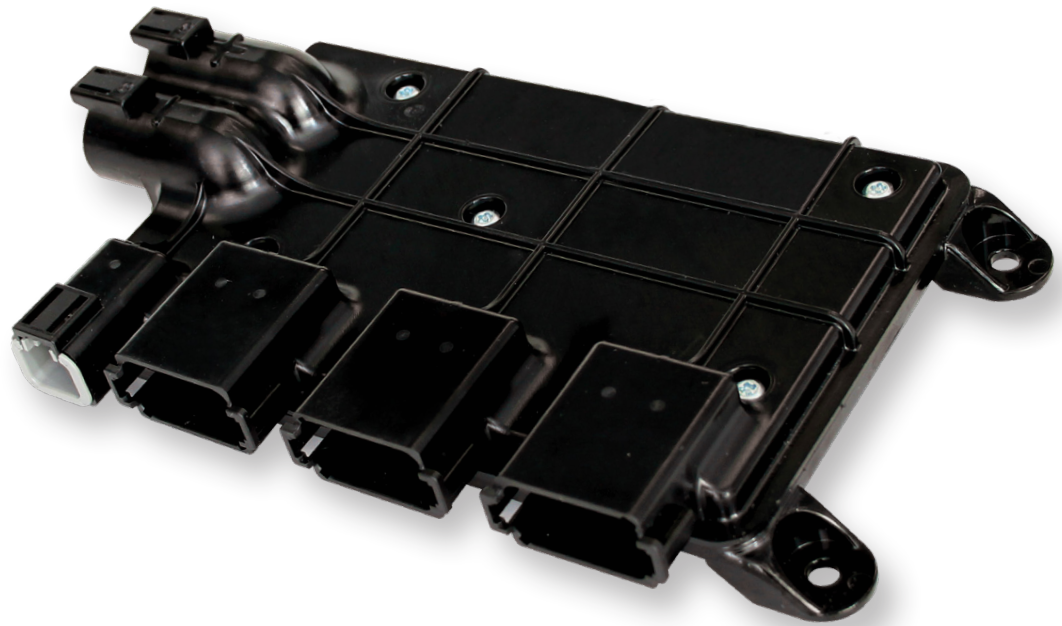


More Reliable Than Fuse and  
Relay Technology

Compact, Sealed, Robust  
Enclosure

Enhanced Diagnostics and  
Protection

Cuts Wire Harness Costs



## POWER DISTRIBUTION MODULE FOR INTEGRATED MACHINE AND EQUIPMENT CONTROL

Murphy's PowerCore Intelligent Xpansion module expands CAN bus control networks by replacing existing relay and fuse boxes with more reliable, solid-state switches that can directly drive work lights, wiper motors, cooling fans, directional DC motors and other high-current loads.

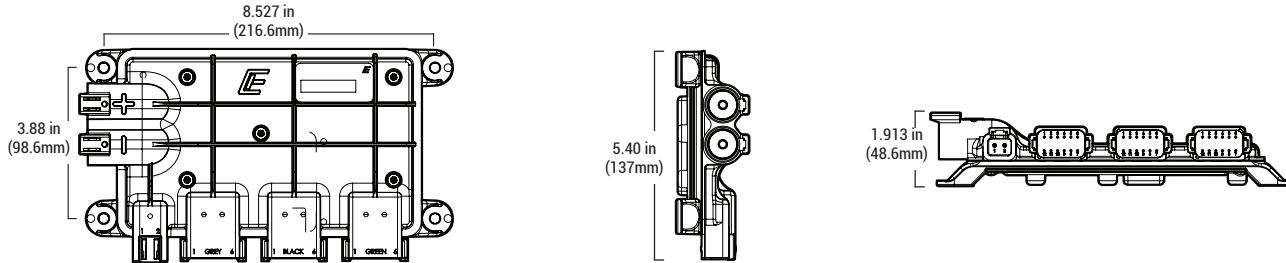
Each of the 12 PDM outputs can switch or proportionally control up to 15 A loads in 2.5 A increments and feature over-current detection and shut-down capability. Outputs are paired to run up to six electric motors with H-bridge

direction control. Twelve digital inputs monitor switched battery, ground and floating inputs. Additionally, eight 0-5V analog inputs are available with a 5V sensor supply.

Wiring length is reduced, and harness costs are cut by remotely locating the IX module near loads and signals. Then the I/O is multiplexed using a CAN bus network, which allows engineers to greatly simplify harness design for ease of installation and improved reliability. For applications not requiring a CAN bus control, the inputs can directly trigger outputs without a need for a separate controller.



## PDM DIMENSIONS



## PDM SPECIFICATIONS

HARDWARE	
<b>CONNECTORS</b>	Deutsch (3) DT series, DTP series, and DT HD series
COMMUNICATION	
<b>CAN</b>	CAN 2.0B Active, Default protocol SAE J1939, Baud rate 250 Kbit
ELECTRICAL	
<b>OPERATING VOLTAGE</b>	12V – 24V systems (8-32 V) Reverse Polarity Protection
<b>INPUTS</b>	(12) digital state (high side, low side, open) (6) analog (0-5 VDC), (2) analog (resistive)
<b>OUTPUTS</b>	(12) Digital High current (15 A each/70 A total configurable as High-side, PWM or up to 6 H-bridge pairs)

ENVIRONMENTAL	
<b>OPERATING TEMPERATURE</b>	-40° to +185°F (-40° to +85°C)
<b>STORAGE TEMPERATURE</b>	-40° to +275°F (-40° to +135°C)
<b>PROTECTION</b>	IP66 and 67, SAE J1455 4.5.3 (10,300 kPa @ 50° C and 100 mm away for 15 min)
<b>VIBRATION</b>	5-25 g, 50-2000 Hz, 72 hrs per axis
<b>SHOCK</b>	30 g, 3 cycles
<b>HOUSING</b>	Internally potted, combination PBT and E-coated cast aluminum with integrated mounting feet
<b>RADIATED IMMUNITY</b>	Tri-plate test 100 V/M 10 KHz – 1 GHz
<b>DIMENSIONS</b>	Width: 5.40 in. (137 mm) Height: 1.913 in. (48.6 mm) Length: 9.64 in. (245 mm)
<b>WEIGHT</b>	2 lb. (90 gram)

**⚠ 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/PDM](http://ENOVATIONCONTROLS.COM/PDM)

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

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

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