1/QZSS L1
Peak Gain: Isotropic	Elements 1 up to 2	617-960 MHz, 5.6 dBi
		1700-2700 MHz, 5.6 dBi
		3300-4200 MHz, 6.8 dBi
		5150-5850 MHz, 6.8 dBi
	Elements 3 up to 6	2.4 GHz, 7.4 dBi
		5-7 GHz, 10.6 dBi
Element 7 (optional)	35.8 dBi	
Isolation	Elements 1 up to 2	>9 dB
	Elements 3 up to 6	>11 dB
Average Efficiency	Elements 1 up to 2	617-960 MHz, >62%
		1700-2700 MHz, >60%
		3300-4200 MHz, >62%
		5150-5850 MHz, >48%
	Elements 3 up to 6	2.4 GHz, >47%
		5-7 GHz, >48%

Correlation Co-efficient	Elements 1 up to 2	617-960 MHz, <0.56
		1700-2700 MHz, <0.5
		3300-5850 MHz, <0.3

#### ENVIRONMENTAL

Hazardous Substances	RoHS Compliant
Temperature	-40°C to 85°C (-40°F to + 185°F) Operating and Storage conformance to SAE J1455 4.1.1.5A
Humidity (Non-Condensing)	60°C and 95% RH Operating and Storage conformance to MIL-STD 810F Method 507.4
Water Ingress	IP67 and IP69K
Vibration	Conformance to SAE J1455 4.10.4.2
Mechanical Shock	Conformance to ISO 16750-3

#### MECHANICAL

Dimensions	Height	3.08" (78.2mm)
	Width	3.07" (78.0mm)
	Length	9.11" (231mm)
Color	Black (BL) or White (WH)	

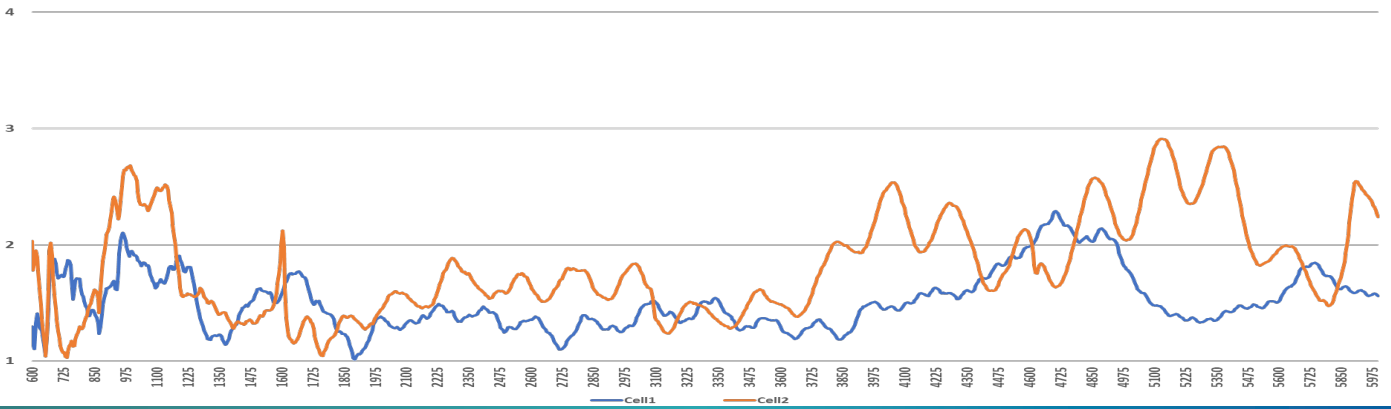
#### CABLE

Cell	Type	LMR-100 Low Loss
	Diameter	0.110" (2.79mm)
	Length	1 ft (0.3m)
	Termination	SMA Male
Wi-Fi	Type	LMR-100 Low Loss
	Diameter	0.110" (2.79mm)
	Length	1 ft (0.3m)
	Termination	SMA Female

