



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.

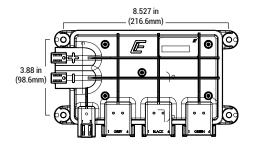
Each of the 12 PDM outputs can switch or proportionally control up to 15 A loads in 2.5 A increments and feature over-current detection and shut-down capability. Outputs are paired to run up to six electric motors with H-bridge direction control. Twelve digital inputs monitor switched battery, ground and floating inputs. Additionally, eight 0-5V analog inputs are available with a 5V sensor supply.

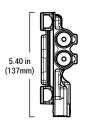
Wiring length is reduced, and harness costs are cut by remotely locating the IX module near loads and signals. Then the I/O is multiplexed using a CAN bus network, which allows engineers to greatly simplify harness design for ease of installation and improved reliability. For applications not requiring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

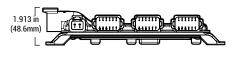


ENOVATIONCONTROLS.COM/PDM









## **PDM SPECIFICATIONS**

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

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

A 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

FOR MODEL & PART INFORMATION

### FOR MANUAL & SUPPORT DOCUMENTS

### FOR SUPPORT & WARRANTY

ENOVATIONCONTROLS.COM/PDM

SUPPORT.ENOVATIONCONTROLS.COM

ENOVATIONCONTROLS.COM/SUPPORT

## **SALES CONTACT**



CONTACT sales@enovationcontrols.com **L** +1 918.317.4100

**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)