

# POWERCORE<sup>®</sup>

TOUGH, RUGGED CONTROLLERS



Flexibility, power and control are at your fingertips with the Murphy PowerCore lineup. Engineered to handle your toughest jobs, the PowerCore controllers and panel solutions support J1939 communication, withstand all weather environments and offer easy-to-read displays, even in direct sunlight. For use on mechanical and electronic engines, the PowerCore family is Final Tier 4/Stage IV ready.



# TEC-10000



# CONTROL PANEL

## SUPERIOR TURNKEY PANEL OFFERS COMPLETE CONTROL, FAMILIARITY ACROSS MULTIPLE APPLICATIONS

Murphy's PowerCore® TEC-10 panel provides full control of your engine including auto start/stop, auto throttling and display of engine parameters along with critical faults from the engine/application. The TEC-10 supports SAE J1939 CAN protocols for electronically governed engines as well as analog sensors on mechanical engines for fault and safety warnings/shutdowns.

An incredibly versatile control panel, the TEC-10 allows parameters and settings to be changed directly from the front face or via a free PC configuration tool. Powerful flexibility allows for the same control panel to be used across a wide range of applications while providing operator consistency and familiarity.

The control panel features molded-in connectors mating with industry-standard Deutsch HDP connectors and is compatible for use on the simplest mechanical engine to the most advanced, fully electronic Tier 4 engines.\*

Designed as a plug-and-play solution, the TEC-10 panel is perfect for rental or industrial applications where I/O is needed and auto start or auto throttling is desired.

The rugged TEC-10 panel can be mounted directly to the engine or engine/application cover. Built to endure industrial environments from full sun to wide temperature ranges, the panel features a high degree of sealing for dust and water as well as the ability to withstand higher vibration with exposure.

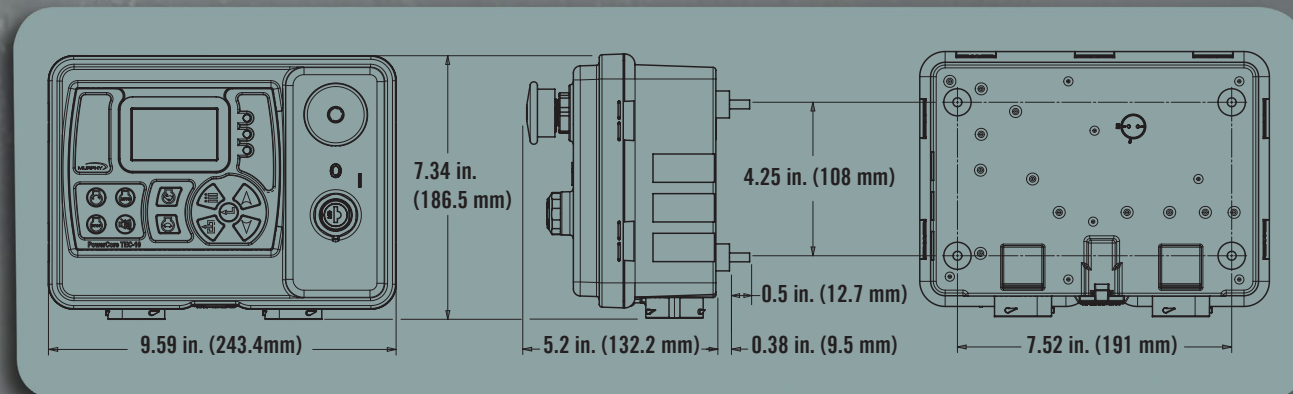
\*Contact Murphy for engine and harness support prior to purchase.

Versatile industrial control panel solution

Easy setup and installation

Mechanical and electronic engine compatible

Intuitive menus with three security passcodes



POWERCORE® TEC-10

# MPC-10



- < All-purpose industrial engine controller
- < Easy panel mount installation
- < Small footprint for snug areas
- < Standard and custom panel solutions available

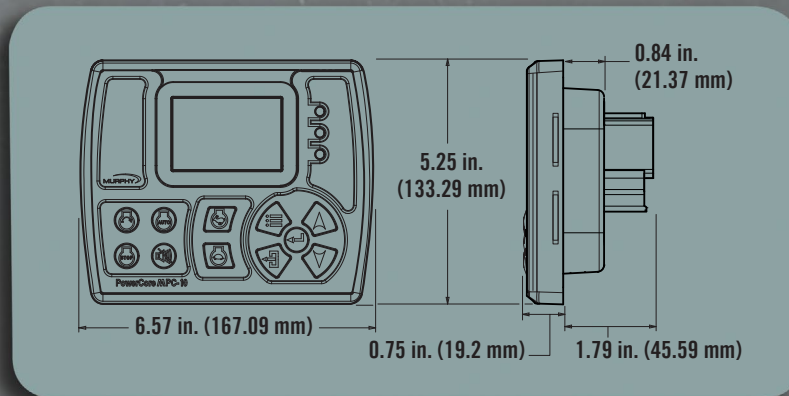
# POWERFUL, CONFIGURABLE CONTROLLER FOR MECHANICAL AND ELECTRONIC ENGINES

The Murphy PowerCore® MPC-10 Controller provides full control of your engine including auto start/stop, auto throttling and display of engine parameters along with critical faults from the engine or application. The MPC-10 supports SAE J1939 protocols for electronically controlled engines as well as analog sensors on mechanical engines for fault and safety warnings and shutdowns.

The small footprint of the MPC-10 makes this controller ideal for snug areas or lower horsepower engines where size is a factor. This controller is perfect for rental applications where a large number of I/O is not essential but engine monitoring and control is required.

