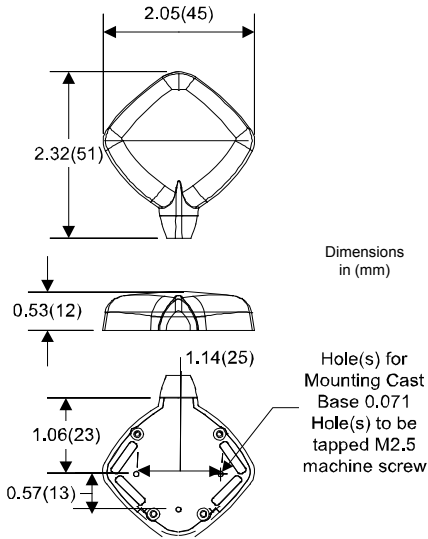




8111D-HR Magnetic Tracking Antenna With SkyLink™ High Rejection GNSS Technology

The 8111D-HR antenna is a dual band, high rejection antenna covering both the GPS L1 and GLONASS L1 frequencies. PCTEL's proprietary SkyLink™ filtering design allows wideband coverage while achieving superior out-of-band rejection. This antenna is ideal for any global GPS/GLONASS 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.



Low Noise Amplifier Specifications

Frequency Range: 1565MHz - 1610MHz (typical)
Nominal Gain: @ 3.0VDC: 26dB (typical)
Noise Figure: < 2.0dB (typical)
Out-of-band Rejection: f0 = 1586MHz
f0 +/- 50MHz : ≥ 60dBc
f0 +/- 60MHz : ≥ 70dBc
DC Voltage: 2.8-6.0V (operating) ≤ 12.0V (survivability)
DC Current: < 25mA (typical)

Features

- GPS L1 & GLONASS L1 Frequencies
- Industry Leading SkyLink™ Out-of-Band Rejection
- 26 dB LNA Gain
- IP67, Low Profile Design

Applications

- Fleet Management / Asset Tracking
- Public Safety Emergency Responders
- Positive Train Control (PTC) Rolling Stock
- Agriculture
- Network Synchronization

RF/Electrical Specifications

Frequency Range	Nominal Gain	Polarization	Nominal Impedance	VSWR
1574MHz - 1610MHz	3 dBic @ 90° -2 dBic @ 20°	Right Hand Circular	50 Ohms	≤1.5:1 (at connector)

Mechanical Specifications

Antenna Dimensions	Weight	Shock	Vibration
1.77" x 2.01" x .47" (45 x 51 x 12 mm)	.26 lbs (120 g)	Vertical axis 50G, other axes 30G	3 axis, sweep = 15 min 10 - 200 Hz log sweep: 3G

Cable	Connector	Mounting Method
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)

Environmental Specifications

Temperature Range	Ingress Protection
-40°C to +85°C operating	IP67