

The
POWERVERVIEW™ 101
display.



Pure Simplicity.

P V 1 0 1

COMPLEX ENGINES NEED SIMPLE SOLUTIONS

What is your engine saying? With electronic engines, it's hard to tell. That's why the PowerView 101 display is designed for pure simplicity.

The PowerView 101 display translates standard J1939 fault codes into text descriptions. Then it displays them on a fully graphical, backlit LCD screen that can show up to four parameters simultaneously.

With the PowerView 101, you get easy-to-read translation of engine/transmission parameters. You also get alarm and shutdown lights, plus detailed diagnostics. It collects all the complexity, and gives you a simple but powerful view.

MURPHY



SIMPLY SOLID

The PowerView 101 display is designed for the harshest environments. Hot or cold. Wet or dry. Closed cab or open - it doesn't matter.

This is a small, solid display with a wide temperature range and tight environmental sealing. It doesn't take up a lot of dash space, but it delivers a ton of operator information.

The PowerView 101 display doesn't just translate data for the operator. It also delivers precise electronic engine and transmission data to your other instruments, such as gages or telemetry devices.

It's accurate, reliable and rugged - no matter where you take it.





F E A T U R E S

- ❖ Fully graphical LCD screen
- ❖ Large, easy-to-read fault symbols
- ❖ Excellent viewing angle and contrast
- ❖ Four touch-sensitive buttons for scrolling and parameter selection
- ❖ Single or quadrant [4 parameter] views
- ❖ Displays active & stored diagnostic trouble codes (DTCs)*
- ❖ Displays standard or metric units
- ❖ Displays engine configuration*
- ❖ Modbus slave mode for remote communications
- ❖ Adjustable LED backlighting
- ❖ Ultra-bright alarm and shutdown LED indication
- ❖ Fuel sender or backlit dimmer input option
- ❖ Drives compatible analog gages
- ❖ Standard five languages per unit – English, Spanish, French, German, Italian. Other languages available are Russian, Chinese, and Japanese.**

* If supported by engine manufacturer.

** Chinese and Japanese models have the option of two languages.

S I M P L Y I N S T A L L E D

Murphy completely reworked the installation process to make it simpler, quicker and easier than ever. With our wire harnesses, the wiring is already tied to a standard connector. Wire harness connections are available for the major manufacturers' electronic engines.