The versatility, rugged design and intuitive menu makes this controller an easy choice for any application. The parameters of the MPC-10 are quickly altered directly from the front keypad or with a free PC configuration tool. The easy-to-use interface enables any operator to quickly understand how the engine is performing while stopped, idling or under full load.

The MPC-10 is also available in our standard ML1000-4X panel or in a customized panel through our Murphy Industrial Panel division.



## PANEL OPTION



**ML1000-4X**

**POWERCORE® MPC-10**

# MPC-20



- < Multipurpose industrial engine controller
- < Auto start and auto throttling capable
- < Large easy-to-read display, even in direct sunlight
- < Rugged design for virtually any environment
- < Standard and custom panel solutions available

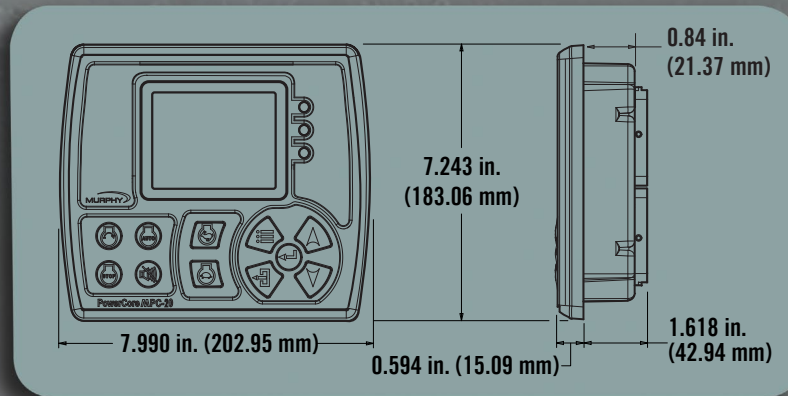
# CONFIGURABLE, MULTIFUNCTION CONTROLLER FOR ELECTRONIC AND MECHANICAL ENGINES

Murphy's PowerCore® MPC-20 controller provides full control of your engine including auto start/stop, auto throttling and display of engine parameters along with critical faults from the engine or application. The MPC-20 controller supports SAE J1939 protocols for electronically controlled engines as well as analog sensors on mechanical engines for fault and safety warnings and shutdowns.

The MPC-20 features a wide array of inputs and outputs suitable for a variety of applications. The inputs and outputs can be used for auto starting the engine or to power or switch ancillary devices required for the application. Additional analog inputs allow viewing parameters with related fault conditions, and the digital inputs can be used for action/fault conditions.

The controller's incredibly versatile menu structure allows set up for your specific engine type directly from the front keypad. The controller has a free PC configuration tool for quick and easy setup and the saving of settings.

The controller has a large, easy-to-read 3.8-inch (97 mm) monochrome QVGA LCD for displaying engine parameters, diagnostic support and Tier 4 aftertreatment icons. The controller can be used as a stand-alone unit or in a panel solution. The MPC-20 controller is mounted in our ML2000 panels as standard offering or can be mounted in a custom panel of choice.



## PANEL OPTIONS



**ML2000**



**ML2000-4X**

**POWERCORE® MPC-20**

PowerCore® Features	TEC-10	MPC-10	ML1000-4X	MPC-20	ML2000-4X
LCD Graphical Indication (Monochrome)	2.7" (WQVGA)	2.7" (WQVGA)	2.7" (WQVGA)	3.8" (QVGA)	3.8" (QVGA)
LED Indication	3	3	3	3	3
Operating Electrical Range	8-32VDC	8-32VDC	8-32VDC	8-32VDC	8-32VDC
Reverse Polarity Protected	•	•	•	•	•
IP Rating of Full Product	IP67	IP67	*NEMA-4X with IP67 Controller	IP67	*NEMA-4X with IP67 Controller
Operating Temperature Range	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Storage Temperature Range	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Connectors	21Pin and 31pin Deustch	3-Deutsch 12pin	21Pin and 31pin Deustch	1-Delphi 90pin	21Pin and 31pin Deustch
CSA Certification (Non-Hazardous Location)	-	•	Controller Only	•	Controller Only
CE Compliant	•	•	•	•	•
Total Inputs	9	9	9	15	15
Total Outputs	7	7	7	13	13
Telematics Ready / SCADA	•	•	•	•	•
PowerVision Configuration Studio® Programming Tool	•	•	•	•	•
Manual Start / Stop	•	•	•	•	•
Multiple Auto Start / Stop Methods	8	8	8	10	10
Multiple Throttling Types	3	3	3	4	4
Auto Throttling Methods	6	6	6	8	8
Manual Throttling Methods	4	4	4	1	1
Mechanical Engine Compatible	•	•	•	•	•
Electronic Engine Compatible	•	•	•	•	•
Menu Passcode Protection	3	3	3	3	3
Start / Stop from Clock Settings	3 Events	3 Events	3 Events	8 Events	8 Events
Event History Log	32 Events	32 Events	32 Events	32 Events	32 Events
Countdown to Shut-down Timer	•	•	•	•	•
Clutch Engage / Disengage Operation	-	-	-	•	•
Minimum & Maximum Run Speeds	•	•	•	•	•
Prestart Delay	2	2	2	2	2
Energize to Stop	-	-	-	•	•
Remote Digital Increase / Decrease Throttling	•	•	•	-	-
Run to Destruct Mode	•	•	•	•	•
External Mushroom Style Stop Switch	•	-	-	-	-
Parameter Setup From Menu	4-Up Screens	4-Up Screens	4-Up Screens	-	-
Internal Service Reminders	•	•	•	•	•
			*4X only		*4X only



In order to bring you the highest quality, full-featured products, we reserve the right to change our specifications and designs at any time.

Specifications and performance data subject to change without notice.  
 Certified specifications and performance data available upon request.

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