Frequency Input Module

(RLVBFIM03)

Racelogic's frequency input module (RLVBFIM03) 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 or logged by a VBOX.

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, RPM sensors or fuel flow sensors is possible.

The RLVBFIM03 can be configured through software to process the input frequency or pulse data to provide logged data in real units. By configuration of each channel the incoming frequency or pulse train can be easily configured into any of the following data formats:

- Frequency (Hz)
- RPM
- Speed Km/h
- Speed Mph
- Pulse count
- Fuel Used (Lt/Gal)
- Fuel Flow rate (Lt/Hr-Gal/Hr)
- Fuel Consumption (Lt/100Km)
- Fuel Consumption (Km/Lt – MPG)

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

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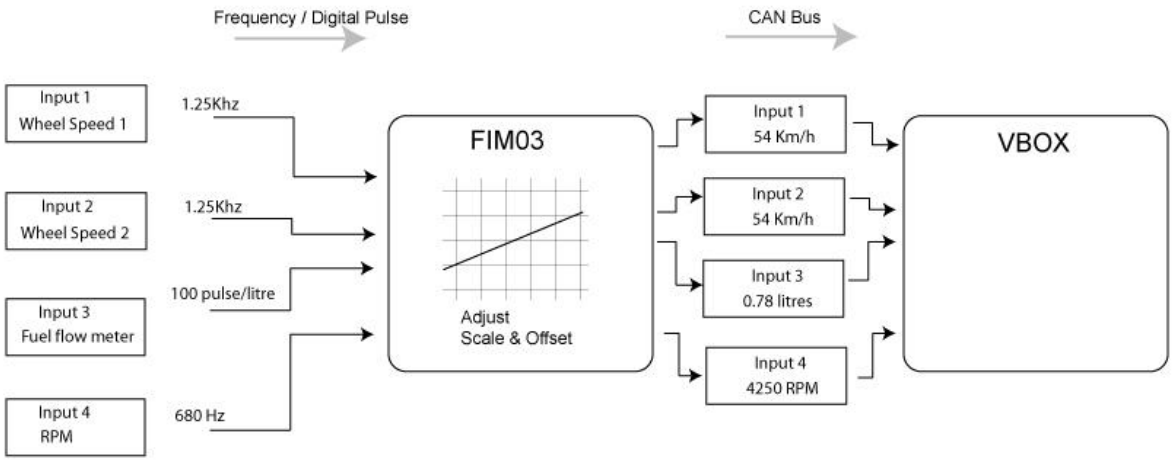
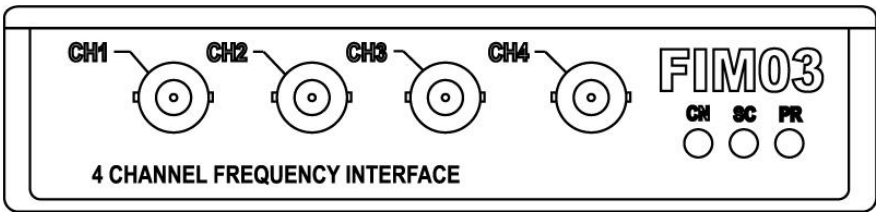
Applications

- ABS Brake stops
- Tire traction testing
- Aqua plane testing.
- Fuel Flow/Consumption
- General Vehicle evaluation
- Engine monitoring (RPM)



Input Connections



Connection	Function
Centre Pin	Signal Input
Outer shield	Signal Ground

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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
	Engine / Wheel RPM
	Pulse count
	Fuel Used Lt or Gal
	Fuel Flow rate Lt/Hr or Gal/Hr
	Fuel Consumption Lt/100Km or MPG
	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