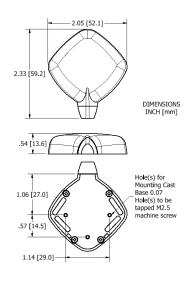
#### **GPS/GLONASS Mobile Antenna**





# 8117D GPS L1/GLONASS L1 Active Magnetic Mount Antenna

The 8117D GPS L1/GLONASS antenna is a high performance antenna with a wide voltage range, ideally suited to telematics platforms for use in vehiclemounted applications. With a wideband patch, this antenna was designed to operate at GPS L1 as well as GLONASS L1 frequencies. Using internal magnets or screw mount holes, the antenna can be installed almost anywhere on a vehicle allowing for greater flexibility. The 8117D antenna features 28 dB gain 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 L1 and GLONASS systems available.

#### **Features**

- GPS L1 & GLONASS L1 Frequencies
- Voltage range 2.5 5 V
- LNA 28 dB gain typical
- Low noise figure 1.5dB

### **RF/Electrical Specifications**

Frequency Range	Nominal Gain	Polarization	Current Draw
1568-1618 MHz	3 dBic @ 90°	Right Hand	9 mA @ 3.3V
	-2 dBic @ 20°	Circular	15 mA @ 5V

### Low Noise Amplifier **Specifications**

Frequency Range: 1568-1618 MHz (typical)

Nominal Gain:

@ 3.3VDC: 28 dB ± 1.5 dB (typical) @ 5VDC:  $30 dB \pm 1.5 dB$  (typical)

Noise Figure:

1.5 dB (typical)

#### Out-of-band Signal Rejection:

- > 45dB @ 1535 MHz
- > 40dB @ 1670 MHz
- > 30dB @ 1540 MHz
- > 30dB @ 1650 MHz
- > 20dB @ 1545 MHz
- > 20dB @ 1640 MHz

#### Voltage:

2.5-5 VDC (Operating)\*\*

## **Mechanical Specifications**

Antenna Dimensions	Weight	Shock	Vibration
2.05 L x 2.33 W x 0.54 H in.	.26 lbs	Vertical axis 50G,	3 axis, sweep = 15 min
(52.1 x 59.2 x 13.6 mm)	(120 g)	other axes 30G	10 - 200 Hz log sweep: 3G

Cable	Connector	Mounting Method
9.8' (3 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*



When installed according to the manufacturer's installation instructions.

<sup>\*\*</sup> User may see a degradation of 2dB gain between 2.5-2.7 VDC from advertised specification.