TAKE A CLOSER LOOK AT POWERVIEW.

MURPHY®

THE LATEST ADDITION TO THE MURPHYLINK™ FAMILY.

INTRODUCING THE NEXT GENERATION MURPHYLINK™ SYSTEM. POWERVIEW INSTRUMENTS AND GAGES ARE THE MOST ADVANCED J1939 CAN SOLUTIONS FOR WHATEVER APPLICATION YOU'RE RUNNING. WHETHER YOU NEED INSTRUMENTS FOR MOBILE OR STATIONARY APPLICATIONS, POWERVIEW IS THE SOLUTION FOR

ALL YOUR EQUIPMENT.

NOW YOU KNOW WHAT YOUR ELECTRONIC ENGINE IS TELLING YOU.

Now, with PowerView, operators see what your engine's Electronic Control Unit (ECU) is telling them in plain text. It puts the information where it's needed most — at the operator's fingertips.

A large LCD graphical display and smooth gage pointer operation makes the PowerView and associated gages easier to use and understand. PowerView gives you choices in bezel designs and colors. Even better, all PowerView components feature plug and go convenience for easy installation, and they're available in both standard and custom panels. With years of experience, nobody knows more about J1939 CAN instrumentation than we do. Just what you'd expect from a company with a 60-year heritage as the Engine Protection Company. *Spec the new PowerView system today.*

POWERVIEW

Available Instrumentation.

- PowerView features a large graphical screen with a great viewing angle and contrast
- PowerView Audible Alarm alerts operators to fault conditions via piezoelectric alarm and relay contacts
- Multiple bezels and color options available
- PowerView Analog Gages display information transmitted from the PowerView in the traditional analog formats shown below:

1

Tachometer

2

Engine Oil Pressure

3

Engine Coolant Temperature

4

12 or 24 VDC Voltmeter

5

Percent Load

6

Audible Alarm

(See PowerView Analog Gage information for other options available)

Accurate, Reliable Operation.

- Accurate electronic engine and transmission data via SAE J1939 CAN
- PowerView translates information from electronic engines for precise operation of gages or remote communication
- All PowerView components are environmentally sealed
- Wide operating temperature range

Enhanced Gage Design.

- Gages are stepper motor driven allowing smooth pointer operation
- Stepper motor design provides more linear scale, less pointer bounce
- PowerView Analog Gages feature intelligent communications
- Self-diagnostics available on start-up for PowerView Analog Gages

Understandable Diagnostics.

- PowerView displays standard J1939 fault codes with text descriptions for common faults
- Ultra-bright alarm and shutdown LEDs
- Large, easy-to-read fault symbols displayed

Easy-to-Read & Use.

- PowerView features fully graphical LCD screen
- Four touch-sensitive buttons feature increased size and spacing for scrolling and parameter selection
- Display information in single or quadrant (4 parameter) views
- Long-lasting green LED backlighting for both the PowerView and PowerView Analog Gages
- Backlighting intensity adjustable via PowerView menu or external dimmer potentiometer
- PowerView Analog Gages feature 270° pointer sweep

Convenient Installation Options.

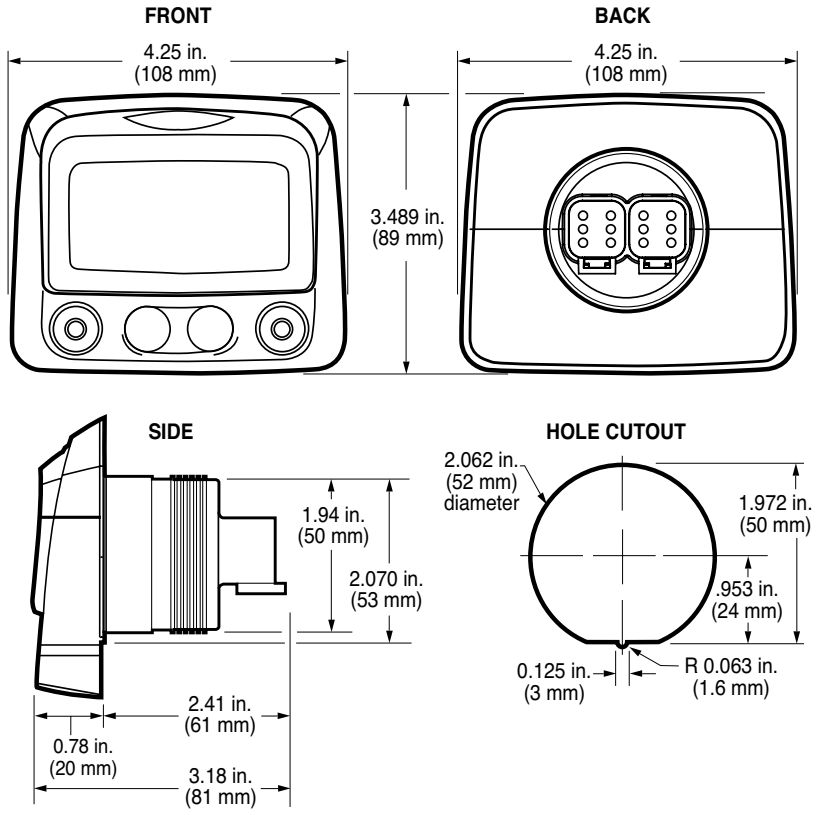
- PowerView fits standard 2-1/16 in. (52 mm) hole opening
- Powerview Analog Gages available in standard 2-1/16 in. (52 mm) and 3-3/8 in. (86 mm) size hole openings
- Two 6-pin Deutsch™ DT style connectors molded into casing for quick connections and simple daisy-chain wiring
- Standard connection harnesses available
- "Plug and Go" standard and customizable panels available with harnesses for all major engine manufacturers


