



# SP2603 Series

## Economical GPS Tracking Device

With the functionality you need and without unneeded capabilities that increase the cost of a device, the SP2603 is ideal for most fleet and other tracking purposes. Focusing on reliability as a foremost design goal, you can count on dependable connectivity. The SP2603 is also available with an optional 750mAh back-up battery so that it can be configured for an application or use case.

The unit features FOTA (Firmware Update OTA), a 3-axis accelerometer for motion sense, and has one input and one output (I/O). The SP2603 is a complete tracking unit with two versions: 2G as well as 3G covering all 5 bands of 3G communication. It is designed for 12v or 24v mobile vehicles with a quick and easy installation procedure.

### FEATURES

- 2G and 3G Modem Options
- HSPA Version Support all 5 Bands
- Self-Calibrate 3D Accelerometer
- FOTA (Firmware Update OTA)
- Flexible Programming Rules
- HDOP/VDOP for Precise Location
- Driving Behavior
- GSM Jamming Detection
- Multiple Data Upload Modes
- Intelligent Power Management
- Conditional Based Profiles
- Internal Backup Battery
- 28 Day, Time & Speed Based Geofences
- 128 Way Points for Delivery Management

# SP2603 Series

## Specifications



### GENERAL

|                     |                                |
|---------------------|--------------------------------|
| Communication Modes | GPRS/EDGE and TCP/UDP/SMS      |
| Location Technology | 50 Channels GPS                |
| Operating Voltage   | 12 and 24 Volt Vehicle Systems |

### GPS

|                      |   |
|----------------------|---|
| Location Technology  | 50 Channel Ublox GPS (With SBAS)<br>GPS L1 C/A Code<br>SBAS, WAAS, EGNOS, MSAS    |
| Accuracy             | SBAS 2.0m CEP   |
| TTFB (Open Sky)      | Cold Start: 27s (Average)<br>Warm Start: 27s (Average)<br>Hot Start: 1s (Average) |
| Update Rate          | 1 second  |
| Tracking Sensitivity | -162dBm   |
| Antenna              | Patch Internal  |
| Assist GPS           | Supported   |

### CELLULAR

|                |                                   |
|----------------|-----------------------------------|
| Data Support   | SMS, TCP, UDP                     |
| Modem          | HL6528 or HL8548                  |
| GSM/GPRS       | 850/900/1800/1900                 |
| UMTS WCDMA FDD | 800/850/900/1900/2100 (optional)  |
| HSPA Data Rate | 5.76Mbps UL/7.2Mbps DL (optional) |
| SIM Card       | 1.8/3.3 V (Micro SIM)             |

### INPUT/OUTPUT

|                 |   |
|-----------------|---|
| Digital Input   | 1   |
| Ignition Sensor | 1   |
| Digital Output  | 1 digital output (Relay), open drain,<br>300mA drive current max. |
| Status LEDs     | Power, GPS, Cellular  |

### ON BOARD

|                  |                       |
|------------------|-----------------------|
| CPU              | ARM Cortex M3         |
| Flash Memory     | 2000 Buffered Message |
| 3D Accelerometer | Built-In              |

### ELECTRICAL

|                   |   |
|-------------------|---|
| Operating Voltage | 8-32V DC operational for 12V & 24V<br>Vehicle support per SAE J1455     |
| Backup Battery    | LI-PO 750mAh (optional)<br>Recharging Range: 0 to +45°C                 |
| Power Consumption | 1mA 12V (sleep)<br>12mA 12V (power save)<br>100mA 12V (active tracking) |

### PHYSICALS

|           |                       |
|-----------|-----------------------|
| Dimension | 94 x 47 x 20.50 mm    |
| Weight    | 78g (without battery) |

### ENVIRONMENTAL

|                       |   |
|-----------------------|---|
| Operating Temperature | -40°C To +80°C (w/o backup battery)<br>-10°C To +50°C (w/ backup battery) |
| Humidity              | 95% RH @ +50°C non-condensing   |
| Shock & Vibration     | U.S. Military Standards 202G and<br>810F, SAE J1455                       |
| EMC/EMI               | SAE J1113; FCC-Part 15B   |
| RoHS                  | Compliant (optional)  |

### CONNECTORS, SIM CARD ACCESS

|                |                                  |
|----------------|----------------------------------|
| Connector Type | Captive wire harness 4 wires     |
| USB            | Configuration & firmware update  |
| GPS Antenna    | Internal                         |
| GSM Antenna    | Internal                         |
| SIM Card       | Micro SIM & Embedded SIM Support |

### MOUNTING

Tie Wrap, Velcro or Adhesive

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