



The PL-S1 is a dual-frequency and dual-constellation GNSS antenna offered at an affordable price.

When accuracy requirements are flexible, this antenna is the best choice to provide maximum return on your investment. The PL-S1 uses an integrated ground plane and Fence Antenna™ Technology for advanced multipath reduction and improved tracking sensitivity. The PL-S1 delivers excellent signal tracking and mid-grade performance at an attractive price.

The antenna supports L1/L2 frequencies from GPS and GLONASS, as well as L-Band frequencies. The PL-S1 is designed to accompany all Topcon modular and handheld GNSS receivers when using Topcon's Spectrum RTK™ Technology.

Operating Frequency Range	
L1 GPS/GLONASS	1586.5 ± 25MHz
L2 GPS/GLONASS	1236 ± 20 MHz
L-Band	1535 ± 10 MHz
Out of Band Rejection	
L1	± 100 MHz -30 dBc (typical)
L2	± 200 MHz -60 dBc (typical)
Gain, Noise Figure and VSWR	
LNA Gain	33 dB (typical)
Gain at Zenith (90°)	GPS L1 4.5 dBic (min) GPS L2 3.5 dBic (min) GLONASS L1 3.5 dBic (min) GLONASS L2 2.5 dBic (min) L-Band 1 dBic (min)
Noise Figure	1.5 dB (typical)
VSWR	≤ 2.0 : 1
Nominal Impedance	50 Ohms
Environmental	
Enclosure	Aluminum with plastic radome
Temperature	Operating: -50°C to 85°C Storage: -55°C to 85°C
Water / Dust Rating	IP67
Random Vibration	IEC 60068-2-34, Test Fd
Sinusoidal Vibration	IEC 60068-2-6, Test Fc
Shock	IEC 60068-2-29 Test Ea
Bump	IEC 60068-2-29 Test Eb
Drop	2 m pole drop to concrete
Power	
Input Voltage	3-18 VDC; Reverse polarity protected
Power Consumption	55 mA (typical)
Physical	
Dimensions (w x h x l)	141.6 x 141.6 x 54.2 mm
Diameter with Ground Plane	200 mm
Weight	430 g (without Ground Plane) 615 g (with Ground Plane)
Centering	< 1 cm
Antenna Connector	TNC
Mount	5/8-11 UNC-2B thread

