3911D-HR High Rejection Dual Filter Mobile GPS Antenna for High RF Noise Environments

The 3911D-HR low interference GPS Antenna with Dual SAW High Rejection Filters allow excellent performance in high RF noise environments as found on vehicles with multiple antennas. It is ideal for fleet tracking, public safety, transit, precision agricultural and military applications.

The 3911D-HR features ESD circuit protection, an innovative two-stage low noise amplifier and a dual SAW high rejection filter. It also features a custom designed ceramic patch element that minimizes detuning effects caused by adjacent objects. The 3911D-HR provides consistent, clear GPS signal reception while minimizing loss-of-lock in high-RF fields. Housed in a weatherproof magnetic or screw mount enclosure, the 3911D-HR GPS antenna is ideal for demanding vehicle mounted GPS applications.



Features

- High rejection dual SAW filters allow placement near other transmitting antennas
- Low current: 7.5 mA @ 3.3V
- Wide voltage input range (2.7 5 VDC)
- Robust IP67 housing built for various weather conditions

Low Noise Amplifier

Low Noise Amplifier Specifications

| Nominal Gain: 25 dB @ 3.3VDC 25.5 dB @ 5VDC |
|---|
| Noise Figure: 3.1 dB |
| Out-of-Band Signal Rejection: See chart below |
| Voltage: 2.7-5 VDC |
| ESD Circuit Protection: 15K volts |

RF/Electrical Specifications

| Center Frequency | Nominal Gain | Polarization | Current Draw |
|----------------------|---------------|-----------------|---------------|
| 1575.42 MHz ± 10 MHz | 3 dBic @ 90° | Right Hand Cir- | 7.5 mA @ 3.3V |
| | -2 dBic @ 20° | cular | 11.5 mA @ 5V |

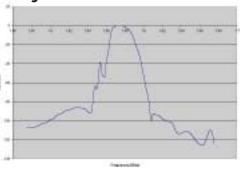
Mechanical Specifications

| Antenna Dimensions | Weight | Shock | Vibration |
|--|--------------------|--|---|
| 1.77" x 2.01" x .47" (45 x 51 x 12 mm) | .29 lbs (130 g) | Vertical axis 50G, other axes 30G | 3 axis, sweep = 15 min 10 - 200 Hz log sweep: 3G |
| Cable | Connector | MA Magnetic (5 lb lift-off force) or permanent | |
| 16.4' (5 meters) highly- flexible 174 sized cable | SMA standard | | |

Environmental Specifications

| | Temperature Range | Weatherproof | | | |
|--|-----------------------------|--------------|--|--|--|
| | -40°C to $+85$ °C operating | IP67 | | | |

Out-of-band Filter Rejection



For other connector options, please refer to GPS Mobile Antenna Configurator Part Number Guide