

# Wi-Sys Communications Inc. WS3947 GPS + Quad Cell/3G/2.4 GHz Combined Covert/Dash or Glass Mount Antenna

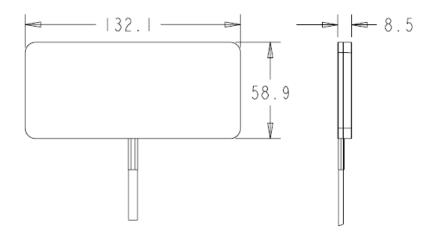
## **Applications:**

- ♦ GPS + Quad Cell (and 3G / 2.4 GHz) Applications
- ◆ Telematics via WiFi, ZigBee, Bluetooth and Proprietary 2.4 GHz
- Security and Law Enforcement
- Automotive Navigation
- ♦ Fleet Management & Telematics
- ♦ Asset Tracking Systems
- Covert/Dash or Glass Mount Installations



The WS3947 GPS, Quad Cellular, 3G & 2.4 GHz ISM Band antenna is an excellent choice for Telematics systems requiring dependable and highly accurate positioning data, as well as clear and consistent host-to-vehicle communications via Quad band Cellular, 3G or 2.4 GHz ISM Band such as WiFi. The WS3947's GPS antenna portion has excellent LHCP rejection for less multi-path effects, and it includes a low noise amplifier and a narrow band SAW filter, to provide a consistent and clear GPS signal while minimizing loss-of-lock when GPS conditions are less than ideal. The Quad Cell/3G/2.4 GHz antenna portion is tuned to receive 824-894 MHz (cell), 890-960 MHz (GSM), 1710-1880 MHz (European), and 1850-1990 MHz (N. American), as well as 1885-2200 MHz (US & Euro 3G/UMTS/W-CDMA) and 2400-2500 MHz (2.4GHz ISM) frequencies.

## **Dimensions: (in mm)**



#### Features:

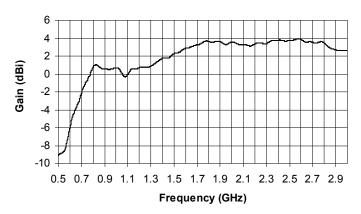
- Low price
- GPS, Quad-band Cellular, 3G
   & 2.4 GHz band reception
- Semi-flexible for embedded and covert installations
- Excellent out-of-band signal rejection
- ♦ High gain active GPS antenna
- Easy to install
- Wide range of connector types available.
- ◆ RoHs Compliant



# Wi-Sys Communications Inc.

# **WS3947** GPS/Cell/3G/2.4 GHz Combined Covert/Dash. Glass Mount Antenna

## Gain of WS3947



# **Ordering information:**

#### WS3947-C-3M-SMA/SMA:

For Covert and Dash mount installations.

## WS3947-GM-3M-SMA/SMA:

For Glass mount installations.

## Wi-Sys Communications Inc.

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

## **Technical Specifications**

### **Environmental Specifications**

Operating Temp: -40c to +85c

#### Mechanical

- Dimension: 132.1mm x 58.9mm x 8.5mm
- Housing: Lexan® covered urethane foam
- Cable: 1.5 DS-QEHV Shikoku DUAL Cable
- Cable length: 2 cables x 3 Metres (Standard), other lengths optional.
- Cable loss: 1.0 dB/m typical
- Connectors: 2 x SMA (other connectors available)

### Antenna Response (GPS)

Frequency: 1575.42 MHz

Gain (typical): 28 dB

Noise Figure (typical): 1.5 dB

Polarization: Right Hand Circular

LHCP Rejection: > 6 dB

VSWR:  $\leq 1.5:1$ 

#### Electrical (GPS)

3.0 - 5.0 VDCVoltage:

Current (typical): 9.0 mA@ 3.5V

#### Electrical (Cellular/3G/2.4GHz)

Frequencies: 824-894 MHz (Cellular)

890-960 MHz (GSM)

1710-1880 MHz (Europe)

1850-1990 MHz (N. America)

1885-2200 MHz (US & EU 3G)

2400-2500 MHz (2.4GHz ISM)

Output Impedance: 50 Ohm Nominal

< 2.0 VSWR:

Gain: 2 dBi (approx.)