

Stingray GNSS Magnetic High Rejection Tracking Antenna

GNSS/GPS Antennas - High Rejection

8111D-HR



Description

High rejection, magnetic mount tracking antenna covers the full GNSS band.

Technologies

- GPS L1
- GLONASS L1
- Galileo E1
- Beidou B1

Features

- Superior out-of-band rejection – Proprietary filtering design allows wideband coverage for all GNSS frequencies
- Quality – 30 dB LNA gain
- Flexible – Magnet or screw mount design options
- Low-profile housing – Minimizes antenna visibility
- Weatherproof – IP67 ingress protection



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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. The 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.

Features

- GPS L1, GLONASS L1, Galileo E1 and Beidou B1 frequencies
- Industry leading out-of-band rejection
- 30 dB LNA gain
- Magnet or screw mount design options
- IP67, low-profile design¹

Certifications



¹ When installed according to the manufacturer's installation instructions.

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Standard Configurations

Model	Cable	Connector ²	Mount	Housing Color
8111D-HR	16.4' (5 meters) highly flexible 174- sized cable	Male SMA standard	Magnetic (5 lb lift-off force) or permanent (pre-threaded for 3 x M2.5 screws)	Black

Electrical Specifications – GNSS Antenna

Frequency Range	1561-1608 MHz (typical)
LNA Gain	@ 3.0 VDC: 30 dB (typical)
Element Gain	3 dBic @ 90° -2 dBic @ 20°
Polarization	Right hand circular
Current Draw	13 mA (typical)
Out of Band Rejection	f0 = 1586 MHz f0 ± 50 MHz: ≥ 60 dBc f0 ± 60 MHz: ≥ 70 dBc
DC Voltage	2.8-6.0 V (operating) ≤ 12.0 V (survivability)
Noise Figure	< 2.0 dB (typical)
VSWR	≤ 1.5:1 (at connector)
Nominal Impedance	50 ohms

Mechanical and Environmental Specifications

Physical

Dimensions	1.77 L x 2.01 W x .47 D inches (45 x 51 x 12 mm)
Weight	0.26 lbs (120 g)
Housing Material	Black, Lexan EXL9330
Operating / Storage Temperature	-40°C to +85°C
Shock	Vertical axis 50G, other axes 30G
Vibration	3 axis, sweep = 15 min 10 – 200 Hz log sweep: 3G
Ingress Protection	IP67 ¹

¹ When installed according to the manufacturer's installation instructions.

² Consult Customer Service for other connector options.

CONTACT US

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this product contact your
sales representative or visit
> pctel.com/antenna-products**

Solving Complex Wireless Challenges

PCTEL is a leading global provider of wireless technology, including purpose-built Industrial IoT devices, antenna systems, and test and measurement solutions. Trusted by our customers for over 25 years, we solve complex wireless challenges to help organizations stay connected, transform, and grow.



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