# **GPS** Speed Converter

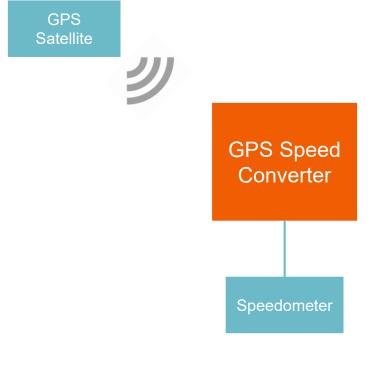


The GPS Speed Converter, developed by Sioux Technologies answers the need in the market to convert GPS signals in to a speed pulse signal.

Often we see in specific markets such as marine, special- or off highway vehicles the need for an alternative vehicle speed signal. The Sioux GPS Speed Converter, converts GPS signals in to a speed pulse signal. This signal can be used to drive your speedomter.

### Knowledge and expertise

Sioux is specialized in developing and integrating software and hardware applications in the automotive industry. With our expert knowledge, Sioux is the technical partner of leading companies in the market. Also specific products like a Tachograph Replacement Unit and a Door Control Unit, help us to support our clients.



#### Connections

• Speed pulse output for a speedometer

#### Features

- 8 16 V DC (optional 8 32 V DC)
- · GP ABS sealed housing
- L1 frequency, C/A code
- $\bullet$  TTFF ~ 1s hot fix
- Multicolour status LED
- GPS Accuracy ( Unaided) Postition: 2.5 m



## **Technical** Specifications

Specifications	
Product name	GPS Speed Converter
Sioux part number	1000701
Power supply	
Operating supply voltage range	8 - 16 V DC
Maximum peak voltage	60V for 100ms
Power consumption (operating)	< 10 mA at 12 V / > 10mA at 24V
Hardware characteristics	
Environmental protection class	IP63
Operating temperature range	-30 to + 85 °C
Storage temperature range	-40 to + 85 °C
EMC specification	Pre-compliant with Automotive directive 2004/104/EC: - Radiated and conducted emission - Radated and conducted immunity
RoHS compliant	Yes
Connection	Open wire ends
Dimensions	76.30 x 35.00 x 15.00 mm (L x W x H)
Weight	50 grams
Housing	GP ABS material, sealed
Color	Black Enclosure - RAL 9011 - UL94 - HB
Recommended screw torque	15 - 20 ozf.in (10 - 15 cN.m)
Cable Length	2,5m / 8.2ft
Cable thickness	0,25mm2 / 30 awg
GPS Sensor	
General	L1 frequency, C/A code (SPS), 48 channels SiRF/CSR GSD4e Chipset
Update rate	1Hz fix/s
Accuracy (Unaided)	Position: 2.5 m (CEP50) Velocity: 0.01 m/s (50%) Time: 1 us (typ.)
TTFF (Time To First Fix)	Cold start (out of the box) : 35 s typ.Warm start: 35 s typ.Hot start: 1 s typ.
Sensitivity	Acquisition (cold): -147 dBm Re-Acquisition: -162 dBm Tracking: -163 dBm
Load dump protection	102 V / 400ms
Outputs	
Speed signal	0 - 10 V; 4 mA @ 0 - 8kHz
LED multicolor	Orange flashing 1 Hz : Start-up mode, searching for GPS   Green : Connected to GPS   Red flashing 1 Hz : Cannot find GPS   Red : System Failure
Disping	
Pinning	
White	KL30 (Vbatt)
Red	*KL15 (Ignition)
Black	KL31 (GND)
Blue	Speed Signal High
Green	CAN1-Low
Yellow	CAN1-High
*Option	



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