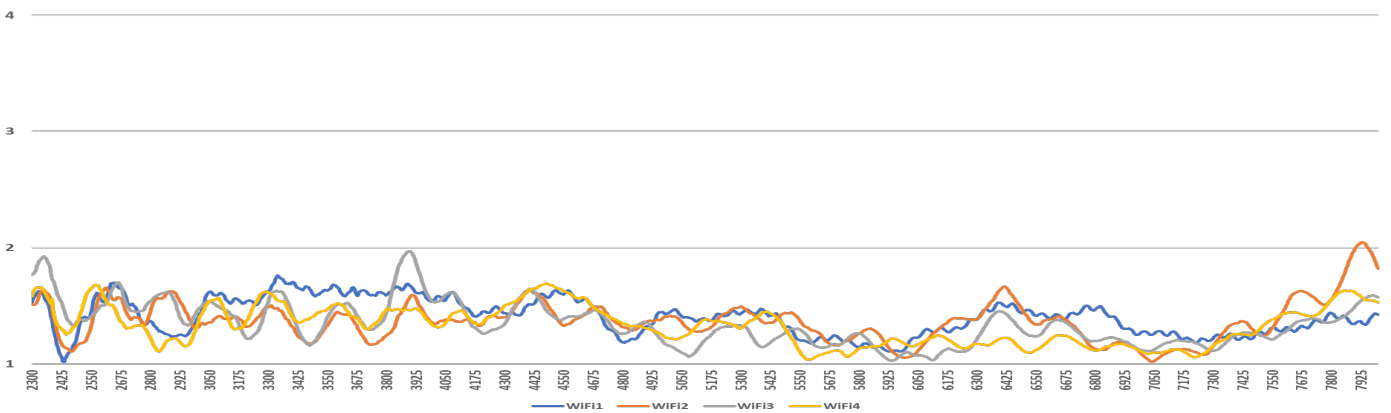
GNSS	Type	LMR-100 Low Loss
	Diameter	0.110" (2.79mm)
	Length	1 ft (0.3m)
	Termination	FME Female
<b>GNSS</b>		
Ceramic Patch Antenna Specification	Bandwidth	1558-1610 MHz
	Gain@Zenith	0 dBi
	Polarization	R.H.C.P.
	Axial Ratio	3.0 dB Typ.
LNA Specification	Noise Figure	1.2 dB
	Gain	35 dBi
	Voltage	1.6V~10V
	Current	9+/-2mA@3.3V

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

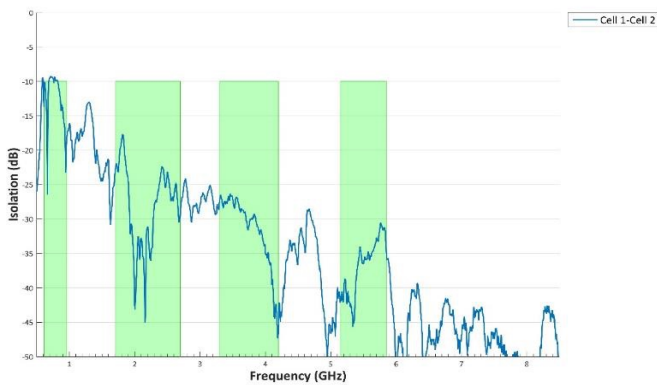
### VSWR of Cell Antennas



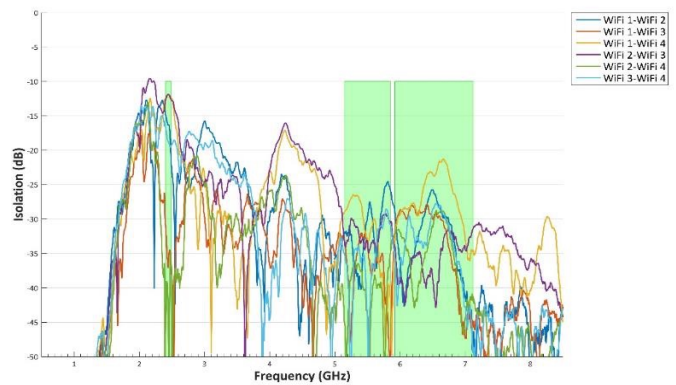
### VSWR of Wi-Fi Antennas



### Isolation of Cell Antennas



### Isolation of Wi-Fi Antennas



### VSWR of GNSS Antenna

