

# MurphyLink™ Series M110 Panels



#### **Features**

- Standard panel designed for modern electronic engines and equipment applications using SAE J1939 Controller Area Network (CAN)
- PowerView displays over 30 standard SAE J1939 parameters broadcast by major engine and transmission manufacturer's ECU's
- Display active faults and ECU-stored faults with text description on most common faults for diagnosing equipment malfunctions
- Standard harnesses available for most major engine manufacturers ECU's
- Enclosed design or flat panel option
- Deutsch connectors

Introducing the new M110 Series panels using the new PowerView System. It is available in an enclosure or stand-alone flat panel option that can be dropped into a dash. The PowerView is a powerful new display in a line of components manufactured as part of its J1939 MurphyLink™ Family. These products have been developed to meet the needs for instrumentation and control on electronically controlled engines communicating using the SAE J1939 Controller Area Network (CAN).

The PowerView is a multifunction tool that enables equipment operators to view many different engine or transmission parameters and service codes. The panels provide a window into modern electronic engines. The PowerView includes a graphical backlighted LCD screen. It has excellent contrast and viewing from all angles. The display can show either a single parameter or a quadrant display for viewing four parameters simultaneously. Diagnostic capabilities include fault codes with text translation for the most common fault conditions.

The PowerView has four buttons using touch-sensitive technology, which eliminates the concern for push button wear and failure. In addition operators can navigate the display with ease. Enhanced alarm indication uses ultra bright alarm and shutdown LED's (amber and red). The PowerView has a wide operating temperature range of -40 to +85°C (-40 to 185°F), display viewing -29 to +75°C (-20 to 167°F), and environmental sealing to +/- 5 PSI.

This basic panel contains a key switch, increment/decrement throttle and the PowerView. This standard panel can be ordered with or without an enclosure, since all of the components are assembled to a stand-a-lone flat panel. Optional mounting kits are offered for the enclosure, which provide packagers and operators numerous mounting solutions to meet multiple applications. Panel designs are offered to meet the needs of specific engine models. In addition, FWMurphy offers standard harnesses for quick Plug and Go operation that interface with all the 2nd Generation MurphyLink™ PowerView panels

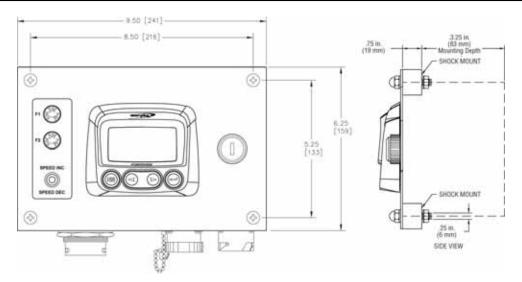
## **Display Parameters**

The following are some of the engine and transmission parameters displayed by the PowerView in English or Metric units (when applicable), consult engine or transmission manufacturer for SAE J1939 supported parameters.

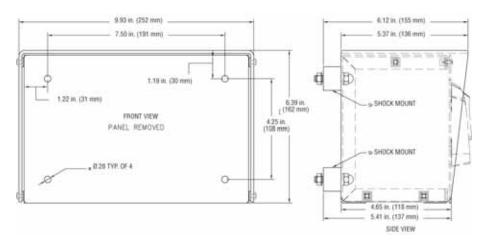
- Engine RPM
- Engine Hours
- Machine Hours
- · System Voltage
- % Engine Load at the Current RPM
- · Coolant Temperature
- Oil Pressure
- Fuel Economy
- Throttle Position

- Engine Manifold Air Temperature
- · Current Fuel Consumption
- Transmission Gear Oil Pressure
- · Transmission Gear Oil Temperature
- Transmission Gear Position
- Active Service Codes
- Stored Service Codes from the Engine
- · Set Units for Display (English or Metric)
- View Engine Configuration Parameters

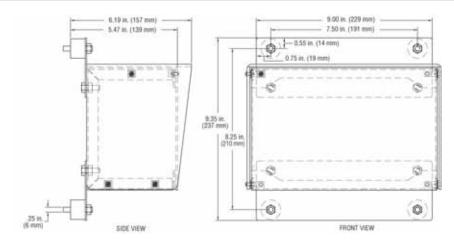
## **Dimensions Flat Panel (only) Includes Shock Mounts**



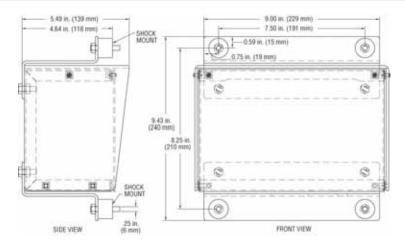
## **Dimensions in Enclosure Includes Shock Mounts**



