

## Key Features

- High Performance in any environment
- Simple installation
- Waterproof & weatherproof
- Rugged, compact & reliable

# GPS1010

## GPS Antenna, Universal Mounting Bracket & Cable Kit

The GPS1010 antenna kit combines an active L1 GPS antenna, a corrosion-resistant mounting bracket and 50 ft (15m) of RG-142 coaxial cable. Designed primarily for stationary applications, the GPS1010 provides an ideal solution for those in need of a fixed-site, roof-top GPS antenna.

### Unparalleled Flexibility

The GPS1010 is designed for easy installation in a variety of locations. The universal mounting bracket can be installed on vertical masts, sides of buildings or roof tops, and accommodates standard mounting poles from 1" to 2.5" in diameter.

### Rugged Performance

The GPS1010 antenna is housed in a waterproof enclosure designed to withstand shock, vibration, extreme temperatures, rain, snow and sunlight. The TNC antenna connector is located inside the threaded socket, which allows the antenna cable to be routed inside the mounting bracket and protects the cable connection from the elements for added reliability.

The mounting bracket is constructed of lightweight 6061-T6 aluminum and is powder coated for a permanent finish. The v-mounting plate and hardware are all made of corrosion-resistant stainless steel. The use of stainless steel and powder coated materials insures years of trouble free service.



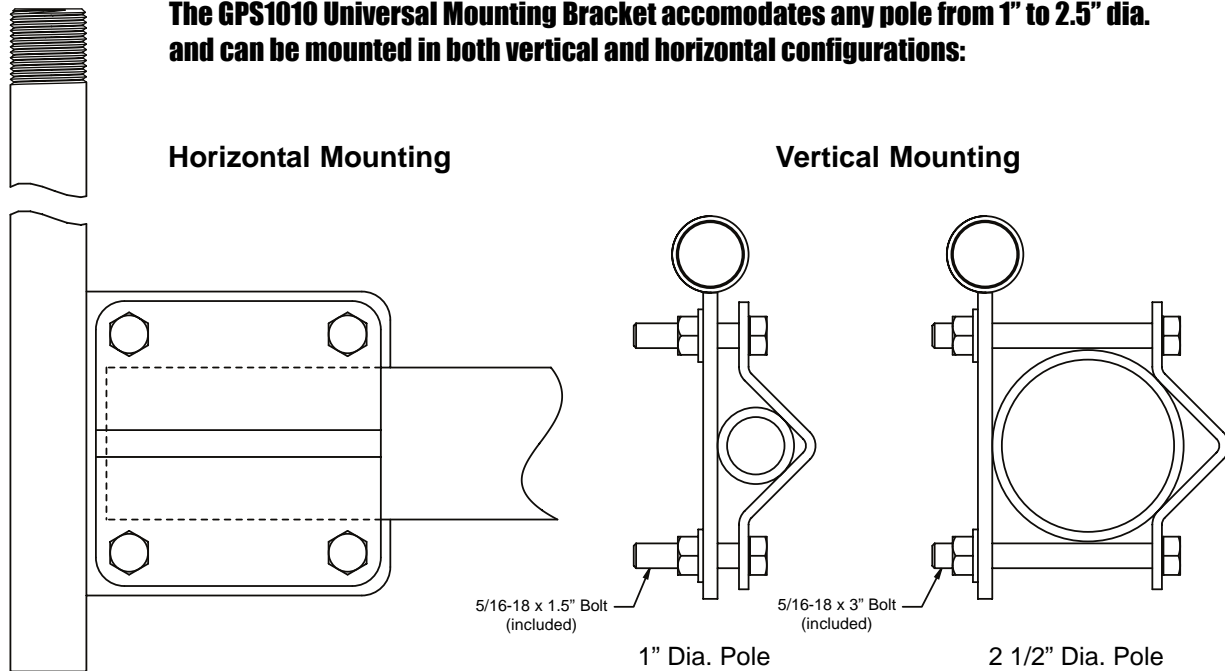
### High Gain Active Antenna

The GPS1010 includes band-pass filtering of 35 dB @ +/- 50 MHz at L1 providing additional rejection of unwanted signals. The antenna also features a low noise amplifier (LNA) with a combined gain of 30 dBi (antenna plus LNA). That gain coupled with approximately 7dB of transmission line loss, provides for an effective gain of 23 dBi at the GPS receiver.

# GPS1010

## GPS Antenna, Universal Mounting Bracket & Cable Kit

The GPS1010 Universal Mounting Bracket accommodates any pole from 1" to 2.5" dia. and can be mounted in both vertical and horizontal configurations:



\*Assembly may also be mounted to flat surfaces using mounting holes provided with the universal bracket.

### TECHNICAL SPECIFICATIONS (GPS ANTENNA)

- Operating Frequency:** L1 1575.42 +/- 1.023 MHz (typ.)
- Input Impedance:** 50 Ohm
- VSWR:** 2.5 (max.)
- Polarization:** Right hand circular
- Azimuth Coverage:** 360 degrees
- Elevation Coverage:** 0 to 90 degrees
- Filtering:** -35dB (1625MHz)(typ.)  
-35dB (1525MHz)(typ.)
- Gain Characteristics of Antenna Element:** Gain: 3.0 dBi (typ.)  
-10 dBi min. @ 0 degrees elevation  
Axial ratio: 3 dB (typ.)
- Total Gain:** 30 dBi (min.) w/o cable
- Noise Figure:** 1.5 dB (typ.), 2.0 dB (max.)
- Power Consumption:** 20mA max @ 5 volts

### PHYSICAL CHARACTERISTICS

#### Antenna Element

- Dimensions :** 3.54" Dia. x 2.36" H (Antenna)  
13.4" Overall height w/bracket
- Operating Temperature:** -30° to 80° C
- Humidity:** 40 to 95% RH (Below Dew Point)

#### Coax Cable

50' (15m) of RG-142 with TNC male connector at antenna and SMA male connector at other end (mates with GPS1000 Receiver).

### ORDERING INFORMATION

#### GPS Antenna Kit

#### Part Number - GPS1010

Includes 30dB gain antenna, universal mounting bracket and hardware and 50' (15m) of RG-142 low loss coax. Longer cable lengths available on a special order basis.

**Warranty:** One year parts and labor FOB Mission Viejo, CA (Condition must be as original and unmodified)



Visit us on the web at [gpscreations.com](http://gpscreations.com) for more information

**GPS Creations**  
27231 Galvez Lane  
Mission Viejo, CA 92691  
Tel: 949-348-7652  
[www.gpscreations.com](http://www.gpscreations.com)

GPS Creations follows a policy of continuous product improvement; specifications and descriptions are therefore subject to change without notice. Please contact GPS Creations for the latest product information. Performance characteristics are subject to GPS system variables, US DOD operational degradation, ionospheric conditions, satellite geometry, signal multipath and assumes S/A is turned off.

© 2004 GPS Creations. All specifications subject to change without notice. All product and brand names are trademarks or registered trademarks of their respective owners.