PCTEL®

8111D-HR GNSS Magnetic High Rejection Tracking Antenna

RoHS COMPLIANT

PCTEL's GNSS High Rejection Magnetic Mount Tracking Antenna is a full GNSS band antenna covering GPS L1, GLONASS L1, Galileo E1 and Beidou B1 satellite frequency bands. PCTEL's proprietary filtering design allows wideband coverage while achieving superior out-of-band rejection. This antenna is ideal for any global GNSS tracking application that requires an externally mounted antenna. Using internal magnets or screw mount holes, the antenna can be installed almost anywhere on a vehicle allowing for greater flexibility.

8111D-HR

Features

- GPS L1, GLONASS L1, Galileo E1 and Beidou B1 frequencies
- Industry leading out-of-band rejection
- 26 dB LNA gain
- Magnet or screw mount design options
- IP67, low-profile design**

STANDARD CONFIGURATION

Model	Cable	Connector*	Mount
8111D-HR	16.4' (5 meters) highly flexible 174 sized cable	SMA Plug	Magnetic (5 lb lift-off force) or permanent (pre-threaded for 3 x M2.5 screws)

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Band	LNA Gain	Element Gain	Polarization	Out of Band Rejection
1561-1608 MHz	@ 3.0 VDC: 26 dB (typical)	3 dBic @ 90° -2 dBic @ 20°	Right hand circular	f_0 = 1586 MHz $f_0 \pm$ 50 MHz: ≥ 60 dBc $f_0 \pm$ 60 MHz: ≥ 70 dBc

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued

Current Draw	DC Voltage	Noise Figure	VSWR	Nominal Impedance
< 25 mA (typical)	2.8-6.0 V (operating) ≤ 12.0 V (survivability)	< 2.0 dB (typical)	≤1.5:1 (at connector)	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Shock	Vibration	Temperature Range	Ingress Protection
1.77 L x 2.01 W x .47 D in (45 x 51 x 12 mm)	0.26 lbs (120 g)	Black, Lexan EXL9330	Vertical axis 50G, other axes 30G	3 axis, sweep = 15 min 10 – 200 Hz log sweep: 3G	-40°C to +85°C operating	IP67**

* Consult Customer Service for other connector options. ** When installed according to the manufacturer's installation instructions.