

Operates with 12VDC or 24VDC systems

Three Configurable Levels of Passcode Protection

Flexible Input Sensor Types For the Analog Inputs

Analog Inputs Can Be Used as Digital Ground Inputs



## POWERFUL, CONFIGURABLE CONTROLLER FOR MECHANICAL AND ELECTRONIC ENGINES

The Murphy PowerCore® MPC-10 Controller is an all-purpose manual/auto-start and manual/auto-throttling engine controller designed with rental applications in mind. This powerful controller is targeted for engine-driven pumps and irrigation, with the versatility to work in most engine-driven applications.

The MPC-10 supports J1939 CAN protocols for electronically governed engines as well as I/O for mechanical engines for fault and safety shutdowns.

The MPC-10 also provides three levels of menu security which can easily be set with the free PC configuration tool.

### AVAILABLE AS A PANEL SOLUTION



Murphy's ML1000 control panel incorporates all the power and functionality of the PowerCore® MPC-10 in a panel solution for most any engine-driven application.

**FOR MORE INFORMATION ABOUT ML1000, VISIT:**  
**ENOVATIONCONTROLS.COM/ML1000**

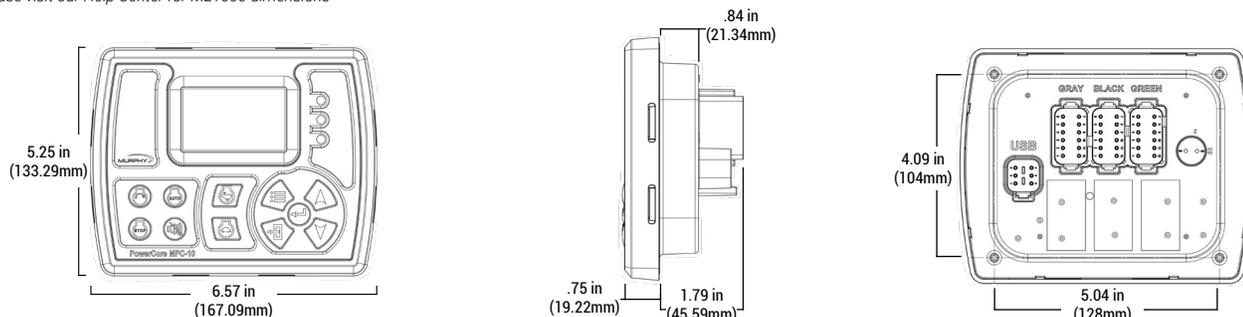


# POWERCORE<sup>®</sup> MPC-10

1511730  
06-2019

## MPC-10 DIMENSIONS

Please visit our Help Center for ML1000 dimensions



## MPC-10 SPECIFICATIONS

DISPLAY	
SCREEN SIZE	2.7 inches
TYPE	WQVGA Monochrome HR-TFT
RESOLUTION	400 x 240
HARDWARE	
KEYPAD	11 tactile feedback buttons
LEDs	(3) Red Shutdown, Amber Warning, Green Auto Mode or Running Loaded State
MATINGCONNECTORS	Deutsch W12S-P012 locking wedges Gray DT06-12SA-P012 Black DT06-12SB-P012 Green DT06-12SC-P012
COMMUNICATION	
CAN	(1) CAN 2.0B, J1939
SERIAL	RS485, (MODBUS) RTU
USB	2.0B for Programming
ELECTRICAL	
OPERATINGVOLTAGE	8-32 VDC, reverse battery polarity and load dump protected
TOTAL CURRENT CONSUMPTION	Power on in stopped state: 117 mA at 12 VDC Power on in standby mode: 52 mA at 12 VDC
CRANKING POWER HOLDUP	0 VDC up to 50mS

INPUTS	(5) Digital, configurable (high/low) (3) Analog, configurable (Resistive 4-20mA, 0-5V, or Digital Low) (1) Frequency, supporting Magnetic pickup (30Hz - 10kHz, 2.0VAC-120VAC) and Engine Alternator (30Hz - 10kHz, 4.5 VRMS - 90 VRMS)
OUTPUTS	(3) Relays: 10A, SPDT, Form C (30 VDC @ 10A max.), 30A max aggregate @ 85C (2) Low-side (1A) (2) High-side (1A) (1) Dedicated Alternator Excite (provides Charge Fail Fault if unable to excite alternator)
ENVIRONMENTAL	
OPERATINGTEMPERATURE	-40°C to +85°C (-40°F to 185°F)
STORAGE TEMPERATURE	-40°C to +85°C (-40°F to 185°F)
PROTECTION	IP67 and IP69K front and back, IP66 panel seal with accessory gasket
VIBRATION	Random, 7.86 Grms (5-2000Hz), 3 axes (X,Y,Z)
SHOCK	±50G in 3 axes (X,Y,Z)
EMC/EMI	SAE J1113
CASE	Polycarbonate/ABS
DIMENSIONS	Width: 6.57 in. (167 mm) Height: 5.25 in. (133 mm) Depth: 2.55 in. (64 mm)

**⚠ 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)

## ML1000 SPECIFICATIONS

HARDWARE	
CONNECTORS	21-way & 31-way Deutsch HDP26-24 series

FOR MODEL & PART INFORMATION

FOR MANUAL & SUPPORT DOCUMENTS

FOR SUPPORT & WARRANTY

[ENOVATIONCONTROLS.COM/MPC-10](http://ENOVATIONCONTROLS.COM/MPC-10) &  
[ENOVATIONCONTROLS.COM/ML1000](http://ENOVATIONCONTROLS.COM/ML1000)

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

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

## SALES CONTACT

**ENOVATION**  
**CONTROLS**<sup>®</sup>  
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