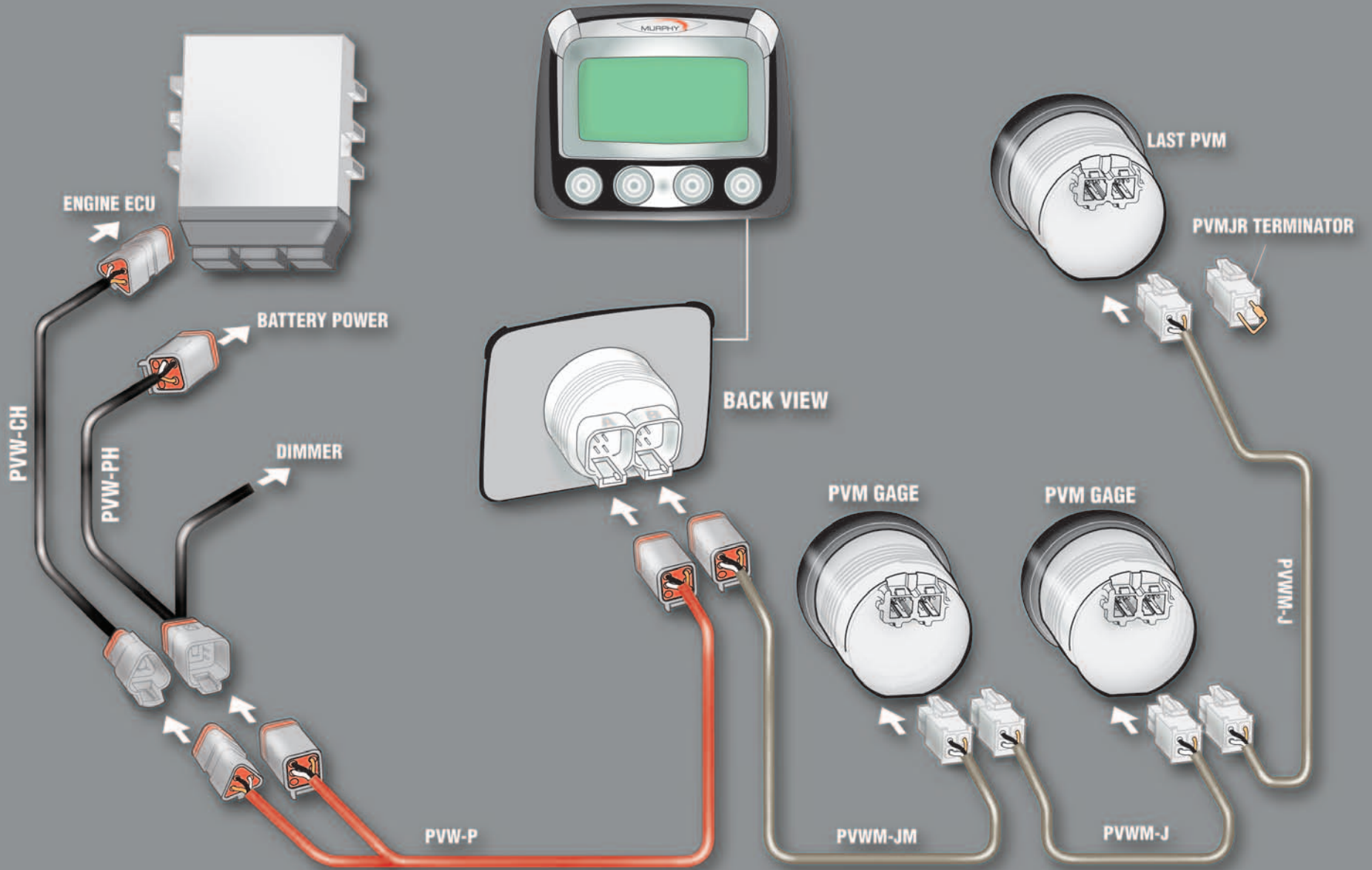
Simple connections ensure that you will be able to install them immediately with minimal training.

We did the hard work for you. Just drop in the PowerView 101 display, plug in the harnesses and you're ready to go. It's actually that simple.

CONVENIENT INSTALLATION:

- < PowerView 101 display fits standard 2-1/16 in. (52 mm) hole opening
- < Powerview PVA and PVM Analog Gages in standard 2-1/16 in. (52 mm) and 3-3/8 in. (86 mm) size hole openings, are available for easy installation with the PV101. (PVM gages are shown in the schematic to the right).
- < Two 6-pin Deutsch™ DT style connectors for PVA gages or two-AMP style connectors for PVM gages molded into casing for quick connections and simple daisy-chain wiring
- < Standard connection harnesses available
- < Standard and customizable panels available with harnesses for all major engine manufacturers

POWerview PV101



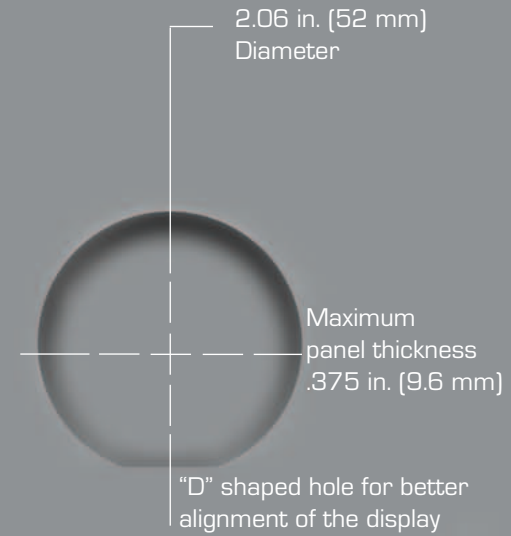
D I M E N S I O N S



Front

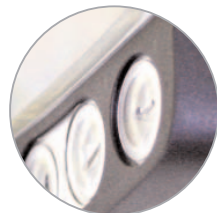
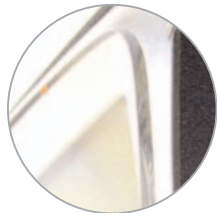


Side



Mounting

TECHNICAL SPECS



DISPLAY: 1.3 x 2.6 in. [33 x 66 mm], 64 x 128 pixels.

