

LTE MIMO, GPS Multiband Antennas with Magnetic Base

PCTEL's magnetic mount antennas provide optimal 4G LTE MIMO coverage in a single low profile housing. The antennas also incorporate a high rejection GPS LNA assembly for optimal performance and support of carrier voice and data networks.

Features

- No tune, multiband coverage
- 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
- High performance GPS assembly for superior out-of-band rejection; provides optimal performance in multiband installations



GPSHPDLTEMIMO-SF-MM

GPS Antenna Specs

Frequency Band: 1575.42 MHz (GPS L1)
Amplifier Gain: 26 dB \pm 3 dBic
Nominal Impedance: 50 ohms
Output VSWR: 1.5:1 typical
DC Current: 20 mA nominal; < 30 mA @ -40° C to +85° C
DC Voltage: 3-12 V
Noise Figure: 1.8 dB typical
Filtering: > 40 dB rejection @ \pm 50 MHz from center frequency



Electrical Specifications - RF Antennas

Model	Elements	Operating Frequencies	Polarization	Nominal Impedance	Gain* (typical)	Maximum Power	VSWR**
GPSHPDLTEMIMO-SF-MM	4 G LTE Elements (2 each)	698-960 MHz 1710-2170 MHz 2300-2700 MHz	Vertical, linear	50 ohms	2.5 dBi	50 watts	< 2.0:1
	802.11n Dual Band Wi-Fi Elements (2 each)	2.4-2.5 GHz 4.9-5.9 GHz	Vertical, linear	50 ohms	3-4 dBi	50 watts	< 2.0:1
GPSHPDLTE-SF-MM	4 G LTE Elements (2 each)	698-960 MHz 1710-2170 MHz 2300-2700 MHz	Vertical, linear	50 ohms	2.5 dBi	50 watts	< 2.0:1

Mechanical Specifications

Model	Dimensions	Coax (5 ports)	Connectors	Contact Surface & Construction
GPSHPDLTEMIMO-SF-MM	5.1 x 3.6 in (130 x 92 mm)	17 feet Pro-Flex Plus 195 (4G LTE Elements - 2 each) 17 feet Pro-Flex Plus 195 (802.11n Wi-Fi Elements - 2 each) 17 feet RG-174/U (GPS L1)	MSMA (LTE) RP-MSMA (Wi-Fi) MSMA (GPS)	Anti-skid liner installed at contact surface to ensure a high friction and mar-free magnetic mount.
GPSHPDLTE-SF-MM	5.1 x 3.6 in (130 x 92 mm)	17 feet Pro-Flex Plus 195 (4G LTE Elements - 2 each) 17 feet RG-174/U (GPS L1)	MSMA (LTE) MSMA (GPS)	

Mechanical & Environmental Specifications

Part Numbers	Radome Color	Radome & Baseplate Construction	Mounting Method	Operating/Storage Temperature	Ingress Protection
GPSHPDLTEMIMO-SF-MM BGPSHPDLTEMIMO-SF-MM	White Black	UV Stable Rugged Thermoplastics	Magnet Mount	-40°C to +85°C	IP67
GPSHPDLTE-SF-MM BGPSHPDLTE-SF-MM	White Black				

* 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.

