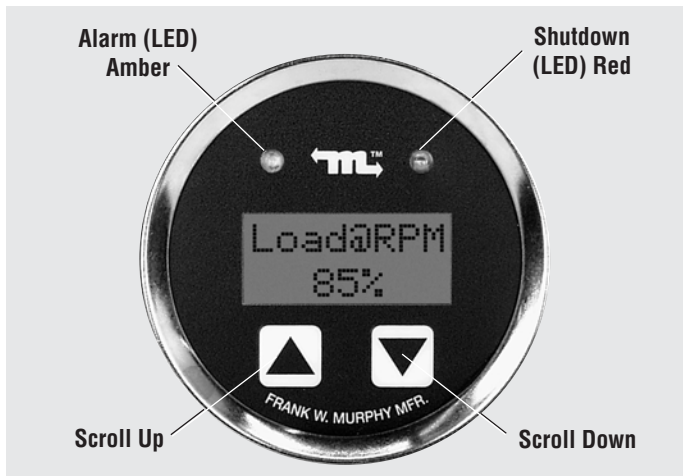


# Murphy Display and Diagnostic Module

MDDM-00071B  
Revised 04-02  
Catalog Section 78  
(00-02-0429)



## Description

The Murphy Display and Diagnostic Module (MDDM) is the keystone in a line of components manufactured by FWMurphy as part of its J1939 MurphyLink™ System. The J1939 MurphyLink™ System has been developed to meet the needs for instrumentation and control on electronically controlled engines communicating using the SAE J1939 Controller Area Network (CAN).

The MDDM is a powerful, easy to use multi-function tool that enables the operator to view many different engine parameters and engine service codes.

The MDDM includes a two line by eight character backlit LCD display. The top line displays data labels, i.e. "EngHrs". The bottom line displays appropriate units information i.e "80 psi" for oil pressure.

The UP and DOWN push buttons located on the front of the MDDM, are used for scrolling through the parameters and viewing the menu list. Two LEDs (amber and red) are used to annunciate active fault messages received by the MDDM.

Other components in the system are micro-processor-based analog gauges for displaying critical engine data broadcast by the ECM: engine RPM, oil pressure, coolant temperature, system voltage, etc., a combination audible alarm and relay unit for warning and shutdown annunciation. Up to 32 components may be linked to the MDDM by an RS485 daisy chained twisted pair cable up to 1,000 meters from the

## MDDM Series

- Specifically Designed For SAE J1939 Controller Area Network (CAN) Equipment Applications
- Displays Over 30 Standard SAE J1939 Parameters Broadcast by Major Engine and Transmission Manufacturers' ECM's
- Displays Active Faults and ECM Stored Fault Codes For Diagnosing Equipment Malfunctions
- Re-broadcasts Critical Data to MLink™ Analog Gages

MDDM. The MDDM and all connected components can be powered by 12 or 24 volt systems, are back lit using LEDs, and are 100% environmentally sealed.

## Engine Parameters

The following are some of the engine parameters displayed by the MDDM in English or Metric units (when applicable):

- Engine Hours
- Engine RPM
- System Voltage
- % Engine Load at the current RPM
- Coolant Temperature
- Oil Pressure
- Fuel Economy
- Throttle Position
- Manifold Air Temperature
- Current Fuel Consumption
- Active Service Codes
- Stored Service Codes from the engine
- Set the Units for display
- View Engine Configuration Parameters

## Applications

The Murphy Display and Diagnostic Module is a low-cost solution for your instrumentation needs on stationary or mobile equipment applications.

## Specifications

**Bezel:** Stainless Steel (Black Optional).

**Membrane Switch:** Polyester.

**Case/Clamp:** Nickel Plated Steel, Aluminum Killed, QQ-S-698.

**Maximum Panel Thickness:** 0.30 inch. (8 mm).

**Mounting Hole:** 2.062 inch (52 mm) in diameter.

**Dial:** White on Black.

**Reversed Polarity:**

Withstands reversed battery terminal polarity indefinitely within operating temperatures.

