



MULTIMAX™ 4G 5-in-1

Compact External IP67 Antenna paired with Cradlepoint IBR900-600M Router/Modem sold by Panasonic

The MULTIMAX 4G 5-in-1 is an outdoor vehicular sharkfin antenna designed specifically to provide high performance connectivity for Fleet and Public Safety vehicles connecting to the Cradlepoint IBR900-600M Router/Modem. The MULTIMAX 4G antenna offers two high gain cellular/LTE/MIMO antennas supporting FirstNet™ LTE Band 14, two high gain dual band Wi-Fi antennas, and a GNSS antenna inside a single robust and compact housing.

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

- Five embedded antenna elements that operate over multiple bands in one IP67 rated housing
- 2 x Wideband Cellular LTE elements with multiple carrier switching, including support for FirstNet™ on LTE Band 14
- 2 x 2.4 & 9-6 GHz Wi-Fi Elements
- 1 x GNSS element
- Available in black or white

ADVANTAGES

- High gain provides bigger cellular footprint
- 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	DESCRIPTION
5-in-1	2	2	1	AP-PAN-MMF-CCWWG-Q-BL-19 Panasonic P/N: AI-CP5DCDWB19	MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, Threaded Bolt Mount, SMA for Cell/LTE & GNSS, RP-SMA for Wi-Fi, Black, 19 ft coax
				AP-PAN-MMF-CCWWG-Q-WH-19 Panasonic P/N: AI-CP5DCDWW19	MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, Threaded Bolt Mount, SMA for Cell/LTE & GNSS, RP-SMA for Wi-Fi, White, 19 ft coax

TECHNICAL SPECIFICATIONS

ELECTRICAL

Frequency Range	Elements 1 & 2	698-960/1700-2700 MHz
	Elements 3 & 4	2.4/4.9-6.0 GHz
	Element 5	1550~1610 MHz
Operational Bands	Elements 1 & 2	LTE/Cellular
	Elements 3 & 4	Wi-Fi
	Element 5	GPS L1/GALILEO E1/GLONASS G1/BeiDou B1/QZSS L1
Peak Gain: Isotropic	Elements 1 & 2	698-960 MHz, 3 dBi
		1710-2700 MHz, 6.5 dBi
	Elements 3 & 4	2.4 GHz, 7 dBi
		5.5 GHz, 5 dBi
Element 5	30.50 dBi	
Isolation	Elements 1 & 2	> 10 dB
	Elements 3 & 4	> 30 dB
Correlation Co-efficient	Elements 1 & 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	2.47" (62.6mm)
	Width	2.44" (62.1mm)
	Length	6.34" (161mm)

Color	Black (BL) or White (WH)
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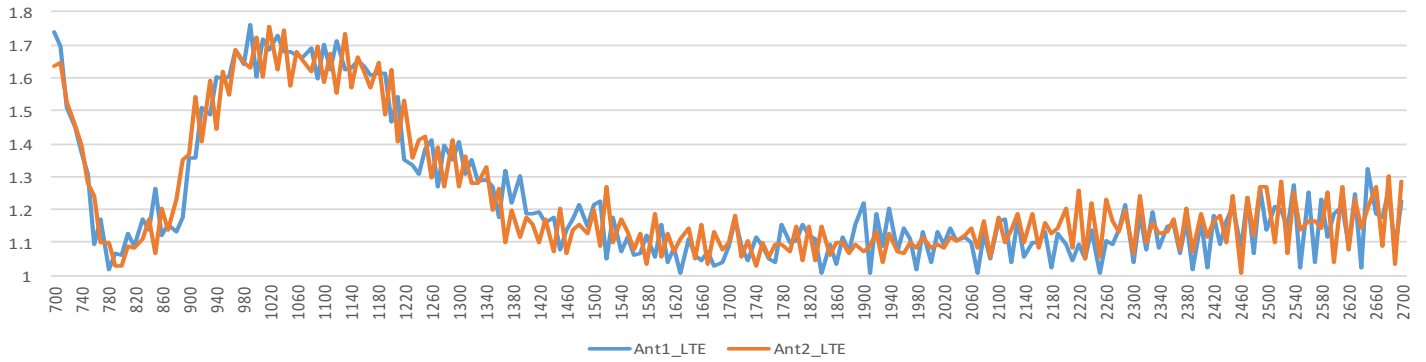
CABLE