175
210
100
250
°F TEMP
°C
RPM
x100
0
5
10
15
20
25
30
50
75
OIL
PSI
KPa
MURPHY
POWERVIEW
KEY-ON
START
DIMMER

specifications

POWERVIEW

PV100 Dimensions



Specifications

Display:
1.3 x 2.6 in. (33 x 66 mm), 64 x 128 pixels.

Operating Voltage:
8 VDC minimum to 32 VDC maximum.

Reversed Polarity:
Withstands reversed battery terminal polarity indefinitely within operating temperatures.

Operating Temperature:
-40 to +85ºC (-40 to185ºF).

Display Viewing Temperature: -40 to +75ºC (-40 to 167ºF)

Storage Temperature:
-40 to +85ºC (-40 to185ºF).

Environmental Sealing:
IP68, +/- 5 PSI (+/- 34.4 kPa).

Power Supply Operating Current (@ 14 VDC):
52 mA minimum; 268 mA maximum (LCD heater on).

CAN BUS:
SAE J1939 Compliant.

Case:
Polycarbonate / Polyester.

Clamp:
Polyester (PBT).

Connectors:
6-Pin Deutsch DTO6 Series.

Maximum Panel Thickness:
3/8 in. (9.6 mm).

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

Auxiliary Communications (Gage):
One (1) RS485 port, MODBUS RTU master, 38.4K baud, N, 8, 1 or 2, half duplex.

Potentiometer Input:
1K ohm, 1/4 W

Shipping Weights (all models):
1 lb. (450 g.)

Shipping Dimensions (all models):
6 x 6 x 6 in. (152 x 152 x 152 mm).

MURPHY
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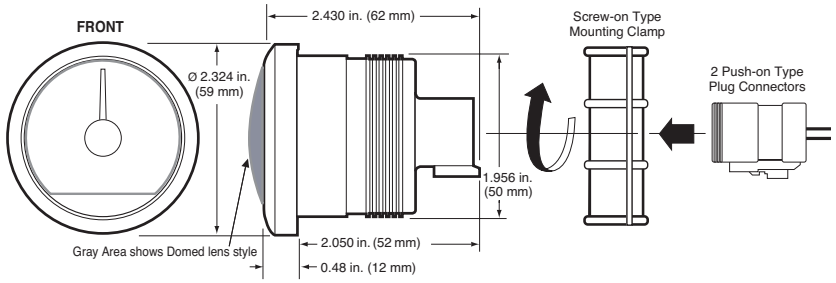
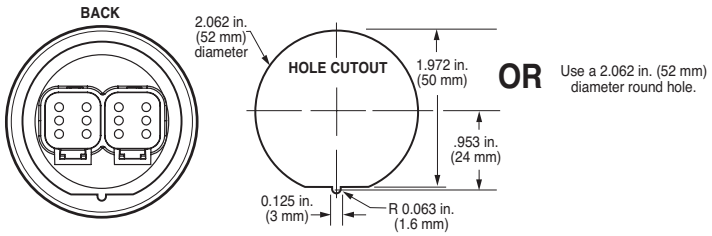
03014H Rev. 9-04

