### GEO-GNSS-AC-S1

# GPS/GLONASS High Performance Asset Tracking & Time Sync Micro Helix Antenna

PCTEL's GEO-GNSS-AC-S1 is a robust, active, high performance antenna covering both GPS L1 and GLONASS L1 frequency bands. PCTEL's proprietary filtering design allows wideband coverage while achieving superior out-of-band rejection. This antenna is ideal for performance in critical asset tracking and network timing synchronization applications.

#### **Features**

- GPS L1 & GLONASS L1 Frequencies
- Custom-Tuned Micro Helix Element
- High Rejection Filtering
- 26.5 dB Gain
- IP67\* Ingress Protection

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#### Applications

- Defense Radio Communications
- Handheld Devices
- Body Worn Asset Tracking
- Public Safety Emergency Responders
- Industrial Network Synchronization

# STANDARD CONFIGURATION

Model	Connector	Radome
GEO-GNSS-AC-S1	SMA Female	Black ABS

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA							
Frequency Range Amplifier Gain		Polarization	Out of Band Rejection	Current Draw			
1574-1610 MHz	@ 3.0 VDC: 26.5 dB (typical):	Right hand circular	f0 = 1586  MHz $f0 \pm 50 \text{ MHz}: \ge 40 \text{ dBc}$	< 20 mA (typical)			

## **ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued**

DC Voltage	Noise Figure	Element Gain	Nominal Impedance
2.5-5.5 V (operating) ≤ 12.0 V (survivability)	< 2.0 dB (typical)	- 2.0 dBic @ GPS L1 -2.5 dBic @ GLONASS L1	50 ohms

### **MECHANICAL & ENVIRONMENTAL SPECIFICATIONS**

Dimensions	Weight	Radome Material	Connector	Temperature Range	Ingress Protection
0.8 x 3.4 inches (20.3 x 87.0 mm)	1.23 oz (35 g)	ABS (Black)	SMA Female	-40°C to +85°C operating	IP67*

\* When installed according to the manufacturer's installation instructions.

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