OPERATING VOLTAGE:

- 6.5 VDC min. to 32 VDC max.
- 8 VDC min. to 32 VDC max. with optional PVM gages.

REVERSED POLARITY: Withstands reversed battery terminal polarity indefinitely within operating temperatures.

OPERATING TEMPERATURE: -40 to +85 °C [-40 to 185 °F].

DISPLAY VIEWING TEMPERATURE: -29 to +85 °C [-20 to 185 °F]

STORAGE TEMPERATURE: -40 to +85 °C [-40 to 185 °F].

ENVIRONMENTAL SEALING: IP68, +/- 5 PSI [+/- 34.4 kPa].

POWER SUPPLY OPERATING CURRENT:

- [@ 14 VDC] 52 mA min. 300 mA max.
- [@ 32 VDC] 1 mA max. [with LCD heater].

CAN BUS: SAE J1939 Compliant.

CASE: Polycarbonate / Polyester.

CLAMP: Polyester [PBT].

CONNECTORS: 6-Pin Deutsch DT Series.

AUXILIARY RS485 COMMUNICATIONS PORT:

- 38.4K baud, N, 8, 1 or 2, half duplex
- User configurable as MODBUS® MASTER or MODBUS RTU SLAVE.
- MASTER ACTIVE [default] drives optional PVA or PVM gages.
- SLAVE ACTIVE offers user adjustable communication parameters.

POTENTIOMETER/FUEL SENDER INPUT (RESISTIVE INPUT): 1K ohm, 1/4 W

SHIPPING WEIGHTS [all models]: 1b. [450 g.]

SHIPPING DIMENSIONS [all models]: 4-3/4in x 4-3/4in x 3-1/8in [121mm x 121mm x 79 mm].

SIMPLY COMPATIBLE

The PowerView 101 Display can also be extended in several new ways. Additional analog gages, alarms and input/output modules bring even more equipment parameters into a single, convenient view.



Analog gages (PVA and PVM)

If you prefer a traditional panel, PowerView gages are the right choice. They show ECU data transmitted by the PowerView in a traditional analog format.

PowerView gages have a stepper motor operation with a 270° sweep, and accuracy that is better than $\pm 1.0\%$ of scale. But they're not just functional, they look sharp, too. These modern gages offer several design choices in lenses, bezel shapes and colors.

