



## GPS Speed Pulse Module Specification and Installation

### 1. Description

This product uses GPS technology to generate a road speed pulsed output. The output pulses at a frequency proportional to road speed. The interface is easy to install and utilises a built-in antenna. It is suitable for 12v and 24v vehicle electrical systems.

### 2. Operation

The unit requires a +12/24v permanent (battery) supply in order to maintain open sky hot start capability. When the ignition is switched off, the unit enters a low-current mode but maintains the GPS data required for a 'Fix' for a period of up to 3 hours.

An on-board bi-colour LED (surface mounted on the PCB immediately to the right of the connector) will flash Orange 3 times when the unit is first powered from the permanent supply. The LED will indicate the state of the interface as follows:-

Red LED on	No Fix
Green LED on solidly	Fix
Green LED flashing	Fix and road speed signal greater than zero

### 3. Wiring

Red	+ 12/24v	Permanent Supply
Black	0v	Vehicle Earth
Purple	+12/24v	Ignition
Green	Speed Pulse Output	

### 4. Installation

The unit should be installed with a clear view of the sky without any metal obstruction. A label on the enclosure indicates the correct orientation of the unit. If these criteria are not met, acquisition time will be greater and performance reduced. A suitable installation would be mounted directly underneath the dashboard, with no obstruction, as close to the windscreen as possible.

### 5. Speed Pulse Output

The digital output pulses between 0v and +12/24v at a frequency of 2.22' Hz / MPH.

### 6. Specification

Supply Voltage		9.0v to 32.0v d.c.
Supply Current	Operating	35 mA typical
	Standby	5 mA maximum
Speed Pulse Output		<b>8000 pulses/mile, 4971 pulses/km)</b> Output Current = 100 mA maximum
Acquisition	Cold Start	28 seconds typical
	Hot Start	2 seconds typical
Operating Temperature		-40 to + 85 deg C
Dimensions (including mounting lug)		65 mm x 44 mm x 16 mm