specifications

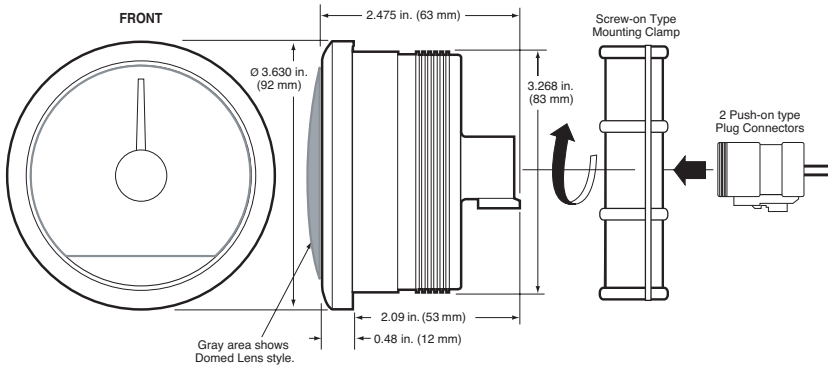
POWERVIEW

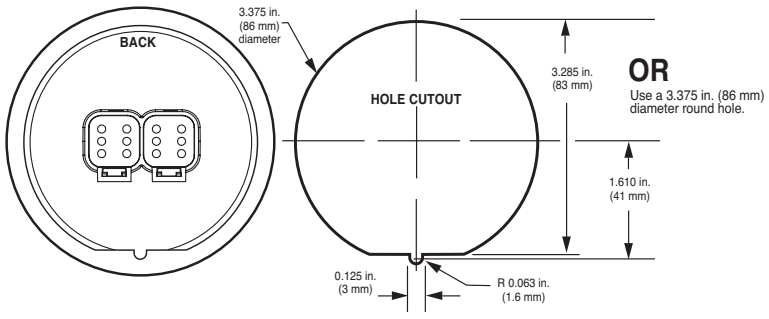
PVA20 / PVAA20 Dimensions





PVA35 Dimensions





Specifications

Power Supply Input Voltage:
12/24V (8-32VDC min. & max. voltage)

Power Supply Operating Current: (@ 14 VDC) =
PVA20, PVA35: 28 mA minimum; 52 mA maximum.
PVAA20: 19 mA minimum; 46 mA maximum.

Backlight Maximum Current (excludes PVAA20): 24 mA.

Input:
RS485 MODBUS® RTU data

Output:
Analog Readout.

Relay Rated Load (PVAA20):
0.5 A, 125 VAC; 1 A, 24 VDC.

Relay Maximum Switching Capacity (PVAA20):
62.5 VA, 30W.

Audible Alarm Output (PVAA20):
28 VDC, 30 mA max. (current sink).

Temporary Silence Button (PVAA20):
Charge transfer technology.

Storage Temperature:
-76° to 185°F (-60° to 85°C).

Dial:
White numerals over black background.

Indicating Pointer:
Stepper motor operation with 270° sweep.

Gage Accuracy:
PVA20/35: Better than ±1.0% of scale.
PVA35: Better than ±2% of scale.

Environmentally Sealed Enclosure:
Sealing: *IP68, ±5 psi (±34.4 kPA).*
Case and Clamp Material: *Polyester (PBT).*
Lens Material: *Polycarbonate.*
Bezel Material: *Polyester (PBT).*

Maximum Panel Thickness:
3/8 in. (9.6 mm).

Mounting Holes: 2.062 inch (52 mm) in diameter.
3.375 inch (86 mm) in diameter.

Connectors:
6-Pin Deutsch DT06 Series.

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03017H Rev. 9-04

flat lens bezel options

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	A-20 Style	Low Profile SAE Style	Contemporary Style	Low Curved Style
PVA20 Series - Gages	**AB** Bezel Type  **A** Bezel Type	**BB** Bezel Type  **B** Bezel Type	**CB** Bezel Type  **C** Bezel Type	**DB** Bezel Type  **D** Bezel Type
PVA35 Series- Tach & Speedometer	**AB** Bezel Type  **A** Bezel Type	**BB** Bezel Type  **B** Bezel Type	**CB** Bezel Type  **C** Bezel Type	**DB** Bezel Type  **D** Bezel Type
PVAA20 - Audible Alarm	**AB** Bezel Type  **A** Bezel Type	**BB** Bezel Type  **B** Bezel Type	**CB** Bezel Type  **C** Bezel Type	**DB** Bezel Type  **D** Bezel Type

