PG-S1

The PG-S1 is a Topcon geodetic antenna built around patented Fence Antenna™ Technology by Topcon.

This high precision micro-centered antenna with integrated ground plane provides excellent tracking sensitivity and multipath rejection for all surveying and construction applications.

The PG-S1 antenna supports L1/L2 frequencies from GPS and GLONASS satellite constellations, as well as L-Band frequencies. The PG-S1 paired with any Topcon modular or handheld GNSS receiver provides a high performance RTK system.

The PG-S1 antenna system offers IP67 dust and water resistance as well as superior level of vibration and shock tolerance (IEC 60068-2). With its compact and ultra-rugged design, the PG-S1 is the most robust geodetic antenna in the market today.

Operating Frequency Range	
L1 GPS/GLONASS	1586.5 ± 25 MHz
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 5.5 dBic (min) GPS L2 5.5 dBic (min) GLONASS L1 4.5 dBic (min) GLONASS L2 4.5 dBic (min) L-Band 3 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 mm, micro-centered
Antenna Connector	TNC
Mount	5/8-11 UNC-2B thread

For more information:
topconpositioning.com/pg-s1

Specifications subject to change without notice.
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