# by Airgain<sup>\*</sup>))) ULTRA**MAX**<sup>™</sup> MIMO 6-in-1 High Performance External Antenna

ULTRAMAX MIMO 6-in-1 is a full outdoor antenna equipped with six ports, designed specifically to provide high performance connectivity for Fleet and Public Safety vehicles and assets connecting to almost any vehicular router or modem. This antenna is configurable and offers up to two high gain cellular/LTE/MIMO antennas, which include support for LTE Band 14 for FirstNet, three high gain Wi-Fi antennas, and a GNSS antenna inside a single robust and compact housing.

- 2 x Wideband Cellular/LTE Elements (MIMO)
- 3 x 2.4 & 4.9-6GHz Wi-Fi Elements (MIMO)

ANTENNAPLUS

- 1 x GNSS Element
- Six embedded antenna technologies that operate over multiple bands in one housing
- · Leading LTE performance while in coexistence with multiple other embedded antenna technologies
- Lower profile and smaller footprint than competing solutions
- High gain provides bigger cellular footprint
- Must be mounted on metal.
- Available in black or white
- US Patent 10109918



**FLEET SOLUTIONS** 





**Optimal MIMO** Performance for LTE

Compact and Robust UV Resistant Housing





Full Outdoor Installation Ready

**Customizable Cables** and Connectors to Connect to Any Modem





GNSS

Flexible Mounting Options



Low loss cable accessories

Fast custom turnaround time

## **Descriptions/Applications**

The ULTRAMAX MIMO antenna builds on the best in class RF performance, leading design features, and extended operational life of our highly successful Fleet and Public Safety Antenna products. Like all our antennas, this product has been designed to be robust to withstand the natural hazards a vehicle faces including vibration, hot, cold, ice, salt, dirt, car washes, and tree branch sweeps. Our antennas typically outlast the life of a vehicle.

Bolt Mount



Adhesive Mount

Magnetic Mount

### Standard Configurations

AP-CCWWWG-M-S222222-RP345-BL-15	MIMO Cell/LTE x 2, Wi-Fi x 3 & GNSS, Magnetic Mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax	
AP-CCWWWG-A-S222222-RP345-BL-15	MIMO Cell/LTE x 2, Wi-Fi x 3, & GNSS, Adhesive Mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax	
AP-CCWWWG-Q-S222222-RP345-BL-15	MIMO Cell/LTE x 2, Wi-Fi x 3, & GNSS, Threaded Bolt Mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax	

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





#### **Electrical Data** Elements 1 & 2 698-960/1700-2700 MHz **Frequency Range** Elements 3, 4, & 5 2.4/4.9-6.0 GHz Element 6 1550~1610 MHz Elements 1 & 2 LTE/Cellular **Operational Bands** Elements 3, 4, & 5 Wi-Fi Element 6 GPS L1/GALILEO E1/GLONASS G1/BeiDou B1/QZSS L1 698-960 MHz 4.9 dBi Elements 1 & 2 1710-2700 MHz 7 dBi Peak Gain: Isotropic Elements 3, 4, & 5 2.4 GHz, 5.5 GHz 7 dBi, 5 dBi Element 6 2.50 dBi 28 dB Elements 1 & 2 > 10 dB Isolation Elements 3, 4, & 5 > 30 dB**Correlation Co-efficient** Elements 1 & 2 < 0.1

Environmental Data	
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
Military Spec	MIL-STD 810 conformance to vibration

#### **Mounting Data**

	•	2.220" (56.4mm)
Dimensions	Width	3.831" (97.3mm)
	Length	7.000" (178.3mm)
Color	Black (BL) or White (WH)	

Cable Data-	Cell/LTE	Cable Data-	Wi-Fi	Cable Data-	GNSS
Туре	CFD195 Low Loss	Туре	CFD195 Low Loss	Туре	RG-174U
Diameter	0.195" (4.953 mm)	Diameter	0.195" (4.953 mm)	Diameter	0.100" (2.54 mm)
Length	1 feet (0.3 m)	Length	1 feet (0.3 m)	Length	1 feet (0.3 m)
Termination	SMA Male	Termination	RP-SMA Male	Termination	SMA Male

GNSS Data - Ceramic Patch Antenna Specification		GNSS Data - LNA Specification		
Bandwidth	1561 – 1602 MHz	Noise Figure	1.2 dB	
Gain@Zenith	2.5 dBi	Gain	28 dBi	
Polarization	R.H.C.P.	Voltage	3.3V~5.6V	
Axial Ratio	3.0 dB Typ.	Current	9.6±1mA@3.3V	