

PowerView™ - Model PV101-C



Features

- Tier 4 emissions compliant
- For modern electronic engines and equipment applications using SAE J1939 Controller Area Network
- Displays over 50 standard SAE J1939 parameters broadcast by engine and transmission ECU's
- Displays active and ECU-stored faults with text description for diagnosing equipment malfunctions
- Simple connection to optional components
- Software configurable with configuration tool

The **PowerView Model PV101**, Murphy's powerful display in the J1939 MurphyLink® family of components, provides a window into modern electronic engines and transmissions.

The PV101 display is a multifunction tool which enables equipment operators to view many standard engine and transmission parameters as well as active and stored trouble codes. The display can show either a single parameter or a quadrant display showing four parameters simultaneously. Diagnostic capabilities include codes with text translation for the most common fault conditions. The enhanced alarm indication has ultra-bright alarm and shutdown LEDs (amber and red).

The PV101 has been enhanced with new features including:

- **Tier 4 Emissions Implementation** - Three icons indicating Active Regeneration, Inhibit Regeneration, and Diesel Particulate Filter Restricted. Auto DPF Regen, Request DPF Regen, and Inhibit Regen Menu active only if enabled via the Configuration Tool.
- **TSCI (Torque Speed Control)** - Allows user to set run speed via CAN if supported by engine manufacturer.
- **Additional 4-Up Screen** - Allows user to have two 4-Up screens to toggle between. Second user configurable screen is defaulted to show Tier 4 Parameters; Catalyst Tank Level, DPF Active Regen Status, Exhaust Filter Outlet Temp, and Exhaust Filter Inlet Temp.
- **Multiple language options** - Russian, Czech, Brazilian Portuguese, Chinese, and Japanese models have been added to the line of existing languages (English, Spanish, French, German, and Italian).
- **Sender Input** - select between backlight dimmer function or fuel level. Can be calibrated to use non-Murphy fuel senders.
- **Service Reminders** - 5 service reminders allow users to set hours for: Change Engine Oil, Change Air Filters, Change Hydraulic Oil, Service Engine, and Service Machine.
- **Select Source Address** - select the exact address the PV101 will claim on the Bus.
- **Select CANBUS Data Rate** - allows user to select CANBUS data rate.
- **PV101 Configuration Tool** - allows users to create, view, edit and download configurations for the PV101 using their computer.

The PV101 display is compatible with all our current J1939 gages, as well as additional J1939 I/O modules. It is also fully backward compatible with its predecessor, the PV100.

Other components in the MurphyLink system include micro-processor-based PowerView Analog Gages for displaying critical engine data broadcast by an electronic engine or transmission's Engine Control Unit (ECU); engine RPM, oil pressure, coolant temperature, system voltage, and a combination audible alarm and relay unit for warning and shutdown annunciation. Up to 32 components may be linked to the PowerView using a simple daisy chain wire connection scheme using RS485. The PowerView and all connected components can be powered by either 12 or 24-volt systems.

Display Parameters

The following are some of the engine and transmission parameters displayed by the PowerView (when applicable, consult engine or transmission manufacturer for SAE J1939 supported parameters). The PowerView can display these parameters in all available languages, as well as in English or Metric units.

- | | | |
|------------------------------------|-----------------------------------|---|
| • Engine RPM | • Oil Pressure | • Transmission Oil Temperature |
| • Engine Hours | • Fuel Economy | • Transmission Gear Position |
| • Fuel Rate | • Throttle Position | • Active Service codes |
| • System Voltage | • Engine Manifold Air Temperature | • Stored Service Codes (when supported) |
| • % Engine Load at the Current RPM | • Current Fuel Consumption | • View Engine Configuration Parameters |
| • Coolant Temperature | • Transmission Oil Pressure | |
| • Catalyst Level | • NMEA 2000 GPS Parameters | |

Specifications

Operating Voltage

- 8 VDC minimum to 32 VDC maximum

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

Environmental

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 (+/- 34kPa)

Power Supply Operating Current

- (@ 14VDC) 52 mA min.: 300 mA max
- (@ 32VDC) 1A max (with LCD heater)

CAN Bus: SAE J1939 compliant

Case: Polycarbonate/polyester

Maximum Panel Thickness: 3/8 inch (9.6 mm)

Auxiliary RS485 Communications Port

- 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

Resistive Input: (user selectable as one of the following)

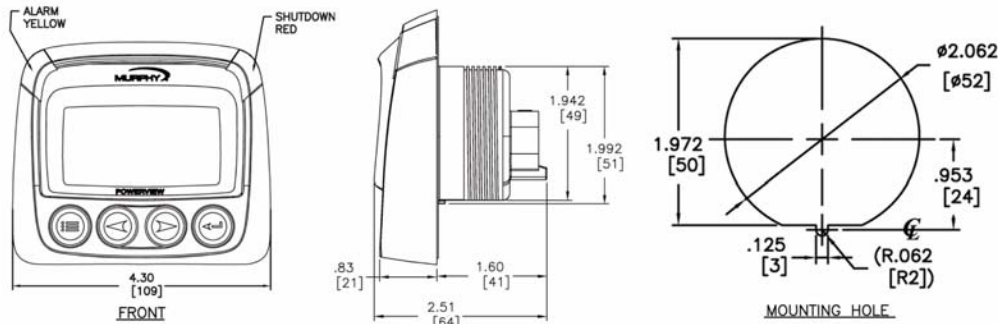
- Backlighting Potentiometer: 1 K Ohm, 1/4 W
- Murphy Fuel Sender: 33 Ohm full, 240 Ohm empty set standard from factory for use with Murphy fuel sender. Programmable for use with non-Murphy fuel senders.

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

Clamp: PBT

Connectors: 6-pin Deutsche DT Series

Product Dimensions



How to Order

Part Number	Model Number	Description	Languages Available
78700439	PV101-C-MSTD	Murphy STD	English, Spanish, French, Italian, German
78700497	PV101-C-M01	Murphy STD Russian	English, Russian, French, German, Spanish
78700498	PV101-C-M02	Murphy STD Chinese	English, Chinese
78700499	PV101-C-M03	Murphy STD Japanese	English, Japanese
78700500	PV101-C-M04	Murphy STD Brazilian Portuguese	English, Brazilian Portuguese, French, German, Spanish
78700501	PV101-C-M05	Murphy STD Czech	English, Czech, French, German, Spanish
78700435	PV101-C Configuration Tool Kit	User Configuration Tool	

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