

ULTRAMAX™ B

Single Cell LTE w/ optional Wi-Fi and/or GNSS IP67 Antenna

ULTRAMAX B is our full outdoor antenna designed specifically for rugged notebooks or tablets connecting to almost any vehicular ruggedized computer or docking station. This antenna offers a combination of a high gain cellular/LTE antenna which includes LTE Band 14 support for FirstNet, a high gain Wi-Fi antenna and a GNSS antenna inside a single robust and compact housing.

- Built-in ground plane (to accommodate installation on non-metal surfaces)
- 1 x Wideband Cellular/LTE Element
- 1 x 2.4 & 4.9-6 GHz Wi-Fi Element
- 1 x GNSS Element
- Three or less embedded antenna technologies that operate over multiple bands in one housing
- Lower profile and smaller footprint than competing solutions
- USA factory ensures fast turnaround customizations
- High gain provides bigger cellular footprint
- Available in black or white
- US Patent 10109918



Compact and Robust UV Resistant Housing



Customizable Cables and Connectors to Connect to Any Modem



Full Outdoor Installation Ready



Fast custom turnaround time



Flexible Mounting Options



Low loss cable accessories



GNSS



Bolt Mount



Adhesive Mount

Descriptions/Applications

The ULTRAMAX B 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.

Standard Configurations

AP-CWG-BA-S222-RP2-BL-15	Cell/LTE & Wi-Fi, Adhesive Mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
AP-C-BQ-S1-BL-15	Cell/LTE, Threaded Bolt Mount, TNC on Cell/LTE, Black, 15ft coax
AP-CW-BA-S22-RP2-BL-15	Cell/LTE & Wi-Fi, Adhesive Mount, SMA on Cell/LTE, RP-SMA on Wi-Fi, Black, 15ft coax
AP-CG-BQ-S11-BL-15	Cell/LTE & GNSS, Threaded Bolt Mount, TNC on Cell/LTE & GNSS, Black, 15ft coax
AP-WG-BA-S11-BL-15	Wi-Fi & GNSS, Adhesive Mount, TNC on Wi-Fi & GNSS, Black, 15ft coax

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

Electrical Data

Frequency Range	Element 1	698-960/1700-2700 MHz	
	Element 2	2.4/4.9-6.0 GHz	
	Element 3	1550~1610 MHz	
Operational Bands	Element 1	LTE/Cellular	
	Element 2	Wi-Fi	
	Element 3	GPS L1/GALILEO E1/GLONASS G1/BeiDou B1/QZSS L1	
Peak Gain: Isotropic	Element 1	698-960 MHz	4.6 dBi
		1710-2700 MHz	6.5 dBi
	Element 2	2.4 GHz, 5.5 GHz	7 dBi, 5 dBi
	Element 3	30.50 dBi	

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
Water Ingress	IP67
Military Spec	MIL-STD 810 conformance to vibration

Mounting Data

Dimensions	Height	2.183" (55.4mm)
	Diameter	7.650" (194.3mm)
Color	Black (BL) or White (WH)	

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

GNSS Data - Ceramic Patch Antenna Specification

Bandwidth	1561 – 1602 MHz
Gain@Zenith	2.5 dBi
Polarization	R.H.C.P.
Axial Ratio	3.0 dB Typ.

GNSS Data - LNA Specification

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