Cell	Type	CFD195 Low Loss
	Diameter	0.195" (4.953mm)
	Length	1 ft (0.3m)
	Termination	SMA Male
Wi-Fi	Type	CFD195 Low Loss
	Diameter	0.195" (4.953mm)
	Length	1 ft (0.3m)
	Termination	RP-SMA Male
GNSS	Type	RG-174U
	Diameter	0.100" (2.54mm)
	Length	1 ft (0.3m)
	Termination	SMA Male

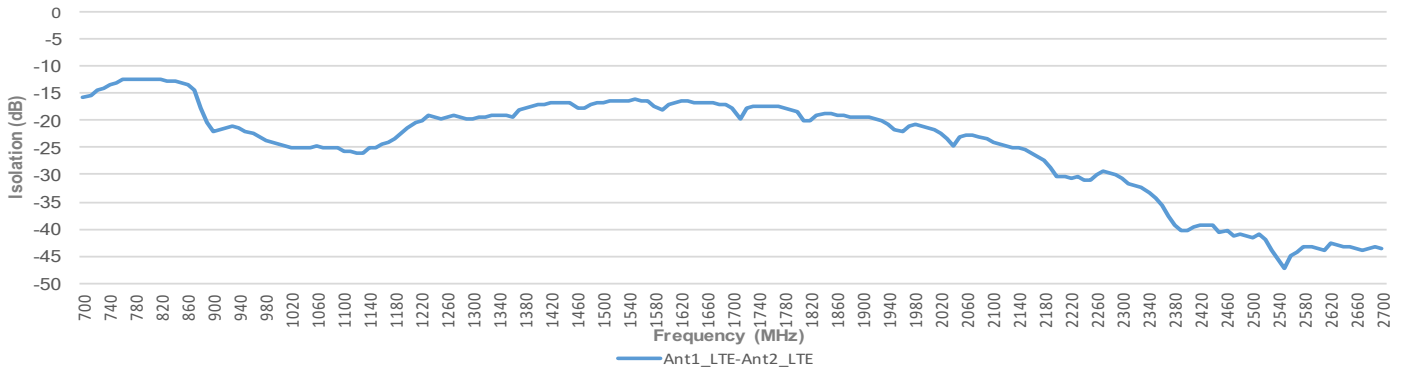
GNSS

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

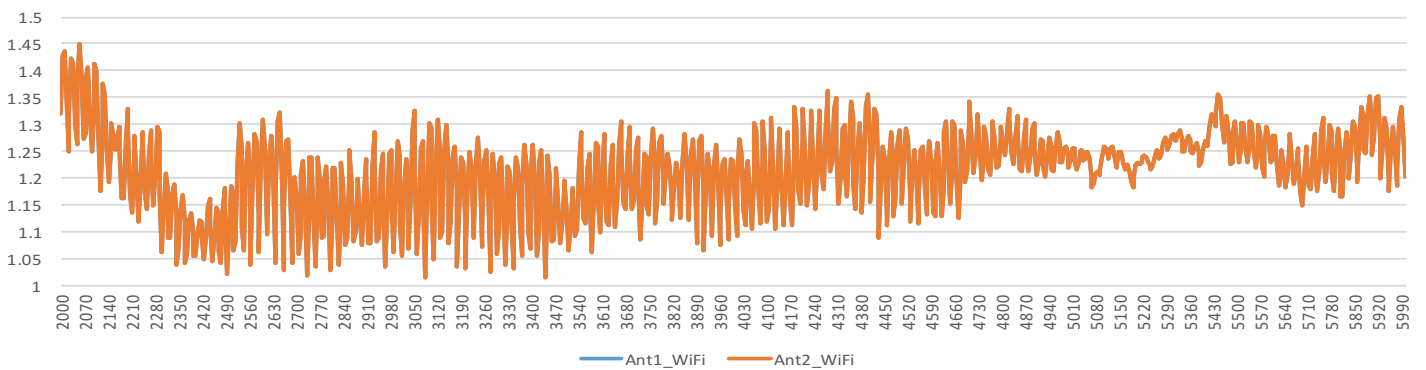
VSWR of LTE Antennas



Isolation of LTE Antennas



VSWR of Wi-Fi Antennas



Isolation of Wi-Fi Antennas

