# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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### Features

- Rugged construction for high pressure and high flow environments
- On-board microprocessor for real-time data analysis with 12-24 volts supply
- Highly reliable and long term stability

### **Applications**

 Engine, transmission and hydraulic oils for on and offhighway vehicles

### FPS2800B12C4 FLUID PROPERTY SENSOR

FPS KIT

- Fully integrated, stand-alone module sensor and processing electronics
- Accurate, repeatable temperature, viscosity, density and dielectric constant
- Factory calibrated with NIST traceable fluids
- Digital output based on J1939, CAN2.0B standard featuring high-resolution parameter readings

### Description

The FPS2800B12C4 is a fluid property sensor (FPS) that will directly and simultaneously measure the viscosity, density, dielectric constant and temperature of low conductivity fluids. Relying on patented tuning fork technology, the sensor monitors multiple physical properties that enables the OEM to determine the quality, condition and contaminant loading of fluids such as engine oil, transmission, hydraulic and gear oils. The multi-parametric analysis capability improves fluid characterization algorithms. The FPS provides in-line monitoring of fluids for a wide range of OEM and aftermarket installations including fluid reservoirs, process lines and pressurized high flow conduits (e.g., engine oil gallery) for applications that include on and off highway vehicles, HVAC&R, compressors, industrial equipment and turbines. A universal digital CAN J1939 based protocol provides easy to connect interface to main Host controller. A simple four pins connector allows for cost effective mounting options.

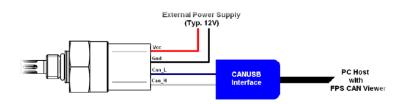
Please Refer to document FPS2800B12C4 datasheet for detailed information on performance and features of the sensor.



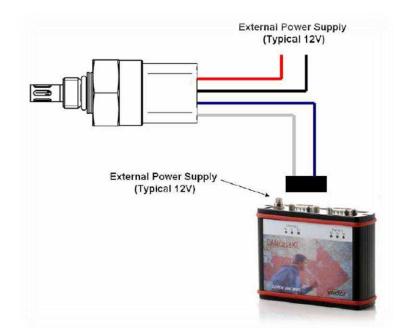
### 1. Two kit configurations

In order to provide plug and play tools for early tests of the Fluid Property Sensor, two kit configurations are available by TE connectivity:

• Kit 1: Data Viewer Kit provides all required equipment that allow direct plug-in, readings, data acquisition of the sensor through the customer PC interface. The CAN Viewer software is an ideal tool to realize stationary tests in laboratory conditions.



 Kit 2: Data Logger Kit provides all required equipment that allow direct plug-in of the sensor for data acquisition using a mobile CAN Logger interface. The CAN Logger interface is an ideal tool for "in field" testing on vehicles or mobile machines without any modification of the ECU software.





Details of the two kits configuration are in the hereunder table:

Components	Kit 1: data viewer kit	Kit 2: data logger kit		
Sensor	FPS2800B12C4	FPS2800B12C4		
Standard calibration	Standard Viscosi	ty (18cP at 100°C)		
Specific calibration	Upon custo	Upon customer request		
Connecting elements				
From sensor to power supply	FPS cable	FPS cable		
	(an integrated 100V – 240V to 12V power supply is added to FPS Cable)	(if requested, an integrated 100V – 240V to 12V power supply can be added to FPS Cable)		
From sensor to data saving system	FPS Cable	FPS cable		
	+ CAN to USB dongle (to connect to PC)			
Acquisition system				
Data saving system	Customer PC	CAN LOGGER BOX		
Software	CAN VIEWER software (**)	CAN LOGGER Software		
	(provided on USB key)	(integrated to the box)		
FPS documents (*)				
Documentation included in the kit	FPS Da	FPS Datasheet		
	FPS Installation Guideline			
	KIT FPS installation guide			

(\*) Documents are electronically provided on a delivered USB key

(\*\*) Following configurations are compatible: XP (SP1/2/3), Vista (no SP / SP1/2), and Windows 7 (compatible with 32 and 64bits versions)

### 2. Ordering information

Please refer to the following table to order the FPS Kit with the desired configuration:

Product Name	Reference	Kit 1: Data viewer kit	Kit 2: Data logger kit
FPS2800B12C4	FPP800A110	Х	Х
USB Key	FPPCLEFUSB	Х	Х
CAN logger box	FPS CAN LO		Х
FPS Cable	HPP130LAB10	Х	Х
Power Supply (100-240V to 12V)	FPPPOWERW	Х	If requested
CAN-USB dongle	FPSCANUSBC	Х	
CAN viewer software	FPL800CANV	Х	
	P/N for order	FPP800KIT1	FPP800KIT2



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