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domed lens bezel options

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E- Bezel Style

Contemporary Domed Bezel and Lens Style

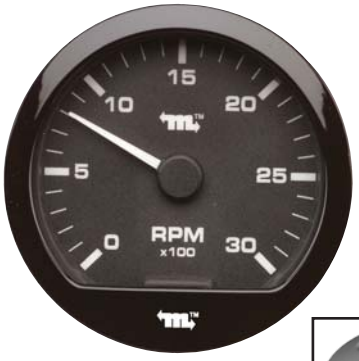
PVA20 Series - Gages

***EB** Bezel Type*

***E** Bezel Type*

PVA35 Series- Tach & Speedometer

***EB** Bezel Type*



***E** Bezel Type*

PVAA20 - Audible Alarm

***EB** Bezel Type*

***E** Bezel Type*

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wire harnesses

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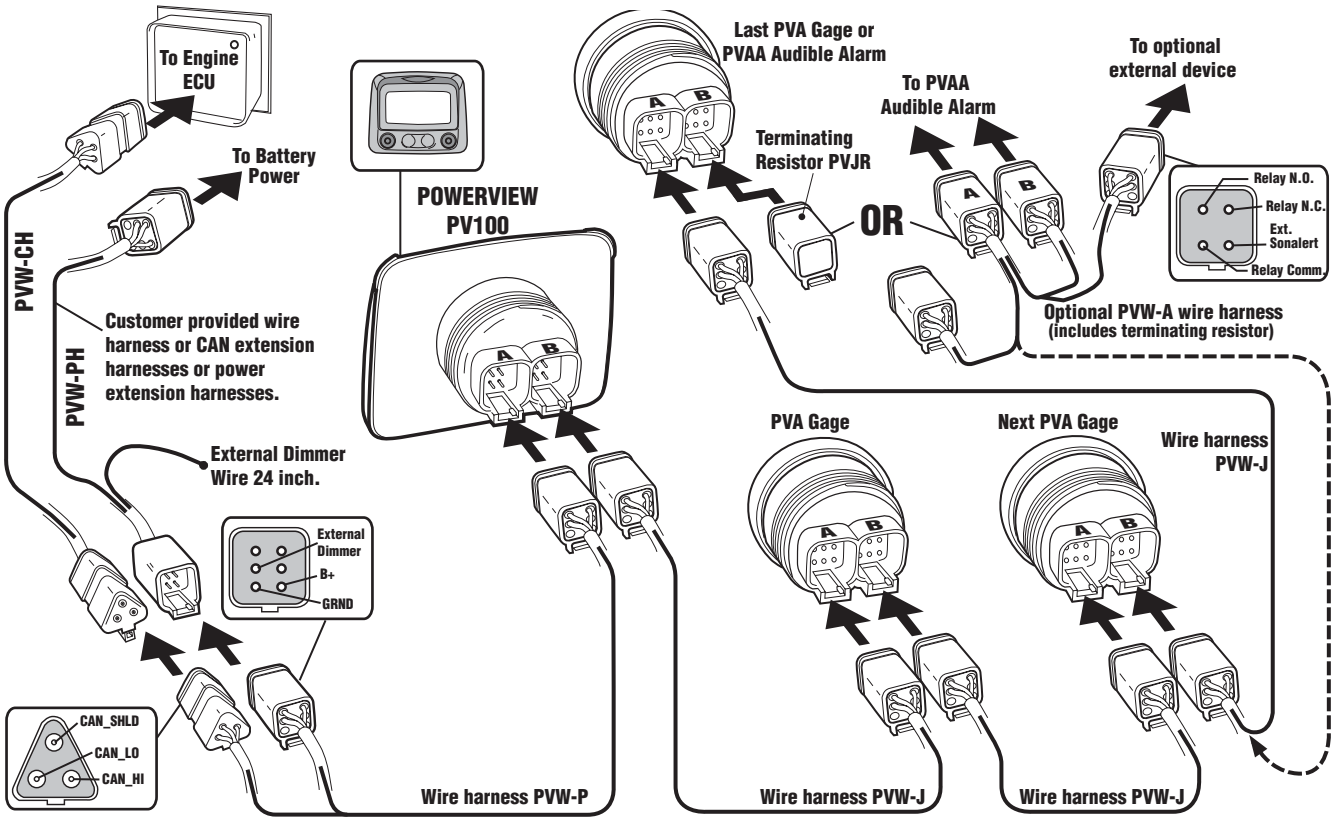
Typical Quick-Connect Diagram



