





VEHICULAR 4-PORT MIMO ANTENNA

698-960 / 1710-2700 / 2300-2700 / 4900-5900 MHZ + GPS MIMO ANTENNA

The Laird vehicular 4-port MIMO antenna covers the 698-960 / 1710-2700 MHz, 2300-2700 / 4900-5900 MHz as well as GPS (1575.42 MHz) frequency ranges. Configured with 3-port, dual-band elements in addition to 1-port with integrated GPS. Connector options include SMA male connectors for 3G/4G LTE and GPS ports with an RSMA male connector for the WiFi port. The housing incorporates a low-profile, rugged design that meets IP67 standards. The antenna also features high impact, UV-resistant polycarbonate plastic available in black or white.

SPECIFICATIONS

| PARAMETER | PERFORMANCE | | | | |
|----------------------------------|--|---------------|---------------------------|---------------|--|
| Model Number | VLQ69273B21G-518A (Black) | | VLQ69273W21G-518A (White) | | |
| | 4 (2-ports 3G/4G LTE, 1-port WiFi, 1-port GPS) | | | | |
| No. of Ports | 3G/4 | 3G/4G Port | | WiFi Port | |
| Frequency Bands (MHz) | 698-960 MHz | 1710-2700 MHz | 2300-2700 MHz | 4900-5900 MHz | |
| Peak Gain * dBi | 3.3 | 4.6 | 5.5 | 5.3 | |
| Max Gain +/- 30 above horizon | N/A | N/A | N/A | 4.1 | |
| VSWR* Typical | < 1.8:1 | < 1.8:1 | < 1.6:1 | < 1.7:1 | |
| VSWR * Max | < 2.0:1 | | | | |
| Typical Port-to-Port Isolation * | | | | | |
| LTE1-to-LTE2> | 15 dB | | | | |
| LTE1-to-WiFi> | 18 DB | | | | |
| LTE2-to-WiFi> | 20 DB | | | | |

*Measured on 1 ft. (30.48 cm) diameter ground plane

| PARAMETER | PERFORMANCE |
|--------------------------------|---|
| Nominal Impedance | 50 Ohm |
| Polarization | Vertical Linear |
| Azimuth Beam Width | Omnidirectional |
| Input Power, Max | 50 Watt (ambient temp. of 25°C / 77°F |
| Operating Temperature | -30° C - +70° C (-22°F to +158°F) |
| Dimensions (dia. x hgt) | 132 mm x 75 mm (5.2" x 2.9") |
| Weight | 0.95 kg (2.09 lb) |
| RF Connector | SMA-Male (3G/4G port) RSMA-Male (WiFi port) |
| Cable (exposed length) | LMR195M- 518.2 cm (17 ft) |
| Radome / Baseplate Material | PC, UL94 - VO Rating, UV Stable (Black & White) |
| Material Compliance | ROHS compliant |
| IP Dust & Water Ingress Rating | IP67 |

*Measured on 1 ft. (30.48 cm) diameter ground plane

GPS ANTENNA SPECIFICATIONS

| PARAMETER | PERFORMANCE | | |
|--|--|---------------|-------------------|
| Frequency Band | 1575.42 MHz (GPS L1) | | |
| Band Width | 6 MHz (Typical) | | |
| Amplier Gain | 27 dB ± 3 dBc | | |
| Nominal Impedance | 50 Ohm | | |
| Output VSWR | < 1.5:1 | | |
| DC Voltage | 2.7 - 12 Vdc | | |
| DC Current | 20 mA (Nominal); 30 mA (-40°C - +85°C) | | |
| Out-of-Band Signal Rejection | > > 40 dB rejection @ ± 50 MHz from center frequency | | |
| Intermodulation@ CW Mode (-40°C - +85°C) | Int1 | Int2 | IM3 |
| Power, dBm | -10(1842.8 MHz) | -10(2110 MHz) | -100(1575.6 MHz) |
| Power, dBm | -10(829.58 MHz) | -10(2405 MHz) | -100(1575.42 MHz) |
| Power, dBm | -10(755.42 MHz) | -10(820 MHz) | -100(1575.42 MHz) |
| Input 1 dB Compression @ 750 MHz, 2000 MHz & 3500 MHz | >10 dBm (-40°C - +85°C) | | |
| RF Connector | SMA-Male | | |
| Cable (exposed length) | RG174-518.2 cm (17ft) | | |

| PART NUMBER | |
|--------------------|--|
| VLQ69273B21NG-518A | 2-Ports 4G/LTE, 1-Port GPS: SMA Male; 1 Port WiFi:RSMA Male(Black) |
| VLQ69273W21NG-518A | 2-Ports 4G/LTE: SMA Male; 2 Ports WiFi:RSMA Male(White) |

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