GPS ULTRA-WIDEBAND MOBILE ANTENNA

The GPSHP-UWB ultra wideband GPS antenna provides multi-band coverage of TETRA, 700 MHz LTE, GSM, 3G, and Wi-Fi frequencies, in addition to GPS L1 support. Compact and easy to install, this antenna is constructed with high quality components, including a high rejection LNA filter to provide maximum isolation protection for location tracking applications. It is an ideal solution for Mission Critical and Public Safety communications.

Features

- No tune, multi-band coverage: 380-430 MHz TETRA, 700-2500 MHz LTE/3G, 2.3-2.5 GHz WiFi broadband wireless frequencies and GPS L1 tracking
- High rejection LNA assembly for maximum isolation properties
- Metal 3/4-inch stud mount with slotted jam nut for easier installation
- Attractive low profile, UV resistant housing for maximum overhead clearance
- IP67 compliant design with custom overmolded gasket 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

Electrical Specifications - RF Antennas

Model GPSHP-UWB	Operating Frequencies	Polarization	Nominal Impedance	Gain[1] (Nominal)	Maximum Power	VSWR
TETRA	380-430 MHz	Vertical, linear	50 ohms	1 dBi	50 watts	<2.0:1
LTE/GSM/3G/ Wi-Fi	698-2500 MHz	Vertical, linear	50 ohms	3 dBi	50 watts	<2.0:1
Wi-Fi	2.3-2.5 GHz	Vertical, Linear	50 ohms	4 dBi	50 watts	< 2.0:1

Mechanical Specifications

Dimensions	Coax (4)	Connectors
5.2” OD x 3.7 ” H (132 OD x 94 H mm)	17 feet Pro-Flex Plus 195 (TETRA 380-430 MHz) 17 feet Pro-Flex Plus 195 (698-2500 MHz) 17 feet Pro-Flex Plus 195 (2.3-2.5 GHz); 17 feet RG-174/U (GPS L1)	SMA Plug (Male) on all cables. Other options available.

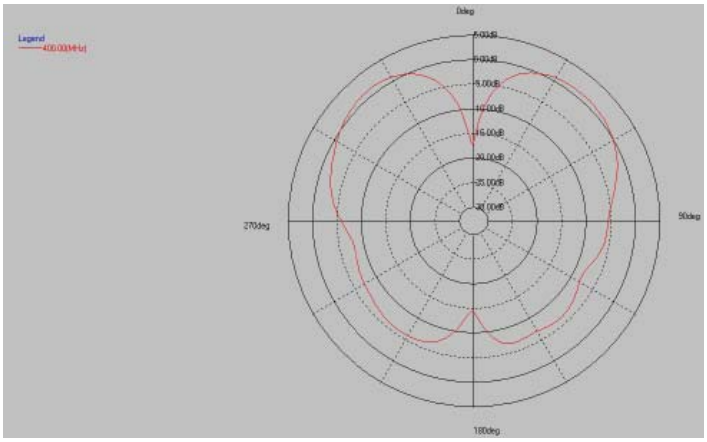
Mechanical & Environmental Specifications

Radome and Baseplate Construction	Mounting Method	Operating / Storage Temperature	Ingress Protection
UV stable CYCOLOY C6200 Radome Zinc baseplate over-molded 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*

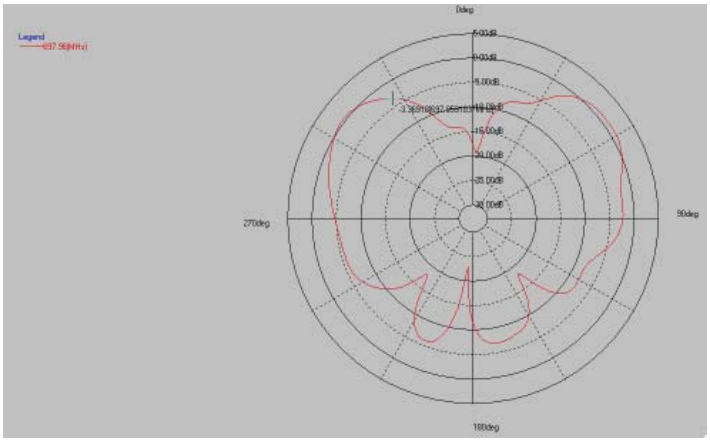
[1] When properly installed on roof top or trunk surface.
[2] Measured on a 4-foot diameter ground plane. Gain value is measured at the base of the antenna (no cable loss included).
[3] Other connector options available. Black radome standard. white radome option is also available (part number WGPSHP-UWB).

