



# PowerCore 100

Solid State Power Management Enclosure

Digital Switching Systems, LLC

*"Delivering Power with Intelligence"*

The **PowerCore 100** Solid State power management enclosure is a fundamental building block of Digital Switching System's **Pi-Series** portfolio of switching solutions aimed at meeting the tough demands of today's marine and transportation markets.

## Electrical Features

- 12 V or 24 V nominal input
- 50 Ampere total PME input current carrying capability @ 12 volts
- 10 switched circuits that include:
  - Momentary, toggle, and time-out functions
  - Pulse-width modulation of output voltage for dimming capability
  - 3 circuits rated up to 20 Amp maximum continuous load (25 Amp @ 70° ambient)
  - 2 H-Bridge circuits for driving reversible motors
- 10 external sense inputs
  - 8 logic level signal sense inputs (2 can be switched)
  - 2 analog signal gating inputs/outputs
  - 2 tachometer/frequency sense inputs
- Remote reset of any output circuit fault through keypad
- Reverse battery connection protection
- Input undervoltage lock down and overvoltage protection.

## Environmental Features

- Operating ambient temperature: -20° to 85° C (-4° to 185° F)
- Storage ambient temperature: -40° to 85° C (-40° to 185° F)
- Humidity: 0 to 98% (non-condensing)
- Salt spray: per ASTM B117 standard
- Complies with all applicable ABYC, UL1077, UE and US Coast Guard requirements

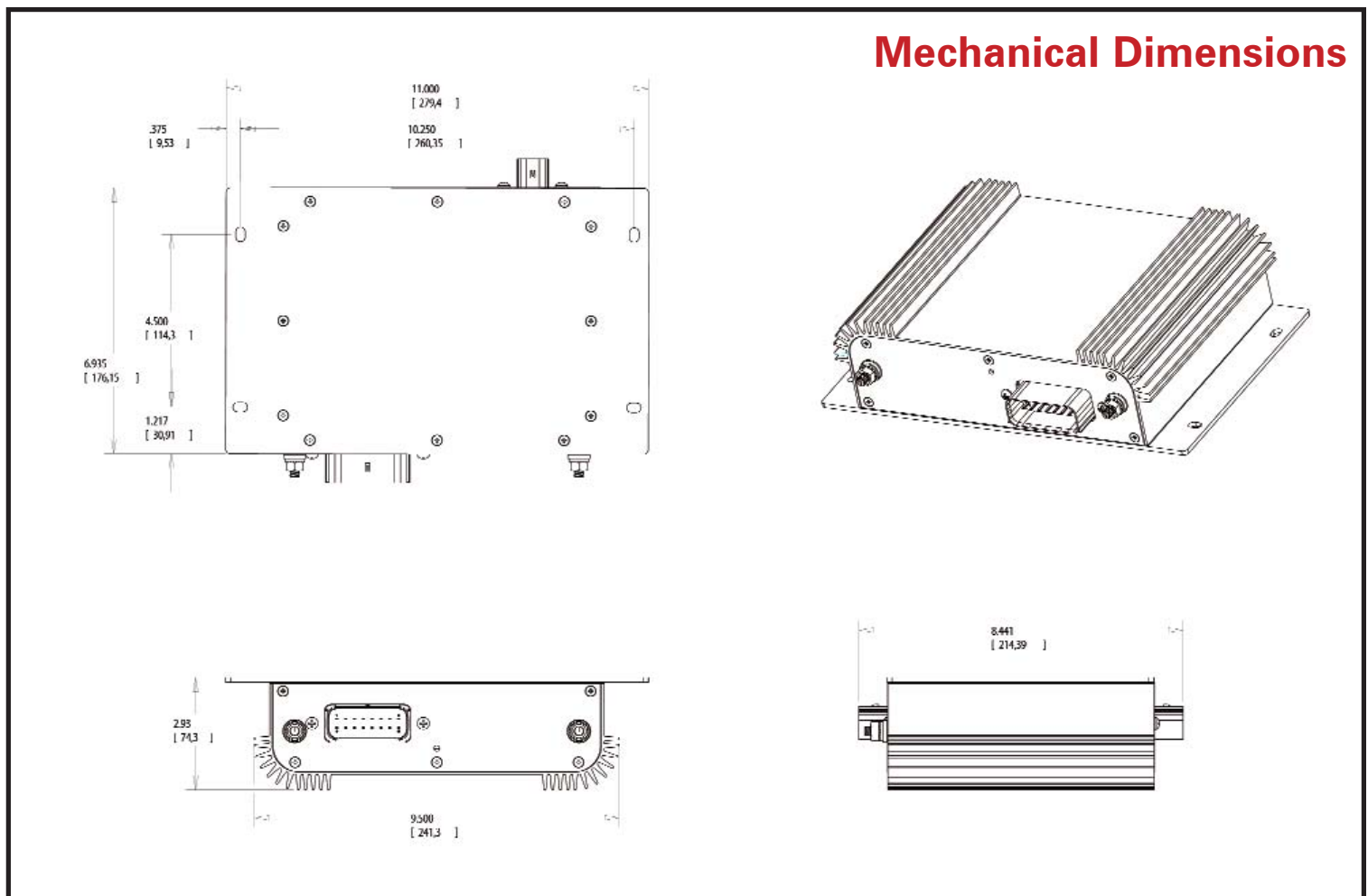
## Special Features

- Power presence LED indicator
- CAN-bus compatible (SmartCraft / NMEA 2000 certified)
- Field programmability of electrical functions and current limit trip points available to authorized OEMs and Value-Added Resellers (VARs)
- Optional 2-circuit bypass

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## Mechanical Features

- Extruded aluminum housing for superior thermal performance
  - 6063-T5 aluminum alloy anodized with a silver metallic finish
- End-panel power and I/O connections
  - 2 x 1/4-20 tin plated, phosphor bronze power lugs along with nuts and external tooth lock washers provided for securing power leads
  - 1 x 16 pin Molex MX150L connectors (Molex part # 19427-0049). Mates with 16 pin receptacle (Molex part # 19418-0030) using 14-16 gauge contact (Molex part #19420-0009)
  - One 4 pin keypad bus connector Molex MX150L (Molex #19427-0032). Mates with 4 pin receptacle (Molex part # 19418-0004) using 14-16 gauge contact (Molex #19420-0009)



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