

# PC20



CANopen

J1939



## OVERVIEW

The Power Management Enclosure (PC20) is the brain of the system.

It receives requests from switches or keypads and handles these commands based on the current state of the system. The output may be the activation/deactivation of a circuit or starting a timer function.

The POWERCORE then sends status data from system to keypads to turn ON/OFF the LED indicators and backlighting.

# POWERCORE MANAGEMENT ENCLOSURE

## ELECTRICAL FEATURES

- 12V or 24V nominal input voltage.
- 150 Ampere total PME input current carrying capability.
- 12 switched circuits that include:
  - Momentary, toggle, and time-out functions.
  - Pulse-width modulation of output voltage for dimming capability.
  - 5 circuits rated up to 20A maximum continuous load, 17 circuits rated up to 15A.
  - 4 complete H-Bridge circuits for driving reversible motors.
- Parallelable output increases current rating.
- An electronic circuit breaker protects every circuits. The current ratio for each circuit can be set independently.
- Remote reset of any output circuitry fault through keypad.
- Input undervoltage lock down.

## SPECIAL FEATURES

- CAN-bus compatible (CANopen/J1939 compliance available).
- Field programmability of electrical functions and current limit trip points available to authorised OEMs and Value-Added Resellers (VARs).
- 4-circuit bypass for essential functions.
- Up to 2 N.O. relay contacts (optional).

# INTELLIGENT POWER

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# SPECIFICATIONS

ELECTRICAL	PC20
Supply voltage	12V and 24V Nominal Voltage (8-32VDC)
Standby current	<30mA per PME
Load current	Max 20A
Input current	150A max
Communication bus	RS-485 between keypad and PME CAN Bus Slave
Circuit protection	electronic overcurrent protection & automotive mini blade fuse

MECHANICAL	PC20
Connector	Molex MX150L #19427-0032 & 19429-0040
Mating connector	Molex MX150L #19418-0030 & 19418-0004
Housing	ALLOY 6060 and ZA4C1
Seal	TPV 8211-75
Power stud	Amphenol surlock plus series
PC board	1.6mm thick, Nema Grade FR-4, Double clad with 3oz copper

ENVIRONMENTAL	PC20
Operating temperature	-20°C to +85°C
Storage temperature	-40°C to +85°C
Humidity	0 to 98% (no condensation)
Ingress Protection Rating	IP65

FEATURES	PC20
Circuits	22
Size mm connectors incl.	230 x 170 x 86
Remote current trip reset	Standard on all outputs
System reset	Optional
Status indicator	Standard
By-pass	4 outputs
Low volt sense & lock down	Optional
Pull down	9 outputs
"H" Bridge capability	4 complete "H" bridges available
Level sense input	8 inputs
Dimming/PWM Features	Available on 10 outputs
Circuit status monitoring	Optional
Field re-programmable	Optional
External status communication on the bus	Optional
N.O. relay contact	Optional



# DIMENSIONS

