

Wi-Sys Communications Inc.

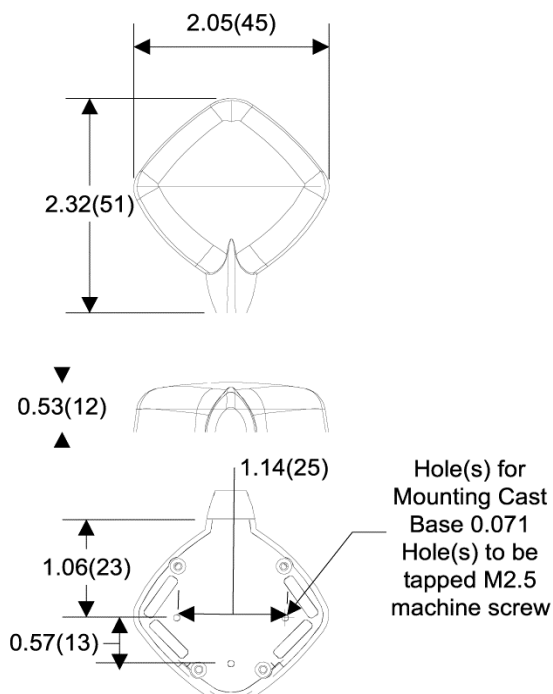
WS3917 High Gain GPS Antenna

Applications:

- ◆ Automotive Navigation
- ◆ Fleet Management & Telematics
- ◆ Marine Navigation
- ◆ Asset Tracking
- ◆ Military Radio and Vehicle
- ◆ Law Enforcement
- ◆ Clock & Timing using GPS



The WS3917 GPS antenna is a high value antenna with a wide voltage range, ideally suited to AVL and telematics platforms for vehicle-mounted use. Using internal magnets or screw mount holes, the antenna can be installed almost anywhere on a vehicle allowing great flexibility. The WS3917 antenna features a high gain (28 dB) low noise amplifier and a SAW filter. With a wide range of connectors and 2.7 to 5 volt operation, the antenna can be used with almost any GPS system available.



Features:

- ◆ Voltage range 2.7 – 5 V
- ◆ LNA 28 dB gain typical
- ◆ Low noise figure 1.5dB
- ◆ Great out-of-band signal rejection
- ◆ Magnet or screw mount
- ◆ Large range of connector types
- ◆ Value priced



a time and place...
for everything

Wi-Sys Communications Inc. WS3917 GPS Antenna

Designed for a wide range of GPS devices, the WS3917 antenna meets or exceeds OEM manufacturer's recommended specifications for optimum GPS performance. The WS3917 antenna is housed in durable PVC plastic for reliability in extreme weather conditions. Mounting the WS3917 antenna is easy with the reliable mag mount or through holes for screws.

The Wi-Sys Antenna Family

WS3910: High gain, low noise
Magnetic mount GPS Antenna

WS3914: Low current GPS antenna

WS3916: Low cost GPS antenna

WS3940: Active GPS + Cellular
Combined glass mount/covert antenna

WS3942: Active GPS + Cellular
Combined magnetic mount antenna

WS3950/WS3960: Low noise
Embedded GPS antenna

WS3954/WS3964: low current
Embedded GPS antenna

WS3957/WS3967: low price filtered
Embedded GPS antenna

WS3977: All-Plastic Through-hole
mount GPS antenna

Technical Specifications

Environmental Specifications

- ◆ Operating temp: -40c to +85c (-45c to +85c storage)
- ◆ Humidity: 95% max (non condensing)

Mechanical

- ◆ Dimensions: 45mm x 51mm x 12mm
(2.05" x 2.32" x 0.53")
- ◆ Weight: 120g (4.2 oz)
- ◆ Attachment methods: Magnetic (5 lb lift-off force) or permanent (pre-threaded for 3x 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 VDC
- ◆ Current: 15mA @ 5V, 9mA @ 3.3V
- ◆ Cable: 1.5 DS-QEHV Shikoku Cable Co. Ltd.
- ◆ Cable length: 3 Metres (standard), other lengths optional
- ◆ Cable loss: 1.3 dB/m typical
- ◆ Connector: SMA standard
SMB, SMC, MCX, BNC, TNC optional

LNA Specifications

- ◆ Frequency: 1572.42 - 1578.42 MHz
- ◆ Output Impedance: 50 Ohm
- ◆ VSWR: 1.5:1 max (at connector)
- ◆ Gain: @ 3.3VDC: 28 dB (typical)
@ 5VDC: 30 dB (typical)
- ◆ 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

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