



## GPS150: All Systems GPS Antenna



### Key Features

- Covers GPS L1, GLONASS L1 and GALILEO E1 satellite systems
- Built-In active antenna with 40 dB of gain
- DC Voltage from 3.3 to 9V
- Triple stage filtering
- Built-In lightning protection.

### General Description

The GPS150 timing reference antenna is especially designed for long-lasting, trouble-free deployments in congested cell-site operations. The low noise, high gain antenna is well suited to address attenuation issues associated with applications requiring longer cable runs.

The quadrifilar helix design, coupled with multistage filtering provides superior out of band rejection and lower elevation pattern performance than traditional patch antennas.

The unique radome shape of the GPS150 sheds water and ice, while eliminating problems associated with bird perching.

The antenna may be purchased by itself or with pipe mounting hardware.

The GPS150 is made with materials that fully comply with the RoHS 2002/95/EC directive.

Lightening protection is built-in, together with ESD protection, reverse voltage protection and transient voltage suppression.

### Applications

The antenna is well suited to congested sites. It complements our range of GPS/GNSS disciplined frequency standards

<b>Specification Parameter</b>	<b>GPS150 Specification</b>
Frequency	1560 MHz to 1620 MHz.
LNA Gain	40 dB $\pm$ 4 dB GPS L1 and GALILEO E1, 38 $\pm$ 4 dB @ GLONASS L1
Nominal Impedance	50 ohm
Output VSWR	< 2.0:1
Maximum Noise Figure	< 2.5 dB @ 25°C
DC Power Supply	3.3V to 9.0 V on inner coaxial conductor
DC Current	< 40 mA
Filtering	3 stage filtering including pre-selector
Out of Band Rejection	-60 dB @ f =< 1530 MHz and -60 dB @ f=>1660 MHz
Lightening Protection	90V, 20 kA, 8/20 S
Temperature Range	-40 °C to +85 °C
Antenna Dimensions	126 x 81 mm
Antenna Weight	0.3 kg
Radome Color	White
Mounting Pipe Option	Mounting option fits pipes of 25 mm to 37 mm

<b>United Kingdom</b>	<b>South Africa</b>	<b>USA</b>
Precision Test Systems LTD The Studio, Whitehouse Farm New Hall Lane, Mundon Maldon Essex, CM9 6PJ, UK Tel: +44 (0) 870 368 9608 Fax: +44 (0) 1245 330030 Email: <a href="mailto:uksales@ptsyst.com">uksales@ptsyst.com</a> Web: <a href="http://www.ptsyst.com">www.ptsyst.com</a>	Precision Test Systems cc Randburg Gauteng Fax: 08651 58198 Email: <a href="mailto:sasales@ptsyst.com">sasales@ptsyst.com</a> Web: <a href="http://www.ptsyst.com">www.ptsyst.com</a>	Precision Test Systems Suite # 981 14781 Memorial Dr. Houston, TX 77079 Tel: 1 888 876 4804 Fax: 1 832 201 6564 Email: <a href="mailto:usasales@ptsyst.com">usasales@ptsyst.com</a> Web: <a href="http://www.ptsyst.com">www.ptsyst.com</a>

Full specifications available from [www.ptsyst.com](http://www.ptsyst.com). Specifications and features subject to change without notice (211013)