



## VERIZON TELEMATICS® 5000 SERIES GPS FLEET TRACKING PRODUCT LINE



### PHYSICAL SPECIFICATIONS

Size: 5.17" L x 2.80" W x 1.04" H  
(131.41mm x 71.08mm x 26.39mm)

Weight: 4.8 oz (136.1 g)

### GENERAL SPECIFICATIONS

- **Input Voltage**  
+8 to +30 VDC
- **Power Consumption**  
Normal (key on) 30 mA @ 14V  
Operating Mode 30 mA @ 24V  
Sleep (key off) 16 mA @ 12V  
Mode 30 mA @ 24V
- **Fault Protection**  
Reversed battery, over-voltage, loss-of-ground
- **Fuse**  
Internal 2.2 A trip point, self-resetting
- **Auxiliary/Debug Interface**  
115200 baud serial (TTL levels)
- **Antennas**  
Internal cellular & GPS
- **Energy Reserve**  
Loss of power detection circuit
- **Accelerometer**  
+/- 2 g

**Verizon Telematic's 5000 Series** product line lets organizations seamlessly connect and manage their vehicle operations. It offers affordable wireless coverage, transmitting vehicle location, performance, diagnostics (5500 model only), and sensor event information.

Enabling 24/7 visibility into fleet assets, the 5000 Series lets fleet managers easily locate vehicles in near real-time and view specific vehicle data such as current location, mileage, speed, fuel consumption, and diagnostic trouble codes — increasing response time and reducing operating costs. The universal solution consists of an in-vehicle unit and an online application, and is compatible with light, medium, and heavy vehicles.

The 5000 Series product line features two automotive grade hardware devices:

- 5500 - Compatible with light and heavy duty vehicles with an OBD-II diagnostic link connector (cars and light trucks 1996 and newer) or J1708/J1939 6-pin or 9-pin diagnostic link connector (heavy trucks 1988 and newer).
- 5200 - Compatible with all types of vehicles and with any harness option designed to work with the 5000 product line. Regardless of the harness type used, the 5200 will not gather diagnostic information from the vehicle.

### FEATURES AND BENEFITS

- **Easy Installation:** Plug and play design provides for easy, quick installation without splicing wires.
- **Vehicle Diagnostics (5500 model):** Remote capabilities enable monitoring of diagnostic trouble codes, ignition status, speed, odometer readings, fuel efficiency, and more.
- **Internal Antenna:** This hardware line comes standard with the antenna internal to the unit, allowing for fast installation. An optional window-mount GPS antenna can be purchased and installed using the serial port on the 5000 series device.
- **Automatic Harness Detection:** Built-in firmware enables the use of either a light or heavy duty harness with the 5500 or 5200 devices.
- **Serial Port Functionality:** Allows for integration with compatible Garmin devices and other devices in the vehicle.
- **Sensor Detection:** Enables monitoring of various voltage events within the vehicle, including power take-off (PTO) engagement/disengagement, secondary engine on/off, and door open/close.



# TECHNICAL SPECIFICATIONS

## ENVIRONMENTAL SPECIFICATIONS

Temperature	
Operating	PVS8: -30 C to +65 C PHS8: -30 C to +85 C
Non-Operating	-40 C to +90 C
Humidity	10% to 90% RH

## WIRELESS SPECIFICATIONS

Wireless	Internal Cinterion Wireless Modules CDMA: PVS8 Modem (800/1900 MHZ)
Regulatory Approvals	FCC, Industry Canada

## GPS SPECIFICATIONS

Receiver	L1 Frequency (1575.42 MHz), 50 channels, continuous tracking receiver
Accuracy Horizontal	(< 5 meters @ 90%)
Acquisition	Cold Start < 32 sec. @ -146dBm Warm Start < 32 sec. @ -160dBm Hot Start < 1 sec. @ -160dBm

## WINDOW-MOUNT GPS ANTENNA (OPTIONAL)

GPS Specifications	See above
Size	2.17" L x 1.65" W x 0.59" H (55.1mm x 42.0mm x 15.0mm)

## DIAGNOSTIC SPECIFICATIONS (5500 ONLY)

Physical Layers	
5500 with Light Duty Harness	SAE J1850 PWM (41.6 Kb/s) SAE J1850 VPW (10.4 Kb/s) ISO 9141-2 (10.4 Kb/s) ISO 14230 (KWP 2000, 12 Volt) ISO 15765 (CAN 2.0b, 250 Kb/s, 500 Kb/s)
5500 with Heavy Duty Harness	SAE J1708 SAE J1939
Application Layers	Software configurable

## SENSOR/SERIAL SPECIFICATIONS

Sensor Input Voltage	-30 to +30 VDC
Sensor Detection Thresholds	
Off	(-3V < x < +3V)
On	(-24V < x < -5V or +5V < x < +24V)
Undefined	(-5V < x < -3V or +3V < x < +5V)
Serial External Power Capacity	1 A @ 12V (max)
Serial Communication Interface	115200 baud serial RS232

To learn more about **TrackNet's products** contact us via email [tracknet@tracknetonline.com](mailto:tracknet@tracknetonline.com) or visit [www.tracknetonline.com](http://www.tracknetonline.com)

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