3917D High Gain GPS Antenna

The 3917D GPS antenna is a high performance value antenna with a wide voltage range, ideally suited to telematics platforms for use in vehicle-mounted applications. Using internal magnets or screw mount holes, the antenna can be installed almost anywhere on a vehicle allowing for greater flexibility. The 3917D antenna features a high gain (28 dB) low noise amplifier and a SAW filter. With 2.7 to 5 volt operation, the antenna can be used with the vast majority of GPS systems available.



Features

- Voltage range 2.7 5 V
- LNA 28 dB gain typical
- Low noise figure 1.5dB
- · Outstanding out-of-band signal rejection

RF/Electrical Specifications

Center Frequency	Nominal Gain	Polarization	Current Draw
1575.42 MHz ± 10 MHz	3 dBic @ 90°	Right Hand	9 mA @ 3.3V
	-2 dBic @ 20°	Circular	15 mA @ 5V

Mechanical Specifications

Antenna Dimensions	Weight	Shock	Vibration
2.1" x 2.3" x .5" (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	Mou	nting Method
16.4' (5 meters) highly- flexible 174 sized cable	SMA standard		ift-off force) or permanent ed for 3 x M2.5 screws)

Environmental Specifications

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



Low Noise Amplifier Specifications

Nominal Gain: @ 3.3VDC: 28 dB @ 5VDC: 30 dB
Noise Figure: 1.5 dB (typical)
Out-of-band rejection: +/- 15 MHz: 5 dB +/- 20 MHz: 10 dB +/- 30 MHz: 32 dB +/- 40 MHz: 40 dB
Voltage: 2.7-5 VDC

Out-of-band Filter Rejection

