

PowerView® PV485

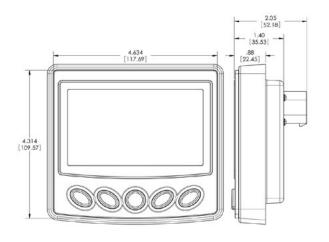
Engine and Diagnostic Display

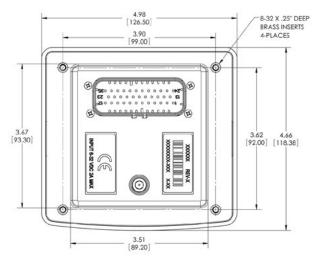
The PowerView 485 is a customizable, all-in-one color display and controller designed to meet the needs of modern electronic engines and equipment applications. Its rugged design offers a wide array of configurable I/O and supports both mechanical and J1939 electronic engines.

The PV485 also supports Tier 4 and stage IV engines, helping to make your transition to Tier 4 easier.

The PV485 controller is compatible with the PowerVision Configuration Studio® software, so custom configurations can be quickly developed. With the PowerVision Configuration Studio software, it is easy to define the user interface screens, as well as the functionality and sequence of events controlled by the PV485. You can configure equipment control such as: autostart, pressure control, data logging and alarms. You can even add custom graphics and company branding to the user interface.

Dimensions







Specifications

Technical

Display: Bonded 4.3"/109mm color transmissive TFT LCD **Resolution:** WQVGA, 480 x 272 pixels, 16-bit color

Aspect Ratio: 16:9
Orientation: Landscape

Backlighting: LED, 900-1000 cd/m2 (30,000 hr lifetime) **Microprocessor:** Freescale i.MX35 32bit, 532Mhz **Operating System:** QNX Real-Time Operating System

Flash Memory: 256 MB

RAM: 128 Mbytes DDR2 SDRAM

Operating Voltage: 6-32 VDC, protected against reverse

polarity and load dump

Power Consumption: 10W max.

CAN: (1) CAN 2.0B

Protocols: J1939, FreeForm CAN support

Connection: (1) 35-pin AMP seal connector (AMP 776231-4)

Keyboard: (5) tactile buttons **USB:** (1) USB 2.0 host (full speed) **Digital Inputs:** (3) Digital Inputs

Digital Outputs: (4) Low Side Open-drain, capable of sinking

500 mA

Analog Inputs: (6) total, (4) software configurable (0-5V, 4-20mA, Resistive) + Battery Voltage + 2nd Battery Voltage

Analog Outputs: (1) 0-5V

Frequency Inputs: (1) Alternator and Magnetic Pickup

Real-time clock: with battery backup

Communication:

(1) CAN 2.0B according to ISO-11898-2; J1939 and CANopen protocols; proprietary messaging

Environmental

Operating Temperature: -40°C to +85°C (-40°F to +185°F) Storage Temperature: -40°C to +85°C (-40°F to +185°F)

Protection: IP 67, front and back

Emissions/Immunity: SAE J1113 or customer-specified;

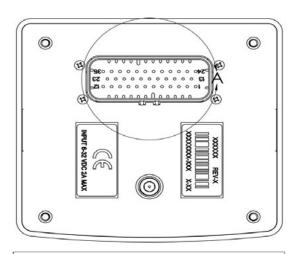
(CE) - EN61000-6-2, EN12895, ISO 13766

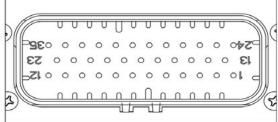
Vibration: Random vibration, 7.86 Grms (5-2000 Hz), 3 axes

Shock: ± 50G in 3 axes

Mechanical

Case Material: Polycarbonate/ABS





DETAIL A SCALE 2:1

# USB D- For reprogramming 1 USB D- For reprogramming 2 USB ID For reprogramming 3 Digital output 1 (low side, 500 mA) For an alarm if needed 4 Digital output 3 (low side, 500 mA) For an alarm if needed 5 Frequency input (alternator or mag) Tach (for analog engines) 6 Digital input 1 May use for switch inputs 7 Digital input 3 May use for switch inputs 8 A/D input 2 (0-5V, 4-20 mA, resistive) Fuel (for analog engines) 9 A/D input 4 (0-5V, 4-20 mA, resistive) 10 Analog output (0-5V) Do not use 11 N/C Do not use 12 N/C Do not use 13 USB shield For reprogramming 14 CAN - CAN low (for CAN engines) 15 Digital output 2 (low side, 500 mA) For an alarm if needed 16 Digital output 4 (low side, 500 mA) For an alarm if needed 17 Frequency input return Tach ground 18 Digital input 2 May use for switch inputs 19 A/D input 1 (0-5V, 4-20 mA, resistive) Analog input, open for now 20 A/D input 3 (0-5V, 4-20mA, resistive) Honda trim 21 A/D ground Ground for tach, trim, fuel 22 Analog output ground Do not use 23 N/C Do not use 24 USB D+ For reprogramming 25 USB Vbus For reprogramming 26 CAN + CAN high 27 Ignition Ignition switched input 28 Batt + Main power 29 Batt - Ground 30 Batt 2+ Volts 31 N/C Do not use 32 N/C Do not use 33 N/C Do not use 34 RS485- For RS485 negative 55 For RS485 positive	Pin	Din Assignment	Pin Notes
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24 USB D+ For reprogramming 25 USB Vbus For reprogramming 26 CAN + CAN high 27 Ignition Ignition switched input 28 Batt + Main power 29 Batt - Ground 30 Batt 2+ Volts 31 N/C Do not use 32 N/C Do not use 33 N/C Do not use 34 RS485- For RS485 negative	22	Analog output ground	Do not use
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29 Batt - Ground 30 Batt 2+ Volts 31 N/C Do not use 32 N/C Do not use 33 N/C Do not use 34 RS485- For RS485 negative	27	Ignition	Ignition switched input
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31 N/C Do not use 32 N/C Do not use 33 N/C Do not use 34 RS485- For RS485 negative	29	Batt -	Ground
32 N/C Do not use 33 N/C Do not use 34 RS485- For RS485 negative	30	Batt 2+	Volts
33 N/C Do not use 34 RS485- For RS485 negative	31	N/C	Do not use
34 RS485- For RS485 negative	32	N/C	Do not use
	33	N/C	Do not use
35 RS485+ For RS485 positive	34	RS485-	For RS485 negative
	35	RS485+	For RS485 positive

How To Order

Part Number	Model/Description	Notes
78700639	PV485	Display
78000815	Rear-Mount Bracket	Accessories
78000824	Wiring Harness, Loose Leads, 24 inches	
78090077	Programming Harness	
78700590	Programming Kit	