

# CENTURION™ 7-in-1

## High Performance External Antenna with Quad LTE

CENTURION 7-in-1 is a full outdoor antenna equipped with 7 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 four high gain cellular/LTE/MIMO antennas, which include support for LTE Band 14 for FirstNet, two high gain Wi-Fi antennas, and a GNSS antenna inside a single robust and compact housing. This antenna with it's 4 x Wideband Cellular/LTE elements has been designed to support the next generation of vehicular LTE routers which support multiple carrier switching.

- 4 x Wideband Cellular/LTE Elements (MIMO)
- 2 x 2.4 & 4.9-6 GHz WiFi Elements (MIMO)
- 1 x GNSS Element
- Eight 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
- USA factory ensures fast turnaround customizations
- Must be mounted on metal
- Available in black or white
- US Patent 10109918

### Descriptions/Applications

The CENTURION 7-in-1 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

<b>AP-C4W2G-Q-SMA-RP56-BL-15</b>	MIMO Cell/LTE x 4, Wi-Fi x 2 & GNSS, Threaded Bolt Mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
<b>AP-C4W2G-A-SMA-RP56-BL-15</b>	MIMO Cell/LTE x 4, Wi-Fi x 2 & GNSS, Adhesive Mount, SMA on Cell/LTE & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
<b>AP-C4W2G-M-SMA-RP56-BL-15</b>	MIMO Cell/LTE x 4, Wi-Fi x 2 & GNSS, Magnetic 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.*



Optimal MIMO Performance for LTE



Compact and Robust UV Resistant Housing



Full Outdoor Installation Ready



Customizable Cables and Connectors to Connect to Any Modem



Flexible Mounting Options



GNSS



Low loss cable accessories



Fast custom turnaround time



Bolt Mount



Adhesive Mount



Magnetic Mount

Electrical Data			
Frequency Range	Elements 1, 2, 3 & 4	698-960/1700-2700 MHz	
	Elements 5 & 6	2.4/4.9-6.0 GHz	
	Element 7	1550~1610 MHz	
Operational Bands	Elements 1, 2, 3 & 4	LTE/Cellular	
	Elements 5 & 6	Wi-Fi	
	Element 7	GPS L1/GALILEO E1/GLONASS G1/BeiDou B1	
Peak Gain: Isotropic	Elements 1, 2, 3 & 4	698-960 MHz	4 dBi
		1710-2700 MHz	7 dBi
	Elements 5 & 6	2.4 GHz, 5.5 GHz	7 dBi, 4 dBi
		Element 7	30.50 dBi
Isolation	Elements 1, 2, 3 & 4	> 15 dB	
	Elements 5 & 6	> 30 dB	
Correlation Co-efficient	Elements 1, 2, 3 & 4	< 0.1	

Environmental Data	
Hazardous Substances	RoHS Compliant
Temperature	-40 °C to 85 °C (-40 °F to + 185 °F) Operating and Storage
Humidity (Non-Condensing)	-5% to 95% Operating and Storage
Military Spec	MIL-STD 810 conformance to vibration and humidity

Mounting Data		
Dimensions	Height	2.1" (53.59 mm)
	Width	3.8" (95.25 mm)
	Length	6.7" (170.2 mm)
Operating Temp	-22°/176°F(-30°/+80°C)	
Color	Black (BL) or White (WH)	

Cable Data			
Cell/LTE & GNSS	Type	CFD195 Low Loss	Wi-Fi
	Diameter	0.195" (4.953 mm)	
	Length	1 feet (0.3 m)	
	Termination	SMA Male	
		CFD195 Low Loss	
		0.195" (4.953 mm)	
		1 feet (0.3 m)	
		RP-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