

## FUEL SENSOR CONDITIONER FOR RACING DATA ACQUISITION SYSTEMS



### FEATURES

- Powered directly from data logger. No additional configuration or power supply required
- Fully compatible with OEM factory fuel sensors (1 to 110 Ω). No additional configuration or wiring required
- 0.5 to 4.5 VDC output compatible with most racing data acquisition systems
- 7 to 18 VDC Power Supply range (provided by data logger)
- -10° to 65°C (-14° to 149°F) operating temperature
- Built-in stabilizing algorithm and signal conditioner for stable readings
- Enables fuel level readings with higher accuracy than standard fuel gauges
- Custom wire harness length for greater flexibility

### DESCRIPTION

IRQ-101A is a light and small electronic device that acquires and conditions the analog signal from the level sensor in the vehicle's fuel tank and connects directly to one of the analog inputs of any racing data acquisition system. In addition, IRQ-101A does not require external power supply since it is powered directly from the data logger. The IRQ-101A can be assembled with a Binder® 712 male connector for use with AIM MyChron® data loggers.

IRQ-101A has a built-in signal conditioning and stabilizing algorithm that provide stable fuel level readings with greater resolution than standard fuel gauges. Additionally, end user has the option to define wire harness length to fulfill their particular needs. The output voltage signal is transmitted via 3 terminals on the Binder® 712 male connector (See Figure 1).

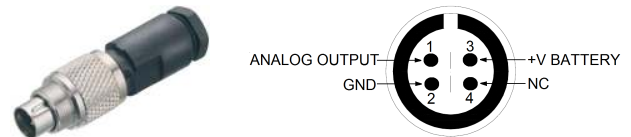


Figure 1: Binder® 712 male connector Pinout (Front View)

### MECHANICAL DIMENSIONS



Outer case is made of heat shrinkable polyolefin sleeving per SAE-AMS-DTL-23053/4 Class 3 for maximum performance.

**TECHNICAL SPECIFICATIONS**

Parameter	Rating	Unit
Fuel Sensor expected range <sup>(3)</sup>	1 to 110	Ohms
Input power supply range	7 to 18	VDC
Maximum current consumption (@12V)	40	mA
Output signal range	0.5 to 4.5	VDC
Operating temperature	-10 to 65	°C
Storage temperature	-40 to 100	°C

**ORDERING INFORMATION**IRQ-101A <sup>(1) (2)</sup>

## Notes:

- (1) Harness length from 1 to 13 ft can be specified with the order. Default order is approximately 13ft (4 meters).
- (2) Order connector option. Default no connector.
- (3) Please contact us if your application needs a different range value.

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