

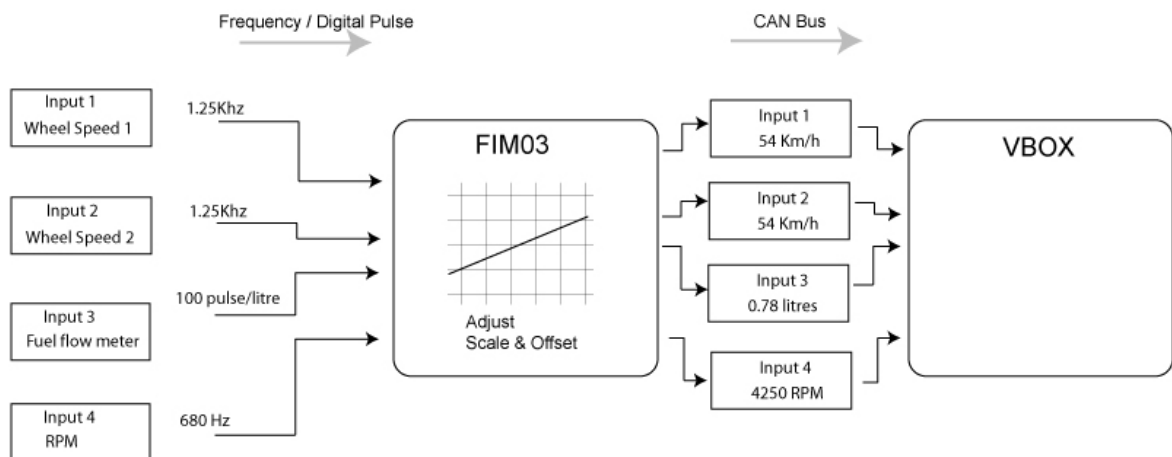


Overview

The RLVB FIM03 is a 4-channel frequency capture and pulse counter unit. It enables frequency-based signals in the range of 1Hz to 20KHz to be recorded by the VBOX data logging system. The input circuit for each channel can accept a wide signal amplitude range from TTL output sensors up to the higher voltages created by inductive sensors. This means that direct connection to ABS wheel speed sensors or RPM sensors is possible.

The FIM03 can be configured through software to process the input frequency data to provide logged data in real units. By configuring a Pulse Per Rev parameter the FIM03 will read data in RPM. Further configuration of Wheel Diameter enables the FIM to calculate wheel speed data in Km/h or Mph. It is also possible to manually enter scale and offset values for use with fuel flow meters, pressure sensors and other pulse output devices.

The pulse counter mode enables hardware pulse counting of input signal transitions making it ideal for applications such as precise fuel flow measurement.



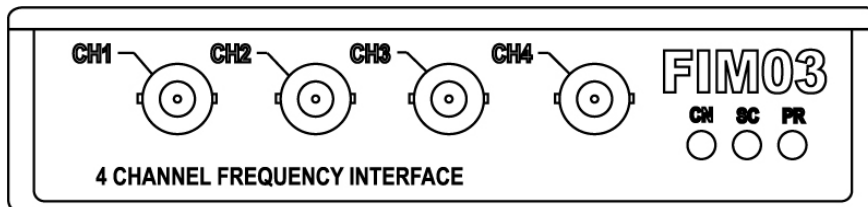
Features

- Frequency input range 1Hz to 20KHz
- Pulse counting mode
- Input channels can accept direct connection to inductive sensors such as ABS or Crankshaft sensor
- Internal scale and offset to provide SI units from sensors
- Modes for automatic calculation of RPM or wheel speed
- BNC connection for signal input

Specification

Input voltage (max range)	-50 volts to +50 volts
Minimum signal amplitude	Approx 1v pk-pk
Input frequency range	1Hz to 20Khz
Timer	24 Bit
Timer resolution	67ns
Max pulse count before reset	1 000 000
Data output to VBOX	Frequency Hz Wheel speed Km/h or Mph Wheel RPM User defined scale and offset for sensor calibration
Signal Input connection	4 x BNC Connector
VBOX Connection	2 x Lemo socket for connection to VBOX CAN Bus
Height	32mm
Width	128mm
Depth	120mm
Operating Voltage	+12v DC

Input Connections



Connection	Function
Centre Pin	Signal Input
Outer shield	Signal Ground