**CAN BUS:** SAE J1939 Compliant.

**Auxiliary Gage Communication:** RS485.

**Operating Voltage:** 8 VDC Minimum to 32 VDC Maximum.

**Operating Temperature:** -4 to 158°F (-20 to 70°C).

**Storage Temperature:** -40 to 185°F (-40 to 85°C).

**Shipping Weights (all models):** 1 lb. (45 g.).

**Shipping Dimensions (all models):** 5-1/2 x 5-1/2 x 5-1/2 in. (140 x 140 x 140 mm).

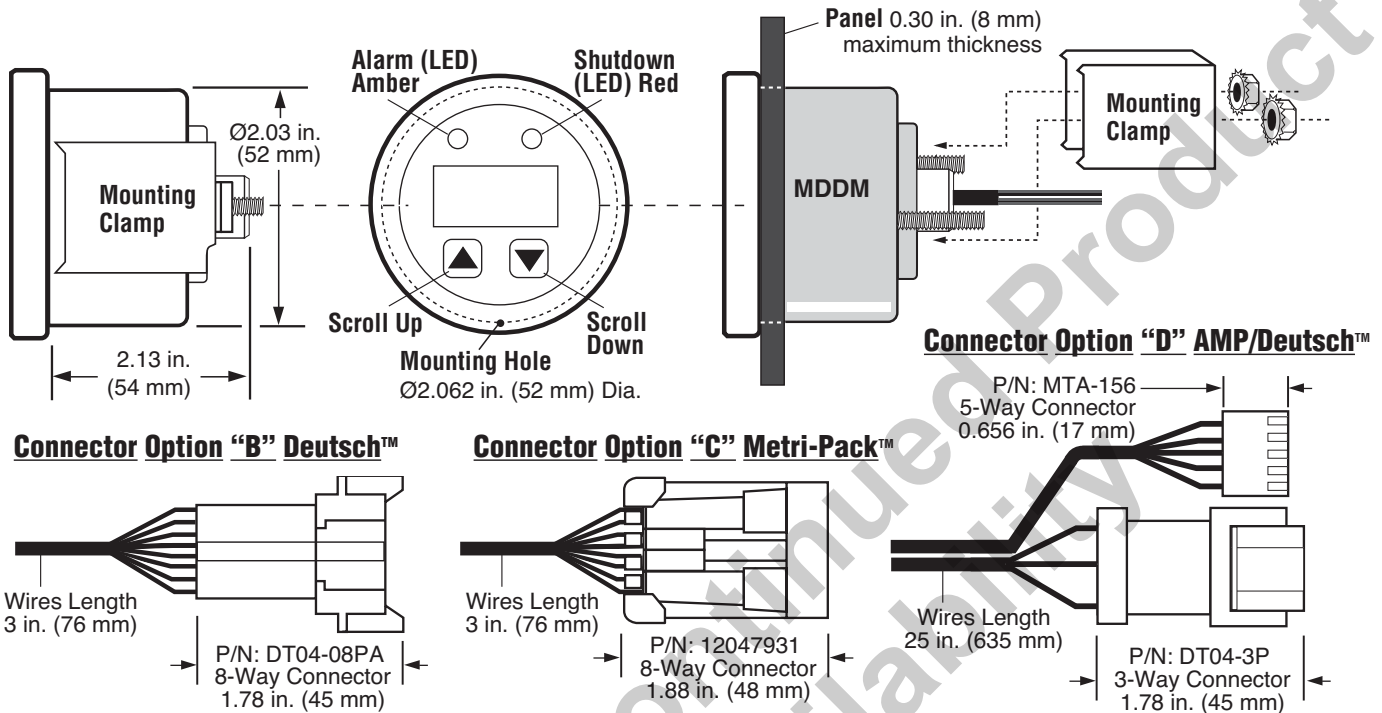
## Warranty

A limited warranty on materials and workmanship is given with this FW Murphy product. A copy of the warranty may be viewed or printed by going to [www.fwmurphy.com/support/warranty.htm](http://www.fwmurphy.com/support/warranty.htm)

## Dimensions

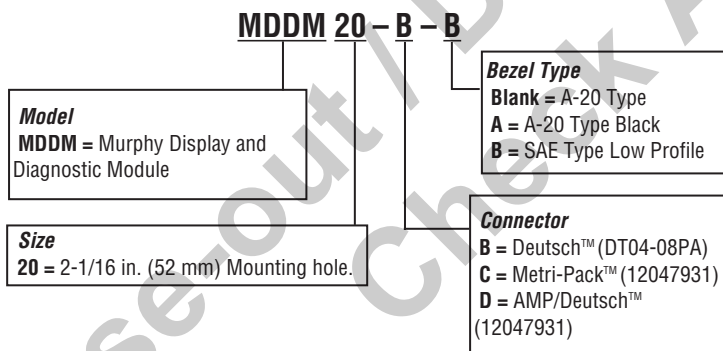


**IMPORTANT:** The MDDM display is best viewed either straight on or at the 6 o'clock position.



### How to Order

To order the MDDM use the model number designation diagram below.



### Accessories

#### MurphyLink™ Analog Gages

- MLA20-A-100-A = Oil Engine Pressure
- MLA20-B-250-A = Coolant Temperature
- MLA20-C-12-A = Voltmeter 12 VDC
- MLA20-C-24-A = Voltmeter 24 VDC
- MLA20-D-100-A = Percent Load @Current Speed
- MLA20-E-400-A = Gear Oil Pressure
- MLA20-F-250-A = Gear Oil Temperature
- MLA35-T-3000-A = Tachometer
- MLA35-S-85-A = Speedometer
- MLAA20 = Audible Alarm
- MLVC2412 = Regulator for 24 VDC systems

# MURPHY

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In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time.

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