HDGLDLTE-LFF

Multi-Band LTE MIMO Antenna with High Rejection GPS/GLONASS, Heavy-Duty

The Rhino dual LTE antenna provides optimal 4G LTE coverage in a single, low-profile housing. The antenna also incorporates PCTEL's unique high rejection GPS/GLONASS technology for optimal performance and support of carrier voice and data networks. Glass reinforced Polycarbonate housing and heavy-duty metal base plate makes this antenna extremely rugged and ideal for heavy equipment applications susceptible to high shock impact, including mining, agriculture, construction and defense vehicles.

Features

- No tune, multi-band coverage: dual 4G LTE and GPS L1/Galileo, and GLONASS L1 frequencies
- Ruggedized UV-resistant, fiberglass reinforced housing for added impact shock absorption and integrity in high vibration installations
- IP67 compliant design provides maximum protection against water or dust ingress under severe environmental conditions*
- RF240 low loss pigtails for LTE and high quality connectors for maximum RF system efficiency
- Metal 1-inch stud mount with slotted jam nut provides single cable exit for easier installation and/or antenna replacement
- Proprietary filtering design allows wideband coverage while achieving superior out-of-band rejection for all GNSS frequencies



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STANDARD CONFIGURATION

Model	Cables	Connectors**	Mounting Method
HDGLDLTE-LFF	Two 1-foot PFP240 low loss (LTE) One 1-foot RG-174/U (GNSS)	Male SMA (LTE) Male SMA (GNSS)	1-inch OD, 3/4-inch long (.75") zinc stud mount with jam nut for permanent mount installations

ELECTRICAL SPECIFICATIONS - RF ANTENNA

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Frequency Range	Elements	Polarization	Nominal Impedance	Gain*** (typical)	Maximum Power	VSWR
698-960 MHz / 1710-2700 MHz	4G LTE Elements (2 each)	Vertical, linear	50 ohms	2.5 dBi	50 watts	< 2.0:1

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 $f0 \pm 50 \text{ MHz} ≥ 60 \text{ dBc}$ $f0 \pm 60 \text{ MHz} ≥ 70 \text{ dBc}$	

* When properly installed on a vehicle rooftop per PCTEL installation instructions.

** 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).

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

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Housing	Gasket Design &	Temperature	Ingress
	Material	Construction	Range	Protection
10.04 L x 3.9 H x 2.19 W in (255 x 100 x 55.8 mm)	Off-White GFR-PC (Polycarbonate)	Contour matching, conformable, thermoplastic-elastomer gasket designed to seal between radome and baseplate. Gasket flexes and conforms to contoured surfaces. Baseplate has a 3M™ VHB mounting pad for anti-rotation.	-40°C to +85°C	IP67****