

CENTURION™ 5G

Up to 9-in-1 High Performance External IP67 Antenna

CENTURION 5G is a full outdoor antenna, designed specifically to provide high performance LTE and 5G connectivity for Fleet and Public Safety vehicles and assets. Equipped with up to 9 ports, this antenna connects to almost any vehicular router or modem. Delivering powerful MIMO technology, this configurable antenna offers up to 4 high gain Cellular/5G (600 MHz to 6 GHz) antennas and includes support for LTE Band 14 for FirstNet™, Band 71 for T-Mobile, CBRS, and LAA. The CENTURION 5G also supports up to 4 high gain tri-band Wi-Fi antennas for the new 6 GHz ISM band for Wi-Fi 6 (802.11ax) including Wi-Fi 6E, and an optional GNSS element inside a single robust and compact housing. This antenna has been designed for the next generation of vehicular 5G routers with multiple carrier switching. The CENTURION 5G provides the ultimate in Wi-Fi support for full HD streaming video and other high bandwidth applications.

- Up to nine embedded antenna technologies that operate over multiple bands in one IP67 rated housing
- Up to 4 x Wideband Cellular 5G (600 MHz - 6 GHz) Elements (MIMO)
- Up to 4 x 2.4 & 5.15 - 7.125 GHz Wi-Fi 6 capable Elements (MIMO)
- Optional GNSS Element
- Leading LTE/5G performance while in coexistence with multiple other embedded antenna technologies
- 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

Description/Applications

The CENTURION 5G 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.

5G



Optimal MIMO Performance for 5G



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

Standard Configurations

Configuration	Cellular Elements	Wi-Fi Elements	GNSS	Part Number	Description
9-in-1	4	4	Yes	AP-NEXT-C4W4G-[x]-SMA-RP5678-BL-15	MIMO 5G (600 MHz-6 GHz) x 4, Wi-Fi 6 x 4 & GNSS, SMA on Cell/5G & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
8-in-1	4	3	Yes	AP-NEXT-C4W3G-[x]-SMA-RP567-BL-15	MIMO 5G (600 MHz-6 GHz) x 4, Wi-Fi 6 x 3 & GNSS, SMA on Cell/5G & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
7-in-1	4	2	Yes	AP-NEXT-C4W2G-[x]-SMA-RP56-BL-15	MIMO 5G (600 MHz-6 GHz) x 4, Wi-Fi 6 x 2 & GNSS, SMA on Cell/5G & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
6-in-1	2	3	Yes	AP-NEXT-C2W3G-[x]-SMA-RP345-BL-15	MIMO 5G (600 MHz-6 GHz) x 2, Wi-Fi 6 x 3 & GNSS, SMA on Cell/5G & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
5-in-1	2	2	Yes	AP-NEXT-C2W2G-[x]-SMA-RP34-BL-15	MIMO 5G (600 MHz-6 GHz) x 2, Wi-Fi 6 x 2 & GNSS, SMA on Cell/5G & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
4-in-1	2	1	Yes	AP-NEXT-C2WG-[x]-SMA-RP3-BL-15	MIMO 5G (600 MHz-6 GHz) x 2, Wi-Fi 6 x 1 & GNSS, SMA on Cell/5G & GNSS, RP-SMA on Wi-Fi, Black, 15ft coax
3-in-1	2	0	Yes	AP-NEXT-C2G-[x]-SMA-BL-15	MIMO 5G (600 MHz-6 GHz) x 2 & GNSS, SMA on Cell/5G & GNSS, Black, 15ft coax
2-in-1	2	0	No	AP-NEXT-C2-[x]-SMA-BL-15	MIMO 5G (600 MHz-6 GHz) x 2, SMA on Cell/5G, Black, 15 ft coax

Mounting Options [x]	
Q	Threaded Bolt Mount
QR	Threaded Bolt Mount with Modified Gasket for 2020 Ford Explorer
A	Adhesive Mount
AR	Adhesive Mount with Modified Gasket for 2020 Ford Explorer
M	Magnetic Mount

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

Electrical Data			
Frequency Range	Elements 1 up to 4	600-960/1700-2700/3300-4300/5150-5850 MHz	
	Elements 5 up to 8	2.4/5.15-7.125 GHz	
	Element 9 (optional)	1550~1610 MHz	
Operational Bands	Elements 1 up to 4	5G (Band 71, LTE, CBRS, LAA)	
	Elements 5 up to 8	Wi-Fi	
	Element 9 (optional)	GPS L1/GALILEO E1/GLONASS G1/BeiDou B1/QZSS L1	
Peak Gain: Isotropic	Elements 1 up to 4	600-960 MHz	3.9 dBi
		1710-2700 MHz	6.4 dBi
		3300-4300 MHz	9.3 dBi
		5150-5850 MHz	8.9 dBi
	Elements 5 up to 8	2.4 GHz, 5-7 GHz 4 dBi, 7 dBi	
	Element 9 (optional)	30.50 dBi	
Isolation	Elements 1 up to 4	> 15 dB	
	Elements 5 up to 8	> 30 dB	
Correlation Co-efficient	Elements 1 up to 4	< 0.1	

Environmental Data	
Hazardous Substances	RoHS Compliant
Temperature	40°C to 70°C (-40°F to +158°F) Operating, -40°C to 85°C (-40°F to +185°F) Storage
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	3.26" (82.7 mm)
	Width	4.47" (113.6 mm)
	Length	7.32" (186 mm)
Color	Black (BL) or White (WH)	

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

Cable Data- Wi-Fi	
Type	LMR 100
Diameter	0.100" (2.54 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 dB
Voltage	3.3V~5.6V
Current	9.6±1mA@3.3V