Optional PowerView Wiring Models (PVW)

External Wiring Harnesses

Model	*Length*	*Description*
PVW-CH-72	72 in.(6 ft)	PowerView Extension Harness
PVW-CH-144	144 in. (12 ft)	PowerView Extension Harness
PVW-CH-240	240 in. (20 ft)	PowerView Extension Harness
PVW-CH-360	360 in. (30 ft)	PowerView Extension Harness
PVW-PH-72	72 in. (6 ft)	Battery Power Extension Harness
PVW-PH-144	144 in. (12 ft)	Battery Power Extension Harness
PVW-PH-240	240 in. (20 ft)	Battery Power Extension Harness
PVW-PH-360	360 in. (30 ft)	Battery Power Extension Harness
PVW-CC-24	24 in.	PowerView CAN Loose Wiring
PVW-PC-24	24 in.	Battery Power Loose Wiring
PVW-CT		CANBUS Tee Harness

*Includes J1939 CAN 120 ohm resistor.

Internal Wiring Harnesses

Model	*Length*	*Description*
PVW-P-12	12 in.	PowerView CAN and Power Harness*
PVW-P-24	24 in.	PowerView CAN and Power Harness*
PVW-PW-30	30 in.	CAN and Power Harness w/loose wires*
PVW-J-9	9 in.	PowerView Jumper Harness
PVW-J-12	12 in.	PowerView Jumper Harness
PVW-J-24	24 in.	PowerView Jumper Harness
PVW-A-9	9 in.	Audible Alarm Jumper Harness
PVW-A-12	12 in.	Audible Alarm Jumper Harness
PVW-A-24	24 in.	Audible Alarm Jumper Harness
PVJR		Jumper Terminating Resistor
PVW-K-12	12 in. 24 in.	Wiring Kit Includes: (1) PVW-P, qty 1 (2) PVW-J, qty 4 (3) PVJR

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how to order

POWERVIEW

To Order Your PowerView Module Use This Designation Diagram:

PV100 – A – ____

Model
PV100 = PowerView

Model Style
A = Black Overmold Faceplate with Silver Bezel

Blank = Standard *
GM = For use only on GM MEFI ECU — General Motors

To Order Your PowerView Gages Use This Designation Diagram:

PVA20 – A – 100 – A – R1

Model
- **PVA20** = 2 inch size PowerView Gage
- **PVA35** = 3-1/2 inch size PowerView Gage (Tachometer or Speedometer only)
- **PVAA20** = 2 inch PowerView Audible Alarm

Gage Function ***(excludes PVAA20)***
- **A** = Engine Oil Pressure
- **B** = Coolant Temperature
- **C** = Voltmeter
- **D** = Percent Load @ Current RPM
- **E** = Transmission Oil Pressure
- **F** = Transmission Oil Temperature
- **G** = Engine Oil Temperature
- **J** = Fuel Level
- **T** = Tachometer
- **S** = Speedometer

*Please see sales bulletins for exact features and specifications.

Bezel (All Models)

Bezel Type (flat lens)
- **A** = A20 (Brushed Silver)
- **AB** = A20 (Black)
- **B** = Low profile SAE (Brushed Silver)
- **BB** = Low profile SAE (Black)
- **C** = Contemporary (Brushed Silver)
- **CB** = Contemporary (Black)
- **D** = Low Curved (Brushed Silver)
- **DB** = Low Curved (Black)

Bezel Type (domed lens)
- **E** = Contemporary Domed (Brushed Silver)
- **EB** = Contemporary Domed (Glossy Black)

Remote Gage

R1 = Option for a second gage of identical type on the gage network. For example: If you are already using one PVA20-A-100-A, and a second oil pressure gage is needed, order a PVA20-A-100-A-R1.

Gage Ranges ***(excludes PVAA20)***	***Available for Gage Functions***
100 = 100 psi/700 kPa	**A**
100 = 100% Load @ Current RPM	**D**
100 = % Fuel Level	**J**
150 = 150 psi/1000 kPa (PVA20-A only)	**A**
250 = 250°F/120°C	**B, F, G**
12 = 12 VDC	**C**
24 = 24 VDC	**C**
400 = 400psi/28 bar	**E**
3000 = 3000 RPM	**T**
85 = 85 MPH	**S**
7B = 7 Bar/100 psi	**A**
10B = 10 Bar/150 psi	**A**
28B = 28 Bar/400 psi	**E**

