

LTE MIMO, Dual 802.11n GPS Multiband Antenna

PCTEL's LTE MIMO antennas provide optimal 4G LTE and dual-band 802.11n Wi-Fi coverage in a single 5-port, 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: dual 4G LTE, dual 802.11n Wi-Fi and GPS L1 frequencies
- Metal 1-inch stud mount with slotted jam nut provides single cable exit for easier installation and/or antenna replacement
- 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



GPSHPDLTEMIMO-SF

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	4G LTE Elements (2 each)	698-960 MHz 1710-2700 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			3-4 dBi		
GPSHPDLTE-SF	4G LTE Elements (2 each)	698-960 MHz 1710-2700 MHz	Vertical, linear	50 ohms	2.5 dBi	50 watts	< 2.0:1
GPSHPDLTEWIFI-SF	4G LTE Elements (2 each)	698-960 MHz 1710-2700 MHz	Vertical, linear	50 ohms	2.5 dBi	50 watts	< 2.0:1
	802.11n Dual-Band Wi-Fi Elements (1 each)	2.4-2.5 GHz 4.9-5.9 GHz			3-4 dBi		

Mechanical Specifications

Model	Dimensions (OD x H)	Coax	Connectors	Gasket Design & Construction
GPSHPDLTEMIMO-SF	5.2 x 3.4 in (132 x 94 mm)	Two-17 feet Pro-Flex Plus 195 (4G LTE Elements)	MSMA (LTE)	Countour 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.
		Two-17 feet Pro-Flex Plus 195 (802.11n Wi-Fi Elements)	RP-MSMA (Wi-Fi)	
		One-17 feet RG-174/U (GPS L1)	MSMA (GPS)	
GPSHPDLTE-SF	5.2 x 3.4 in (132 x 94 mm)	Two-17 feet Pro-Flex Plus 195 (4G LTE Elements)	MSMA (LTE)	
		One-17 feet RG-174/U (GPS L1)	MSMA (GPS)	
GPSHPDLTEWIFI-SF	5.2 x 3.4 in (132 x 94 mm)	Two-17 feet Pro-Flex Plus 195 (4G LTE Elements)	MSMA (LTE)	
		One-17 feet Pro-Flex Plus 195 (802.11n Wi-Fi Elements)	RP-MSMA (Wi-Fi)	
		One-17 feet RG-174/U (GPS L1)	MSMA (GPS)	

Mechanical & Environmental Specifications

Radome & Baseplate Construction	Mounting Method	Operating/Storage Temperature	Ingress Protection
UV stable CYCOLOY C6200 Radome	1-inch hole, 3/4-inch long (.75") zinc stud mount with jam nut	-40°C to +85°C	IP67***

* 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 2170-2700MHz.

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

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