GPS HIGH PERFORMANCE MULTIBAND MIMO

This GPS multiband antenna utilizes PCTEL's most durable and versatile design for vehicular applications requiring MIMO for Wi-Fi applications. This platform offers multiband coverage, superior GPS LNA technology, an easy to install design, and "top shelf" materials to provide maximum durability and performance for mobile data and video communications.

Radome shown in white. Black radome is standard.

WGPSHPMIMO
U.S. Patent No. 8,184,060

Features

- No tune, multiband coverage: 700/800 MHz Public Safety, 800 MHz Cellular/ SMR, 900 MHz GSM/ISM, 1800-2100 MHz GSM/PCS, 3G, 4G, 2.4/5.8 GHz Wi-Fi and 2.3-5.8 GHz Public Safety and WiMAX broadband wireless frequencies
- Metal 3/4-inch stud mount with slotted jam nut provides single cable exit for easier installation and/or antenna replacement
- Attractive 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 when installed on the roof of a vehicle
- 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

Electrical Specifications - RF Antennas

Model GPSHPMIMO	Operating Frequencies	Polarization	Nominal Impedance	Typical Gain*	Max Power	VSWR
Voice/Data RF Element	698-2500 MHz 3300-3800 MHz	Vertical, linear	50 ohms	1-2 dBi 2-3 dBi	50 watts	< 2.0:1
Broadband Wireless RF Element #1	1.7-2.8 GHz 4.9-5.9 GHz	Vertical, linear	50 ohms	2-3 dBi 3-4 dBi	50 watts	< 2.0:1
Broadband Wireless RF Element #2	1.7-2.8 GHz 4.9-5.9 GHz	Vertical, linear	50 ohms	2-3 dBi 3-4 dBi	50 watts	< 2.0:1

Mechanical Specifications

Dimensions	Coax (4)	Connectors**
5.2" OD x 2.8" H (132 OD x 71 H mm)	17 feet Pro-Flex Plus 195 (Voice/Data RF Element; 17 feet Pro-Flex Plus 195 (Broadband Wireless Element #1) 17 feet Pro-Flex Plus 195 (Broadband Wireless Element #2) 17 feet RG-174/U (GPS L1)	SMA Plug (Male) standard

Mechanical and Environmental Specifications

Radome / Baseplate Construction	Mounting Method	Operating / Storage temperature	Ingress Protection
Black, UV stable CYCOLOY C6200 Radome Zinc baseplate overmolded with black TPE, SANTOPRENE gasket	3/4-inch hole, 3/4 inch long (.75") zinc stud mount with dual jam nuts (included)	-40°C to +85°C	IP67 (when installed on a roof-top)

*Measured on a 4-foot diameter ground plane. Gain value is measured at the base of the antenna (no cable loss included).
**For other connector options, please refer to GPS Multiband Mobile Antenna Configurator Part Number Guide for Quad-Band Models.

Electrical Specifications GPS Antenna

Frequency Band: 1575.42 MHz (GPS L1)
Amplifier Gain: 26 dB ± 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: 3-13.5 V
Noise Figure: 1.8 dB typical
Out-of-Band Signal Rejection: > 40 dB rejection @ ± 50 MHz from center frequency