

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 vehicle mounted 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.



8117D

Features

- GPS L1 & GLONASS L1 Frequencies
- Voltage range 2.5 – 5 V
- LNA 28 dB gain typical
- Low noise figure 1.5 dB
- Other connectors supported: FAKRA C, TNC, MCX, RPTNC, and QMA but not shown

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
8117D	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)

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Range	LNA Gain	Element Gain	Polarization
1568-1618 MHz (typical)	@ 3.3 VDC: 28 dB \pm 1.5 dB (typical) @ 5 VDC: 30 dB \pm 1.5 dB (typical)	3 dBic @ 90° -2 dBic @ 20°	Right hand circular

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued

Current Draw	Out of Band Rejection	DC Voltage	Noise Figure
9 mA @ 3.3 V 15 mA @ 5 V	@ 1535 MHz: > 45 dB @ 1540 MHz: > 30 dB @ 1545 MHz: > 20 dB @ 1670 MHz: > 40 dB @ 1650 MHz: > 30 dB @ 1640 MHz: > 20 dB	2.5-5 VDC (operating)*	1.5 dB (typical)

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Temperature Range	Ingress Protection
2.05" L x 2.33" W x 0.54" H (52.1 x 59.2 x 13.6 mm)	0.26 lbs (120 g)	ASA	-40°C to +85°C operating	IP67**

* User may see a degradation of 2 dB gain between 2.5-2.7 VDC from advertised specification. ** When installed according to the manufacturer's installation instructions.