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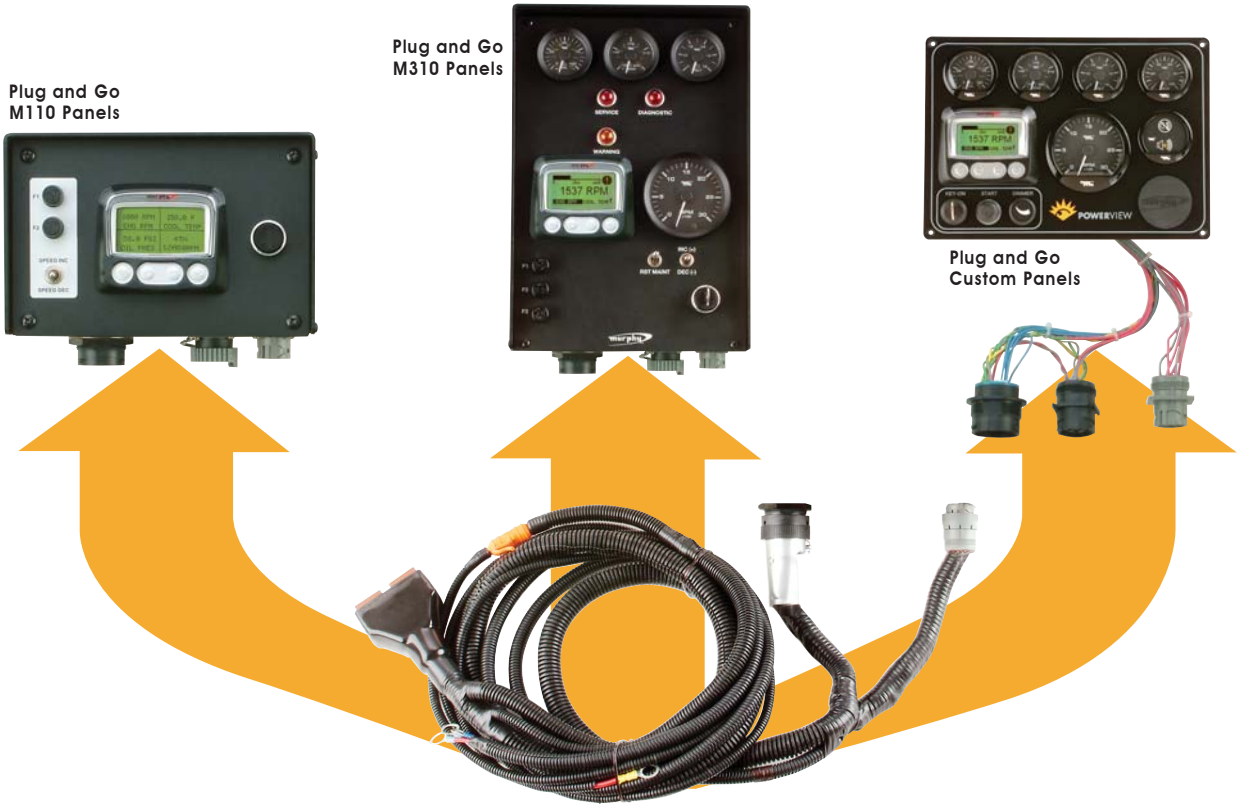
MSeries panels

POWERVIEW

Connecting To Electronic Engines Doesn't Have To Be Complicated. Now You Can Just "Plug And Go."



Standard Harnesses Adapt All Panels To Most Engine ECUs.

With MurphyLink panels, we've made it simple and easy to connect to modern electronic engines using the SAE J1939 Controller Area Network (CAN). We've done the work so you don't have to.

Our next-generation panels include PowerView, the most advanced J1939 CAN display system available. You get a large graphical, high-resolution, backlighted LCD screen that provides a clear look inside modern electronic engines. PowerView displays over 30 standard SAE J1939 parameters, and its diagnostic capabilities include fault codes with text translations for most common fault conditions.

- Standard harnesses make basic and deluxe panels interchangeable
- Simple connections for easy installation with minimal training
- Available for most major electronic engines
- Includes Deutsch connectors
- Available in enclosed design or flat panel option

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MS-04054H Rev. 9-04

For more information about PowerView products, phone (918) 317-4100, fax (918) 317-4266, or visit our website at ***www.fwmurphy.com.***

Warranty. *A two-year limited warranty on materials and workmanship is given with the FW Murphy PowerView products. Details are available on request and are packed with each unit.*

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