Coach™ 4x4 Wi-Fi, DSRC GNSS Multi-Band Antenna

The GL4X4MIMO-SF antenna enables high data rate connectivity for ITS, DSRC and IIoT applications. This low-profile antenna supports dual-band 2.4/5 GHz MIMO for 802.11p, ac Wi-Fi standards, combining multiple antenna elements into one IP67-rated housing. A single stud mount cable exit simplifies permanent installations. The antenna also incorporates PCTEL's unique high rejection GPS/GLONASS technology for optimal performance and support of carrier voice and data networks.



GL4X4MIMO-SF

Features

- Multi-band coverage of 2.4-2.5 GHz and 4.9-5.99 GHz frequencies
- Dual-band integrated elements terminated with high performance, low loss RG-58/U stranded cable and high quality connector for maximum RF system efficiency
- Proprietary filtering design allows wideband coverage while achieving superior out-of-band rejection for all GNSS frequencies
- Metal stud mount with slotted jam nut provides single cable exit for easier installation and/or antenna replacement
- UV-resistant low-profile design for maximum installation flexibility without antenna orientation restrictions
- IP67 compliant design with custom overmolded gasket provides maximum protection against water or dust ingress under severe environmental conditions

STANDARD CONFIGURATION

Model	Cable	Connectors***	Mounting Method
GL4X4MIMO-SF	Four (4) 17-foot Pro-Flex™ Plus 195 stranded cable leads (Wi-Fi) One (1) 17-foot RG-174/U cable (GNSS)	Reverse Polarity SMA Male SMA Male	1-inch hole (25.4 mm) slotted stud mount with 3/4-16 UNF slotted hex-nut

ELECTRICAL SPECIFICATIONS

Frequency Range	Nominal Gain*	VSWR**	Polarization	In-Band Isolation Between Elements	E-Plane Beamwidth	Maximum Power
2.4-2.5 GHz / 4.9-5.99 GHz	4 dBi / 4 dBi	1.5	Vertical, linear	23 dB, 26 dB	30°, 25°	25 watts

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Band	Amplifier Gain	Output VSWR	DC Current	DC Voltage	Noise Figure	Out-of-Band Rejection
1565-1608 MHz	@ 3.0 VDC: 26 dB (typical)	2.0:1 (maximum)	25 mA (typical)	2.8-6.0 V (operating) ≤ 12.0 V (survivability)	< 2.0 dB (typical)	f0 = 1586 MHz f0 ± 50 MHz: ≥ 60 dBc f0 ± 60 MHz: ≥ 70 dBc

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA (CONTINUED)

Frequency Band	Nominal Gain	Polarization	Nominal Impedance
1565-1608 MHz	3 dBic @ 90° / -2 dBic @ 20°	Right hand circular	50 ohms

MECHANICAL SPECIFICATIONS AND ENVIRONMENTAL SPECIFICATIONS

Dimensions	Radome & Baseplate Construction	Temperature Range	Ingress Protection
5.4 x 2.7 in (137 x 67 mm)	Black UV-Stable Rugged Thermoplastics	-40° to +80° C	IP67***

* Measured with 6-ft cables, no ground plane ** Measured with 17-ft cables *** When installed on rooftop surface, according to PCTEL installation instructions