

## PDM

Performs in High Heat and High Vibration Environments

Includes 6 configurable inputs, 8 (40A) outputs and 2 (100mA) outputs

Enhanced Diagnostics & Short Circuit/Overcurrent Protection

200A Maximum Total Current Drive Capability

Rugged, Sealed Metal Enclosure



### HIGH CURRENT I/O MODULE FOR EXTREME APPLICATION ENVIRONMENTS

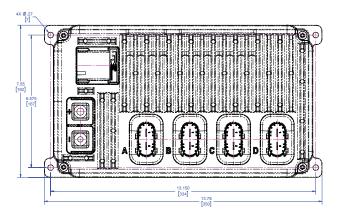
The High Current Power Distribution Module (HCPDM) simplifies the interconnection of input devices and the switching of high current ouput loads. The unit allows users to easily extend the functionality of an existing control/display system using the SAE J1939 protocol. Users can monitor up to 6 multi-configurable inputs and control 8 (40A) outputs. Additionally, 2 low current (100mA) outputs are provided for high impedance loads or to control automotive relays. These additional outputs can function during engine crank e.g., be used to start an engine. The HCPDM also features a full complement of diagnostics and includes individual output current feedback with adjustable overcurrent setpoints.

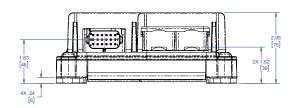
The HCPDM utilizes advanced intelligent electronics that enable it to energize any output at a predefined level during startup (Power on Reset). The integrated 5 regulated output further extends system flexibility by providing power for sensors.

Housed in a robust metal enclosure, the HCPDM can be mounted close to load devices anywhere on the vehicle. It is designed for 12 Volt operation and has a fully sealed construction using proven Deutsch and AMP connectors. Users can remotely monitor and configure all the inputs and outputs and control individual outputs.

# 58/00031 - High Current PDM - 06-2025

### **DIMENSIONS**





### **SPECIFICATIONS**

ELECTRICAL		
OPERATING VOLTAGE	Nominal 12VDC (6 – 18VDC)	
OPERATING CURRENT	Idle current: <170mA Sleep Current: <2mA Integrated Reverse Polarity Protection	
INPUTS	(6) Six configurable (Digital High Side, Digital Low Side, Resistive, $0-5V, 0-32V, 4-20mA$ )	
OUTPUTS	(8) Eight Digital High Current (40A each/200A total, configurable as Binary High Side, PWM, or up to 4 H-Bridge pairs) (2)Two 100mA for high impedance outputs (LEDs, PLC inputs, & standard automotive relay coils). Outputs are capable of remaining active during engine crank cycle	
SHORT CIRCUIT OVER- LOAD	Integrated & Fully Protected	
SENSOR SUPPLY	5V @ 400mA output	

COMMUNICATION	
CAN INTERFACE	CAN 2.0B Active, Default protocol SAE J1939, 250 kbit/s Baud rate
SLEEP PIN	Control of sleep and wake function; Wake on CAN option
LED INDICATORS	(1) Green – Power Status (1) Red – Fault Indication (1) Blue – Communications

HARDWARE	
CONNECTORS	Inputs, CAN, Sensor Supply: One 18 Way Deutsch DT18- SA-K004; Outputs: Four 2 Way AMP MCP 9.5; Power Supply: 2 Female threaded lugs with Cross-Head Hex bolts (1 – M8.1-M12)

ENVIRONMENTAL		
OPERATING TEMPERATURE	-40°F to +185°F (-40°C to +85°C)	
STORAGE TEMPERATURE	-40°F to +221°F (-40°C to +105°C)	
INGRESS PROTECTION	IP67/IP69K	
VIBRATION	5.82 grms, 8 hours/axis	
SHOCK	+/-50G, 6ms	
HOUSING	Internally potted, E-coated cast aluminum with integral mounting feet	
EMC/EMI	CISPR11, CISPR25, EN60945, EN61000-4-2, EN61326-1, SAE J1113-2, SAE J1113-4, SAE J1113-11, SAE J1113-12, SAE J1113-13, SAE J1113-21, SAE J1113-22, SAE J1113-26, SAE J1455	
DIMENSIONS	Width: 7.56 in. (192 mm) Height: 2.71 in. (69 mm) Length: 13.74 in. (349 mm)	
WEIGHT	8.14lbs or 3694g	

▲ WARNING: This product can expose you to chemicals 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/HCPDM

SUPPORT.ENOVATIONCONTROLS.COM

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### **SALES CONTACT**



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