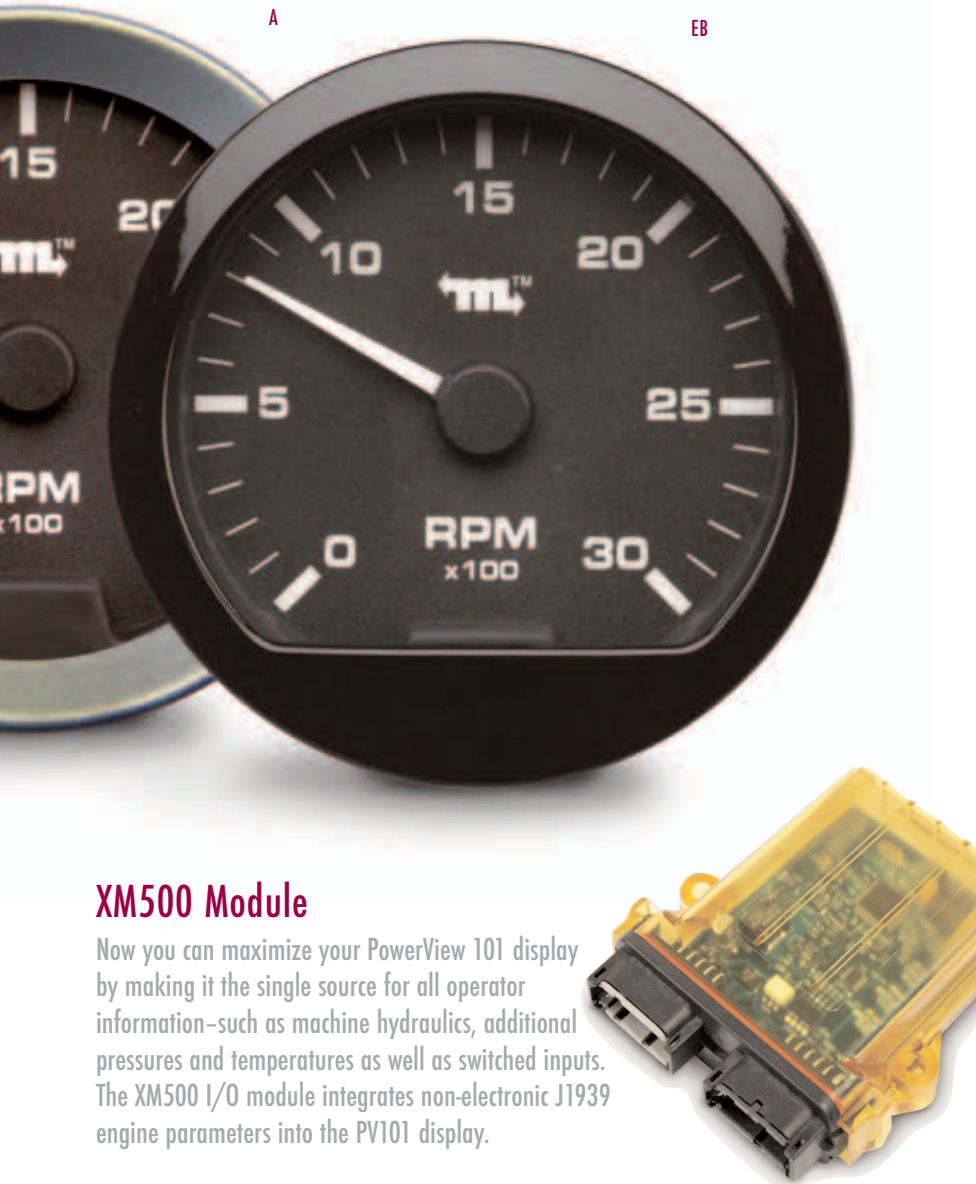
The **PVA model POWERVIEW gages** feature slightly higher specs and design options. The **PVM model POWERVIEW gages** are designed for a smooth and cost-effective transition for lower horsepower electronic engines. Driven by the PowerView 101 display, the PVM gage combines durability, accuracy and attractive design.

Audible Alarms (PVAA)

The PowerView Audible Alarm* alerts operators to fault conditions with a piezoelectric alarm and Form C relay contacts with a temporary silence button.

* Audible alarm only available for use with PVA gages.

PVA / PVM ELECTRONIC GAGE COMPARISON



XM500 Module

Now you can maximize your PowerView 101 display by making it the single source for all operator information—such as machine hydraulics, additional pressures and temperatures as well as switched inputs. The XM500 I/O module integrates non-electronic J1939 engine parameters into the PV101 display.

	PVM	PVA
POWER SUPPLY		
5VDC (4.5-5, 5.5VDC min. & max. voltage)	▲	
12/24VDC (8-32VDC min. & max. voltage)		▲
POWER SUPPLY OPERATING CURRENT		
@ 14VDC: 28mA min., 52mA max. (excludes PVAA)		▲
@ 5VDC: 18mA min., 80mA	▲	
CONNECTORS		
AMP Mini Universal Mate-N-Lock	▲	
6-Pin Deutsch DT06 series		▲
CASE COLOR		
Black	▲	
White		▲
BEZEL (ALL MODELS)		
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)	▲	▲
E = Contemporary Domed (Brushed Silver)		▲
EB = Contemporary Domed (Glossy Black)		▲
LENS		
Flat	▲	▲
Domed		▲
RTZ (RETURN TO ZERO)		
2" Gage		▲
3.5" Gage	▲	▲
PV101 COMPATIBILITY		
Maximum RS485 Harness Length (meters)	8.5	<1000
Maximum number of gages supported	5	18
Remote Gage Support		▲
PVAA Audible Alarm Support		▲
PVM Gage Support	▲	
PVA Gage Support		▲
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature: -40 to 185°F (-40 to 85°C)	▲	▲
Storage Temperature: -67 to 185°F (-55 to 85°C)	▲	
Storage Temperature: -76 to 185°F (-60 to 85°C)		▲
Sealing: IP68, ±5 psi (±34.4 kPa)	▲	▲

* Depending on gage type

** Remote gages refer to multiple instances of the same gage on the same bus.



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ENGINES UNDERSTOOD.**