

CENTURION™ 7-in-1

High Performance External IP67 Antenna with Quad LTE

CENTURION 7-in-1 is a full outdoor antenna equipped with seven 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 its four 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 Wi-Fi 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

| | |
|----------------------------------|---|
| AP-C4W2G-Q-SMA-RP56-BL-15 | 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 |
| AP-C4W2G-A-SMA-RP56-BL-15 | 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 |
| AP-C4W2G-M-SMA-RP56-BL-15 | 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/QZSS L1 | |
| 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 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 | 2.27" (57.7mm) |
| | Width | 4.47" (113.6mm) |
| | Length | 7.32" (186mm) |
| Color | Black (BL) or White (WH) | |

| Cable Data- Cell/LTE | | Cable Data- Wi-Fi | | Cable Data- GNSS | |
|----------------------|-------------------|-------------------|-------------------|------------------|------------------|
| Type | CFD195 Low Loss | Type | CFD195 Low Loss | Type | 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 |