Electrical Specifications GPS Antenna

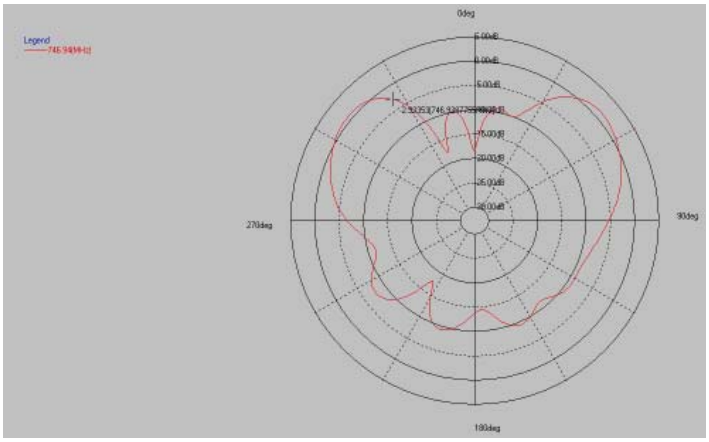
Frequency Band: 1575.42 MHz (GPS L1)
Amplifier Gain: 26 dB +/- 3 dBic
Nominal Impedance: 50 ohms
Output VSWR: 1.5:1 typical
DC Current: 20 mA Nominal; < 30 mA @ -40°C to +85° C
DC Voltage: 3-13.5 V
Noise Figure: 1.8dB Typical
Filtering: > 40 dB rejection @ +/- 50 MHz from center frequency



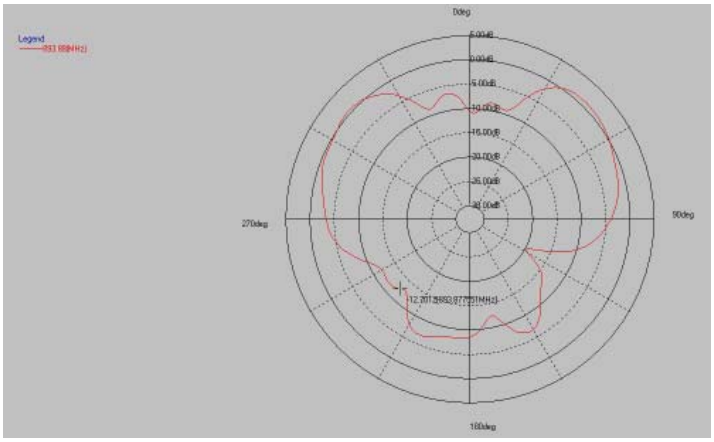
400 MHz Vertical Elevation



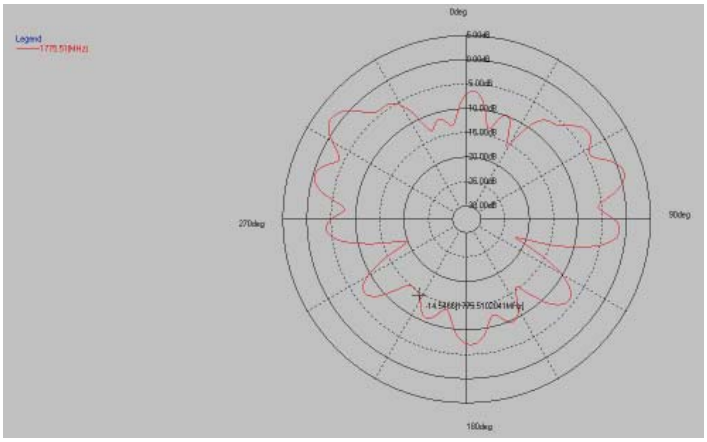
698 MHz Vertical Elevation



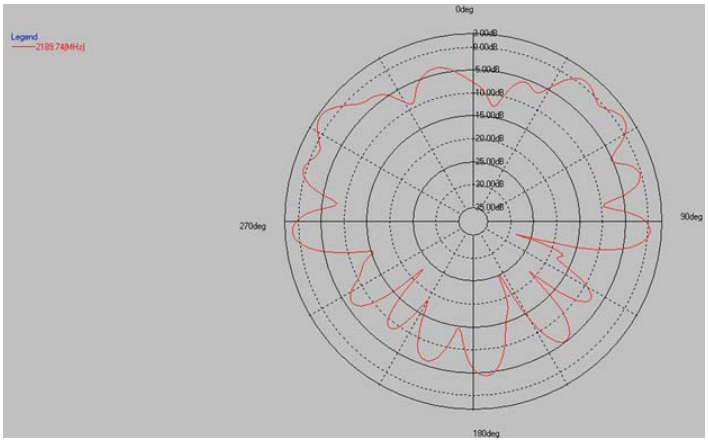
750 MHz Vertical Elevation



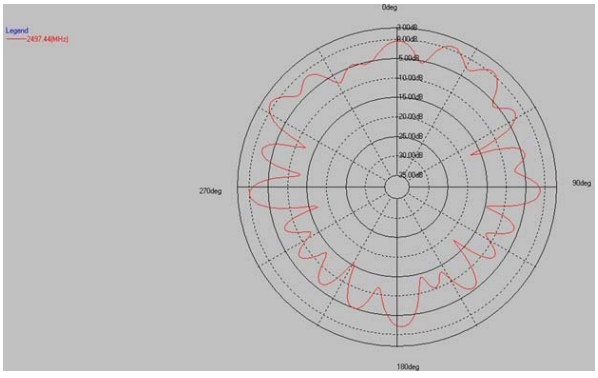
900 MHz Vertical Elevation



1700 MHz Vertical Elevation



2200 MHz Vertical Elevation



2500 MHz Vertical Elevation