

# Multi-Band LTE MIMO & 802.11ac Antennas with High Rejection GPS/GLONASS

The Coach antennas provide optimal 4G LTE and dual-band 802.11ac Wi-Fi coverage in a single, low-profile housing. The antennas also incorporate PCTEL's unique high rejection GPS/GLONASS technology for optimal performance and support of carrier voice and data networks.

## Features

- No tune, multi-band coverage: dual 4G LTE, dual 802.11ac Wi-Fi, GPS L1, and GLONASS L1 frequencies
- Magnetically mounted using heavy-duty internal rare earth magnets
- Rubber pad on the bottom of the antenna prevents slippage and protects the mounting surface
- Attractive low-profile housing for added overhead clearance
- IP67 compliant design provides maximum protection against water or dust ingress under severe environmental conditions
- High performance, low loss cable and high quality connectors for maximum RF system efficiency
- UV-resistant black or white housing options complement most vehicular aesthetic requirements
- Proprietary filtering design allows wideband coverage while achieving superior out-of-band rejection for all GNSS frequencies



GLHPDLTEMIMO-SF-MM



BGLHPDLTEMIMO-SF-MM

## STANDARD CONFIGURATION

Model	Cable	Connectors*	Mounting Method
GLHPDLTEMIMO-SF-MM	Two-17 feet Pro-Flex™ Plus 195 (4G LTE Elements) Two-17 feet Pro-Flex™ Plus 195 (Wi-Fi Elements) One-17 feet RG-174/U (GNSS Element)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GNSS)	Magnetic Mount (all models)
GLHPDM3-SF-MM	Two-17 feet Pro-Flex™ Plus 195 (4G LTE Elements) Three-17 feet Pro-Flex™ Plus 195 (Wi-Fi Elements) One-17 feet RG-174/U (GNSS Element)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GNSS)	
GLHPDLTE-SF-MM	Two-17 feet Pro-Flex™ Plus 195 (4G LTE Elements) One-17 feet RG-174/U (GNSS Element)	SMA Plug (LTE) SMA Plug (GPS)	

## ELECTRICAL SPECIFICATIONS - RF ANTENNAS

Model	Frequency Range	Elements	Polarization	Nominal Impedance	Gain** (typical)	Maximum Power	VSWR***
GLHPDLTEMIMO-SF-MM	698-960 MHz / 1710-2700 MHz	4G LTE Elements (2 each)	Vertical, linear	50 ohms	2.5 dBi	50 watts	< 2.0:1
	2.4-2.5 GHz / 4.9-5.9 GHz	Dual-Band Wi-Fi Elements (2 each)			3-4 dBi		
GLHPDM3-SF-MM	698-960 MHz / 1710-2700 MHz	4G LTE Elements (2 each)	Vertical, linear	50 ohms	2.5 dBi	50 watts	< 2.0:1
	2.4-2.5 GHz / 4.9-5.9 GHz	Wi-Fi Elements (3 each)			3-4 dBi		
GLHPDLTE-SF-MM	698-960 MHz / 1710-2700 MHz	4G LTE Elements (2 each)	Vertical, linear	50 ohms	2.5 dBi 2.5 dBi	50 watts	< 2.0:1



## Multi-Band LTE MIMO & 802.11ac Antennas with High Rejection GPS/GLONASS

### ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Band	Amplifier Gain	Output VSWR	DC Current	DC Voltage
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)

### ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Noise Figure	Out-of-Band Rejection	Nominal Gain	Polarization	Nominal Impedance
< 2.0 dB (typical)	f <sub>0</sub> = 1586 MHz f <sub>0</sub> ± 50 MHz: ≥ 60 dBc f <sub>0</sub> ± 60 MHz: ≥ 70 dBc	3 dBic @ 90° -2 dBic @ 20°	Right hand circular	50 ohms

### MECHANICAL & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Dimensions	Housing Material	Temperature Range	Gasket Design & Construction
5.1 OD x 3.6 H in (13 x 9.2 cm)	White or Black**** UV-Stable Rugged Thermoplastics	-40°C to +85°C	Anti-skid liner installed at contact surface to ensure a high friction and mar-free magnetic mount.

\* Consult Customer Service for other connector options.

\*\* Measured on a 4-foot diameter ground plane. Gain value is measured at the base of the antenna (no cable loss included).

\*\*\* VSWR < 2:1 across all bands when measured on 1-ft diameter ground plane with 17-ft cable.

When measured on 1-ft diameter ground plane with 1-ft cable, VSWR < 2:1 698-960MHz, <2:1 1710-2170MHz, and < 2.5:1 2300-2700MHz.

\*\*\*\*Black radome option also available. Add "B" in front of the part number for black radome option.