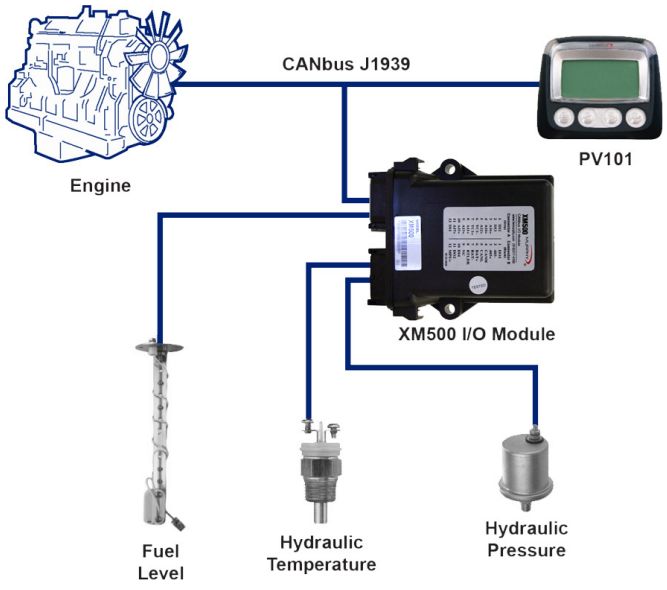
XM500
I/O Module

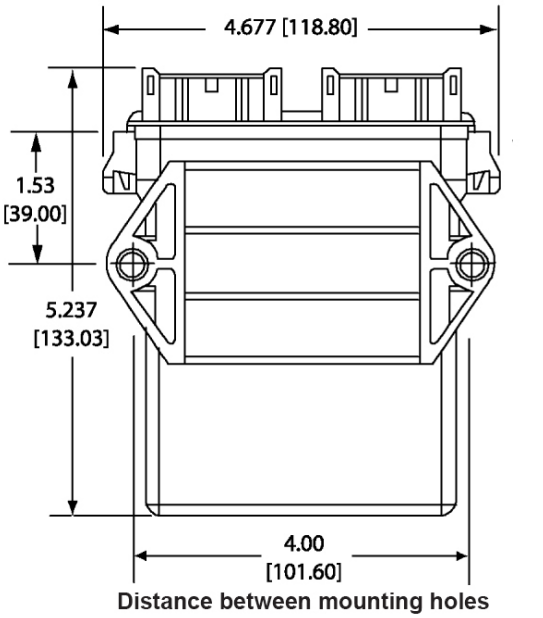
The XM500 Module is a configurable Input/Output (I/O) module designed to bring analog and digital inputs and output onto the SAE J1939 CAN. The XM500 configuration tool provides a user-friendly interface allowing the user to create or change the configuration used on the XM500 module.

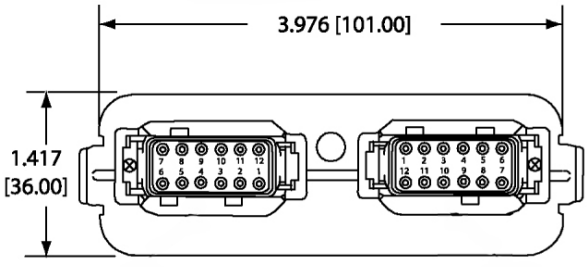
Your application may require monitoring of other information which may not be provided by the OEM engine or transmission electronic control unit (ECU), such as fuel level, hydraulic oil pressure or a low engine coolant level switch. The XM500 is ideally suited to bring the additional information you need onto the J1939 CAN Bus and can be configured to broadcast fault codes and activate digital outputs per input condition such as fuel level low, hydraulic oil temperature high, etc. Because the XM500 broadcasts information using the J1939 standard protocol, the information can be displayed using standard J1939 display modules, such as the PowerView PV101.

Diagram



Dimensions and Connections





Specifications

Electrical

Power Input: 8 to 28VDC

Communication Ports: CAN J1939

Operating Temperature: -40°F to 185°F (-40°C to 85°C)

Digital Inputs: 4 - Ground or battery positive activation

Digital Outputs*: 2 Sinking (500 mA)

Product Weight: 10 ounces

Shipping Weight: 12 ounces

Shipping Dimensions: 4" x 6" x 2"

***(Outputs are NOT reverse polarity protected. Damage will occur if B+ is connected to the outputs. Damage incurred from improper installation is not covered under the Murphy limited warranty policy.)

Thermocouple Input[1]: Type K and Type J

Analog Inputs[2]:

1 - Battery Supply Voltage (dedicated)

7 - Configurable as 0-5VDC, 4-20mA, resistive senders[3] or used as an additional digital input

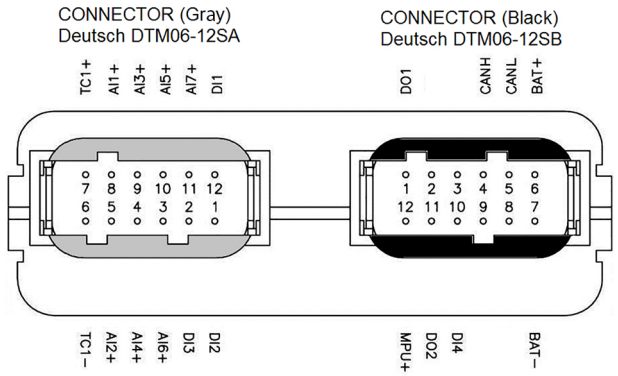
Speed Sensing Input: Magnetic pickup (2 to 120VAC RMS from 30 to 10,000 Hz)

[1]When the thermocouple input is used, only 5 resistive, 4-20 mA, or 0-5 VDC can be used instead of 7.

[2]Analog inputs can be exchanged for digital inputs (battery ground activation only) for a total of 11 digital inputs.

[3]Other resistive senders can be supported. Contact Murphy's Industrial Panel Division for programming charges.

Connector Pins



Connector A (gray)	
Pin	Description
1	Digital IN 2
2	Digital IN 3
3	Analog 6
4	Analog 4
5	Analog 2
6	J & K Type -
7	J & K Type +
8	Analog 1
9	Analog 3
10	Analog 5
11	Analog 7
12	Digital IN 1

Connector B (black)	
Pin	Description
1	Digital OUT 1
2	
3	
4	CAN high
5	CAN low
6	Battery +
7	Battery -
8	
9	
10	Digital IN 4
11	Digital OUT 2
12	MAG pickup

How To Order

Part Number	Description	Notes
78700420	XM500 Murphy Standard*	Module
78700534	XM500 Configuration Tool	Tool
30000669	6' harness with terminating resistor	Wire Harness
30000685	6' harness without terminating resistor	
30000670	12' harness with terminating resistor	
30000686	12' harness without terminating resistor	

* To determine other configurations, review XM500 Config & Wiring documents at www.fwmurphy.com