

ULTRAMAX™ GLASS

High Performance 4-in-1 Windshield Mount Antenna

ULTRAMAX GLASS is a windshield mount antenna, 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 offers two high gain cellular/LTE/MIMO antennas, which include support for LTE Band 14 for FirstNet, a high gain Wi-Fi, and a GPS antenna inside a single robust and compact housing.

- 2 x Wideband Cellular/LTE Elements (MIMO)
- 2.4 & 4.9-6GHz Wi-Fi Element (MIMO)
- GPS & GLONASS Element
- Four embedded antenna technologies that operate over multiple bands in one housing
- Leading LTE performance while in coexistence with multiple other embedded antenna technologies
- High gain provides bigger cellular footprint
- Available in black



Optimal MIMO Performance for LTE



Compact and Robust UV Resistant Housing



GPS



Customizable Cables and Connectors to Connect to Any Modem



Fast custom turnaround time



Low loss cable accessories

Descriptions/Applications

The ULTRAMAX GLASS 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. This antenna can be mounted on either the windshield or on the dashboard of any fleet or public safety vehicle.

Standard Configurations

Configuration	Cellular Elements	Wi-Fi Elements	GNSS	Part Number	Description
4-in-1	2	1	Yes	AP-GL-CCWG-BL-10	MIMO Cell/LTE x 2, Wi-Fi x 1 & GNSS, Adhesive Mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 10ft coax

Electrical Data

Frequency Range	Elements 1 & 2	698-960/1700-2700 MHz	
	Element 3	2.4/4.9-6.0 GHz	
	Element 4	1575.42/1620 MHz	
Operational Bands	Elements 1 & 2	LTE/Cellular	
	Element 3	Wi-Fi	
	Element 4	GPS L1/GLONASS G1	
Peak Gain: Isotropic	Elements 1 & 2	698-960 MHz	3.5 dBi
		1710-2700 MHz	4.5 dBi
	Element 3	2.4 GHz, 5.5 GHz	7 dBi, 5 dBi
	Element 4	30.5 dBi	
Isolation	Elements 1 & 2	> 10 dB	
	Element 3	> 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

Dimensions	Height	0.67" (17.02mm)
	Width	2.26" (57.40mm)
	Length	6.79" (172.47mm)
Color	Black (BL)	

Cable Data- Cell/LTE

Type	CFD195 Low Loss
Diameter	0.195" (4.953 mm)
Length	1 feet (0.3 m)
Termination	SMA Male

Cable Data- Wi-Fi

Type	CFD195 Low Loss
Diameter	0.195" (4.953 mm)
Length	1 feet (0.3 m)
Termination	RP-SMA Male

Cable Data- GNSS

Type	RG-174U
Diameter	0.100" (2.54 mm)
Length	1 feet (0.3 m)
Termination	SMA Male

GPS Data - Ceramic Patch Antenna Specification

Bandwidth	1575.42 – 1602 MHz
Gain@Zenith	2.5 dBi
Polarization	R.H.C.P.
Axial Ratio	3.0 dB Typ.

GPS Data - LNA Specification

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