

7-inch color display featuring rich color graphics

Powerful processor for smooth animations and video playback

10 tactile configurable soft keys with white LED backlight

Bonded glare-free LCD screen for superior visibility in sunlight



## SUNLIGHT VIEWABLE ENGINE DISPLAY WITH GLOVE-FRIENDLY TOUCH AND SOFT KEYS

The PowerView 780B is a full-color configurable display that integrates vital engine, transmission and diagnostic information into an easy-to-read operator interface.

This 7-inch display features expansive storage and a high-speed processor that boots quickly and can render high-quality graphics and animations.

The display's bonded LCD can easily be viewed in full sunlight, and its available glove-friendly touchscreen and rugged design make it a perfect solution for all types of environments and applications.

The PV780B is available in glove-friendly touchscreen and non-touchscreen options.

### BUILT FOR POWERVISION

PowerVision Configuration Studio® software lets programmers design stunning user interfaces, create intelligent applications with scripting and prototype quickly with a vast library of standard engine parameters.

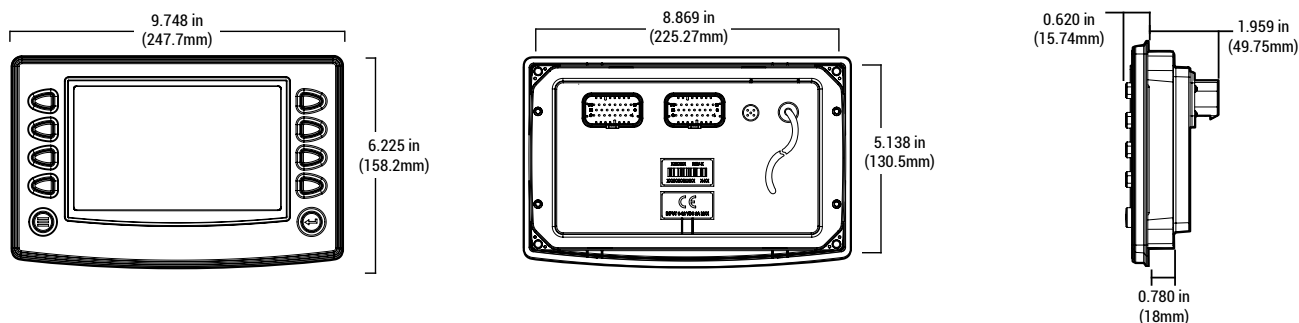


**IP**  
**67**

# POWerview® 780B

1712046 04-2022

## DIMENSIONS



## PRODUCT SPECIFICATIONS

COMPUTING	
<b>PROCESSOR</b>	Renesas® R-Car M2 with Arm® Cortex®-A15 dual-core processor @ 1.5 GHz (32-bit)
<b>OPERATING SYSTEM</b>	QNX® Realtime Operating System
<b>STORAGE</b>	8 GB flash memory
<b>RAM</b>	512 MB DDR3-SDRAM
<b>GRAPHICS</b>	Renesas graphics processor
DISPLAY	
<b>SCREEN SIZE</b>	7 inches (178 mm)
<b>TYPE</b>	LVDS TFT LCD with LED backlight, 24-bit color
<b>RESOLUTION</b>	800 × 480 (WVGA)
<b>CONTRAST RATIO</b>	Typ. 600:1
<b>BRIGHTNESS</b>	1000 cd/m <sup>2</sup>
<b>SURFACE</b>	Anti-glare
<b>TOUCH PANEL</b>	Projected capacitive (PCAP) with glove touch
HARDWARE	
<b>KEYPAD</b>	10 tactile configurable soft keys with white LED backlight
<b>REAL TIME CLOCK</b>	Available with battery backup
<b>CONNECTORS</b>	(2) AMPSEAL 23 pin (main) (1) M12 5 pin [Ethernet] (optional) (1) USB pigtail
<b>VIDEO INPUTS</b>	(3) NTSC/PAL (single channel viewable)

COMMUNICATION	
<b>CAN</b>	(2) CAN 2.0B according to ISO 11898-2, J1939 and proprietary messaging
<b>SERIAL</b>	RS-485 serial (Modbus: master or slave)
<b>USB</b>	USB 2.0 full speed host
<b>ETHERNET</b>	1 X Ethernet 10/100 Base-T (optional)
<b>WI-FI</b>	802.11 b/g radio (optional)
<b>BLUETOOTH</b>	Fully integrated Bluetooth 2.1, class 1 (optional)
ELECTRICAL	
<b>OPERATING VOLTAGE</b>	6 – 36 VDC, reverse polarity protected
<b>INPUTS</b>	(3) Analog 0 – 5 VDC, 4-20 mA, resistive, 10-bit resolution (5) Discrete digital, active-high (1) Frequency in (2Hz – 10kHz) 5V pk-pk min, 49V pk-pk max
<b>OUTPUTS</b>	(1) 500 mA switched low-side (1) Frequency output (2Hz – 3KHz)
ENVIRONMENTAL	
<b>OPERATING TEMPERATURE</b>	-40°C to +85°C (-40°F to +185°F)
<b>STORAGE TEMPERATURE</b>	-40°C to +85°C (-40°F to +185°F)
<b>PROTECTION</b>	IP66 and IP67, front and back, for outdoor use
<b>VIBRATION</b>	7.86 Grms (5 – 2000Hz), 3 axes
<b>SHOCK</b>	±50G in 3 axes
<b>EMC/EMI</b>	SAE J1113, ISO 13766, CE per 2014/30/EU

**⚠ WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

FOR MODEL & PART INFORMATION

FOR MANUAL & SUPPORT DOCUMENTS

FOR SUPPORT & WARRANTY

[ENOVATIONCONTROLS.COM/PV780B](http://ENOVATIONCONTROLS.COM/PV780B)

[SUPPORT.ENOVATIONCONTROLS.COM](http://SUPPORT.ENOVATIONCONTROLS.COM)

[ENOVATIONCONTROLS.COM/SUPPORT](http://ENOVATIONCONTROLS.COM/SUPPORT)

## SALES CONTACT



### CONTACT

✉ [sales@novationcontrols.com](mailto:sales@novationcontrols.com)  
☎ +1 918.317.4100  
[www.novationcontrols.com](http://www.novationcontrols.com)

### CORPORATE HEADQUARTERS

5311 S 122nd E Ave  
Tulsa, Oklahoma, USA 74146  
United States • United Kingdom • India • China



FM 28221 (Tulsa, OK-USA)  
FM 29422 (UK)