

3915D-HR Low Power GPS Antenna with Dual High Rejection SAW Filters



The 3915D-HR Very Low Power “No Interference” GPS Antenna has one of the industry’s lowest power consumption and best out-of-band filter performance. The 3915D-HR features ESD circuit protection, an innovative very low power two-stage low noise amplifier and dual high rejection SAW filters. It also features a custom designed ceramic patch element that minimizes detuning effects caused by adjacent objects. The 3915D-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 3915D-HR is ideal for most demanding, power critical GPS applications.

Features

- High rejection dual SAW filters allows placement near other transmitting antennas
- Low current: 1.3 mA
- 20 dB gain
- Wide voltage input range (2.7 - 5 VDC)
- Robust IP67 housing built for various weather conditions



Low Noise Amplifier Specifications

Nominal Gain:
20 dB @ 3.3VDC

Noise Figure:
3.6 dB

Voltage:
2.7-5 VDC

ESD Circuit Protection:
15K volts

RF/Electrical Specifications

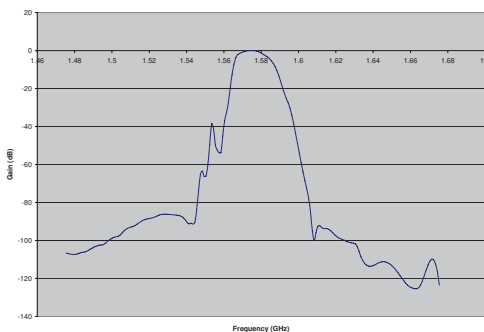
Center Frequency	Nominal Gain	Polarization	Current Draw
1575.42 MHz ± 10 MHz	3 dBic @ 90° -2 dBic @ 20°	Right Hand Circular	1.3 mA @ 3.3V 2 mA @ 5V

Mechanical Specifications

Antenna Dimensions	Weight	Shock	Vibration
2.1” x 2.3” x .53” (45 x 51 x 12 mm)	4.2 oz (120 g)	Vertical axis 50G, other axes 30G	3 axis, sweep = 15 min 10 - 200 Hz log sweep: 3G

Cable	Connector	Mounting Method
9.8’ (3 meters) highly-flexible 174 sized cable	SMA standard	Magnetic (5 lb lift-off force) or permanent (pre-threaded for 3 x M2.5 screws)

Out-of-band Filter Rejection



Environmental Specifications

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