

MULTI**MAX**™ FV

5-in-1 Compact External IP65 Antenna

MULTIMAX FV is a full outdoor 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 support LTE Band 14 for FirstNet, two high gain dual band Wi-Fi antennas, and a GNSS antenna inside a single robust and compact housing.

- 2 x Wideband Cellular/LTE Elements (MIMO)
- 2 x 2.4 & 4.9-6GHz Wi-Fi Elements (MIMO)
- 1 x GNSS Element
- Five or less 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
- USA factory ensures fast turnaround customizations
- High gain provides bigger cellular footprint
- Must be mounted on metal
- · Available in black or white
- US Patent 10109918

Descriptions/Applications

The MULTIMAX FV 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 new product line also offers a rugged low-profile design which gives you greater protection against all 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.

FLEET SOLUTIONS





Optimal MIMO



Compact and Robust Performance for LTE UV Resistant Housing



Full Outdoor Installation Ready



Customizable Cables and Connectors to Connect to Any Modem



GNSS



Low loss cable



Fast custom turnaround time



Bolt Mount with Adhesive Pad



Adhesive Mount



Magnetic Mount

Standard Configurations

MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, Threaded Bolt Mount, SMA on Cell/ AP-MMF-CCWWG-Q-S22222-RP34-BL-15 LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, Adhesive Mount, SMA on Cell/LTE & AP-MMF-CCWWG-A-S22222-RP34-BL-15 GNSS, RP-SMA on Wi-Fi, Black, 15ft coax MIMO Cell/LTE x 2, Wi-Fi x 2 & GNSS, Magnetic Mount, SMA on Cell/LTE & AP-MMF-CCWWG-M-S22222-RP34-BL-15 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				
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, 5.5 GHz	7 dBi, 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 Data	
Hazardous Substances	RoHS Compliant
Temperature	-55°C to 85°C (-67°F to +185°F) Operating and Storage conformance to MIL-STD-810G Method 501.5
Humidity (Non-Condensing)	5% to 96% Operating and Storage conformance to IEC 60068
Water Ingress	IP65
Military Spec	MIL-STD 810 conformance to vibration

Mounting Data		
Dimensions	Height	2.47" (62.6mm)
	Width	2.44" (62.1mm)
	Length	6.34" (161mm)
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	