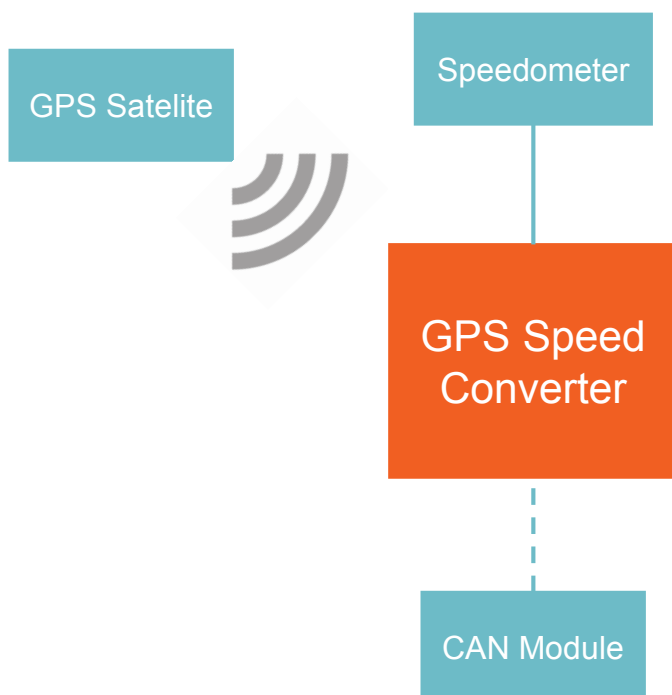


GPS Speed Converter - CAN

The GPS Speed Converter - CAN, developed by Sioux Logena answers the need in the market for specific signals on the CAN-bus system.

Often we see in specific markets such as marine, special- or off highway vehicles the need for specific signals on the CAN-bus system. The Sioux Logena GPS Speed Converter - CAN, converts GPS signals into a J1939 CAN message.

Vehicle Direction/Speed message, time date message, Vehicle Position message, will become available on the CAN-bus system. Also it will generate a speed pulse signal to drive your speedometer.



Knowledge and expertise

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

Connections

- Speed pulse output for a speedometer
- 1x CAN

Features

- 8 - 16 V DC (optional 8 - 32 V DC)
- GP ABS sealed housing
- L1 frequency, C/A code
- TTFF ~ 1s hot fix
- Multicolour status LED
- GPS Accuracy (Unaided) Position: 2.5 m
- CAN J1939 messages:
 - o Time/date message
 - o Vehicle direction/speed message
 - o Vehicle position message

Technical Specifications

Specifications

Product name	GPS Speed Converter CAN - Analogue
Sioux Logena part number	1000702

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: <ul style="list-style-type: none"> • Radiated and conducted emission • Radiated 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	0,25mm ² / 30 awg

GPS Sensor

General	L1 frequency, C/A code (SPS), 48 channels SiRF/CSR GSD4e Chipset
Update rate	1 Hz 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

Outputs

Speed Signal	0 -10 V; 4 mA @ 0 - 8 kHz
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

Transmitted CAN messages

	SPN	SPN Name
TD - Time / Date (PGN 65254)	959	Seconds
	960	Minutes
	961	Hours
	963	Month
	962	Day
	964	Year
VDS - Vehicle Direction/Speed (PGN 65256)	165	Compass Bearing
	517	Navigation-Based Vehicle Speed
	580	Altitude
VP - Vehicle Position (PGN 65267)	584	Latitude
	585	Longitude

Pinning

White	KL30 (Vbatt)
Red	*KL15 (Ignition) *option
Black	KL31 (GND)
Blue	Speed Signal High
Green	CAN1 - Low
Yellow	CAN1 - High