## Surface Mount Dimension (optional) Kit P/N 32-00-0033



## Recessed Mount Dimension (optional) Kit P/N 32-00-0035

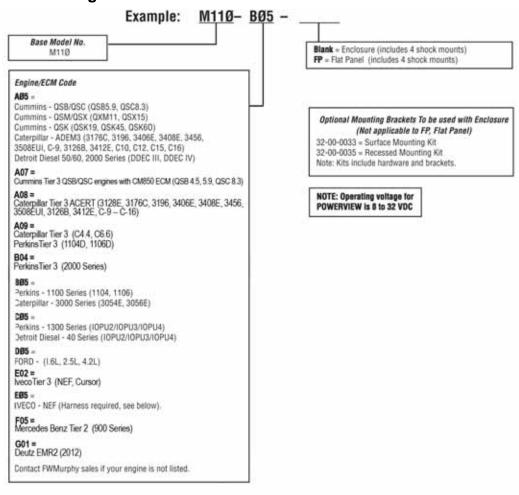


**NOTE:** It is the user's responsibility to verify that the electronic control module (ECM) has been programmed to support these control features, and that the appropriate external wire harness or other interconnecting wiring has been installed from the panel to the ECM.

#### **How to Order**

To order, use the model number designation diagram below.

# M-LINK M110 Panel Model Number Order Matrix for CUMMINS, CATERPILLAR, PERKINS, DETROIT DIESEL Engines



## M-LINK M010 External Harnesses Model Number Order Matrix For M110 Panels CUMMINS. **CATERPILLAR, PERKINS, DETROIT DIESEL Engines**

Example: MEH-MØ1Ø - AØ3 - 6 Rase Model No

#### ENGINE/ECM CODE

A01 = Cummins QSB/QSC (QSB5.9, QSC8.3)

A62 = Detroit Diesel 50/60, 2000 Series (DDEC III, DDEC IV)

A84 = Caterpillar-ADEM3 (3176C, 3196, 3406E, 3408E, 3456, 3508EUI, C9, 3126B, 3412E, C10, C12, C15, C16)

A05 = John Deere, (All Electronic Engines)

A06 = Detroit Diesel, DDEC V. (50/60, 2000 Series)

A07 = Cummins Tier 3 QSB/QSC engines with CM850 ECM

(QSB 4.5, 5.9, QSC 8.3)

A08 = Caterpillar Tier 3 ACERT (3128E, 3176C, 3196, 3406E, 3408E, 3456, 3508EUI, 3126B, 3412E, C-9 -C-16)

A09 = Caterpillar Tier 3 (C4.4, C6.6) Perkins Tier 3 (1104D, 1106D)

A10 = Detroit Diesel, DDEC III/IV, (Electronic Engines with more than 8 cylinders and Dual ECU's)

BØ1 = Cummins QSK (QSK19, QSK45, QSK60)

B04 = Perkins Tier 3 (2000 Series)

CØ1 = Cummins QXM/QSX (QXM11, QSX15)

DØ1 = FORD - (I.6L, 2.5L, 4.2L)

#### \*HARNESS REQUIRES RELAY SEE BELOW

A63 = Perkins 1300, Detroit Diesel 40 Series (IOPU2/IOPU3/IOPU4)

#### \*HARNESS REQUIRES RELAY(S) SEE BELOW

BØ3 = Perkins-1100 Series (1104, 1106) Caterpillar-3000 Series (3054E, 3056E)

E02 = Iveco Tier 3 (NEF, Cursor)

F01 = Mercedes Benz, Tier 2, (900 Series)

F05 = Mercedes Benz Tier 2 (900 Series)

#### \*\*\*HARNESS REQUIRES RELAY(S) SEE BELOW

EØ1 = IIVECO - (NEF)

Contact FWMurphy sales if your engine is not listed

HARNESS LENGTH: ft (m) 6 ft. (1.8) 12 ft. (3.6) 20 ft. (6.1) 30 ft. (9.1)

## \*HARNESS REQUIRES RELAY

(AØ3)

00008799 = 12V Relay 00008800 = 24V Relay

NOTE: Relay sold separately. Relay must have minimum 30 amp contact rating.

## \*\*HARNESS REQUIRES RELAY(S)

(BØ3)

00008799 = 12V Relay [1104/3054E (2) Required, 1106/3056E (1) Required) 00008800 = 24V Relay [1104/3054E (2) Required, 1106/3056E (1) Required]

#### \*\*\* HARNESS REQUIRES RELAY(S)

(EØ1) (E02)

00008799 = 12V Relay Quantity (3) Required 00008800 = 24V Relay Quantity (3) Required

NOTE: Relays sold separately. Relays must have minimum 30 amp contact rating.

#### Universal Extensions Harness (Optional)

32000048 = 6 ft. (1.8 m) MEH extension

32000044 = 12 ft. (3.6 m) MEH extension

32000049 = 20 ft. (6.1 m) MEH extension

32000050 = 30 ft. (9.1 m) MEH extension

32000045 = 40 ft. (12.1 m) MEH extension