



a time and place...
for everything

Wi-Sys Communications Inc.

WS3910 Very Low Noise GPS Antenna

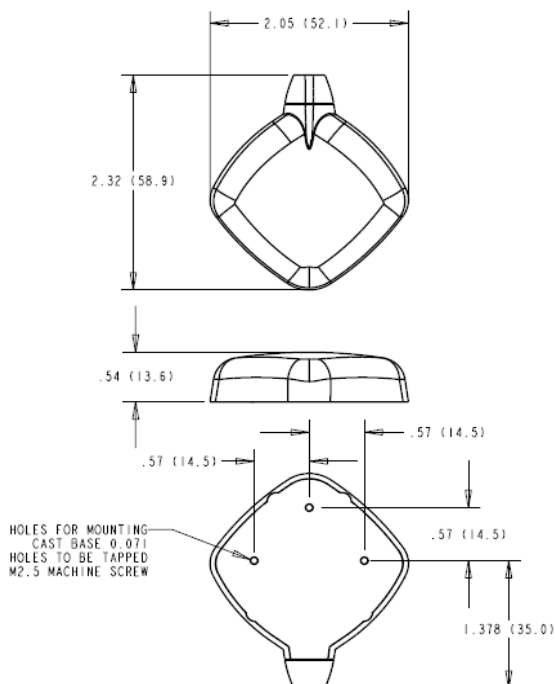
Applications:

- ◆ Fleet Management & Telematics
- ◆ Ag Positioning Equipment
- ◆ Law Enforcement & Public Safety
- ◆ High Accuracy & Mission Critical GPS
- ◆ Military Radios and Vehicles
- ◆ Avionics
- ◆ Asset Tracking



The WS3910 Very Low Noise GPS Antenna has the industry's lowest noise figure. It features ESD circuit protection, a patented very low noise LNA and a high rejection SAW filter. It also features a perfectly tuned custom ceramic patch element that minimizes detuning effects caused by adjacent objects. The WS3910 provides the clearest GPS signal reception while minimizing loss-of-lock in even in less than ideal conditions. Housed in a weatherproof magnetic or screw mount enclosure, the WS3910 Very Low Noise GPS Antenna is clearly the best choice wherever top GPS performance is required.

Mechanical Dimensions



Features:

- ◆ Patented very low noise (0.5dB) LNA
- ◆ High rejection SAW filter
- ◆ High gain: 28 dB (typ.)
- ◆ Low current: 8mA (typ.)
- ◆ 15KV ESD circuit protection
- ◆ Wide voltage input range (2.7 – 5.0 VDC)
- ◆ Weather proof housing
- ◆ RoHS compliant

Ordering Information:

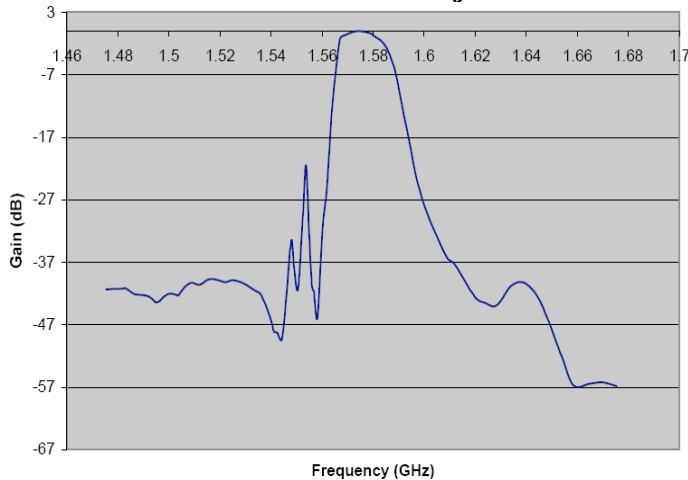
- ◆ **WS3910-3M-SMA:** 3 metre cable with a SMA male connector
- ◆ **WS3910-5M-SMA:** 5 metre cable with a SMA male connector



a time and place...
for everything

Wi-Sys Communications Inc. WS3910 Very Low Noise GPS Antenna

Out-of-band Filter Rejection



Other Wi-Sys Magnet Mount Antenna

WS3911-HR: Dual filter, very high-rejection GPS antenna

WS3914: Very low current, filtered GPS antenna

WS3915-HR: Very low current, dual filter high rejection GPS antenna

WS3917: Low cost, active, filtered GPS antenna

WS3942: Active, filtered GPS + Cellular combined antenna

WS3948: Active, filtered GPS + 2.4 GHz combined antenna

Technical Specifications

Environmental Specifications

- ◆ -40c to +80c operating (-45c to +80c storage)
- ◆ Weatherproof / IP67

Mechanical

- ◆ 52.1 mm x 58.9 mm x 13.6 mm
- ◆ 120g (4.2 oz)
- ◆ Attachment methods: Magnetic (5 lb lift-off force) or permanent (pre-threaded for 3 x M2.5 screws)
- ◆ Shock: Vertical axis 50G, other axes 30G
- ◆ Vibration: 3 axis, sweep = 15 min
10 – 200 Hz log sweep: 3G

Antenna Response

- ◆ Frequency: 1575.42 MHz
- ◆ Gain: @ 90° 3 dBic, @ 20° -2.0 dBic
- ◆ Polarization: Right Hand Circular
- ◆ Axial ratio: @ 90° 4 dB, @ 20° 6 dB

Electrical

- ◆ Voltage: 2.7 – 5.0 VDC
- ◆ Current: 8 mA
- ◆ ESD circuit protection: 15 KV
- ◆ Cable: 1.5 DS-QEHV Shikoku Cable Co. Ltd.
- ◆ Cable length: 3 metres or 5 metres (standard), other lengths optional
- ◆ Cable loss: 1.3 dB/m typical
- ◆ Connector: SMA Male (standard), other connectors optional

LNA Specifications

- ◆ Frequency: 1572.5 – 1578 MHz
- ◆ Output Impedance: 50 Ohm
- ◆ VSWR: 1.5:1 max (at connector)
- ◆ Gain: 28dB (typical)
- ◆ Noise figure: 0.5 dB

Wi-Sys Communications Inc.

31B Richardson Side Road
Ottawa, ON K2K 0A1 Canada
Tel 613.254.7386 Fax 613.254.7388
sales@wi-sys.com www.wi-sys.com

