

EPS3000 Platform **Low Power Modular System** -48V system, 63A

Features

- Compact 1U form factor (2U for CDM & PO)
- Fully featured 1U CDM shelf system (controller/distribution/battery management) & front end PO Shelf
- Universal input 500W/600W (dependant on temperature and input voltage)
- Rectifiers are 90% efficient
- CDM shelf holds up to 3 rectifiers, PO shelf holds 5 rectifiers.
- Temperature hardened for harsh environments (-40°C to +70°C operation**)
- Worldwide specifications and standards for global deployment
- Hot swap rectifiers to minimize down time
- Analog and digital communications bus
- Strong front end surge protection dealing with excursions up to 300VAC

**PO shelf only, CDM shelf operates up to 55°C

1U CDM Shelf



1U PO Shelf



Description

The EPS3000 is a modular power system designed for 1U 19-inch (483mm) applications where reliability, space conservation and environmental considerations are critical. This highly dense power system occupies minimum space and its modular architecture enables an exact fit to custom needs.

The shelf architecture allows the EPS3000 CDM to provide DC power and distribution as well as communications and control over the rectifiers. The EPS3000 PO provides bulk power either as a stand alone item or as an addition to the EPS 3000 CDM.

EPS3000 systems may include up to 8 rectifiers and supports -48V primary loads up to 3000W of N+1 redundant power.

The internal system controller card is powered by the system bus voltage and is located inside the CDM between the rectifiers and the distribution. The controller allows setting of system parameters, and various alarm thresholds locally on the two-line LCD graphics display with intuitive navigation. The controller can perform user assisted battery tests and has a provision for user-definable alarm inputs as well as alarm relay outputs.

Module Specifications

Shelf	Single 19-inch
Rectifier Input Distribution	Single phase input per rectifier
Output Distribution	Maximum of 4 load circuit breakers and 2 battery breakers 30A per pole 63A max total Load and Battery connections: single-hole M5 lugs to terminate loads.
Maximum Discharge Current	50A per pole
Maximum Recharge Current	Installed rectifier capacity minus plant load
Operating Ambient Temperature**	-40 to 55 °C (CDM), -40 to 70°C (PO) Linearly derate to 500W @ 70°C
Altitude	-60 to 2,500, See Note 1
Humidity	5% to 95% non-condensing
Harmonics	EN61000-3-2 (IEC61000-3-2)
Voltage Fluctuations	EN61000-3-3 (IEC61000-3-3)
Electromagnetic Immunity	Meets Telcordia GR-1089-CORE
Electrostatic Discharge	EN61000-4-2 Level 3
RF Immunity	IEC61000-4-3 Level 3, 10 V/m
EFT	IEC61000-4-4 Level 3, No Error; Level 4, No Damage
Surge	IEC 61000-4-5 Level 3, Level 4, No Damage
Conducted Immunity	IEC 61000-4-6 Level 3, 10V
Voltage Dips, Interruptions, and Variations	IEC 61000-4-11
Safety Agency Approval	Underwriters Laboratories (UL) Listed per UL Subject 1801: Outline of Investigation for Power Distribution Center for Communications Equipment, and cUL Certified (CSA 22.2 No. 60950-1): Safety of Information Technology Equipment VDE licensed to VDE0805/EN60950-1 Rectifiers are individually UL Recognized (UL60950-1), cUL Certified (CSA 22.2 C22.2 No. 60950-1) and evaluated to EN60950-1 by an EC Notified Body, as appropriate.
Note 1: For altitudes above 2,500 meters, de-rate the temperature by 1 °C per 100 meters.	

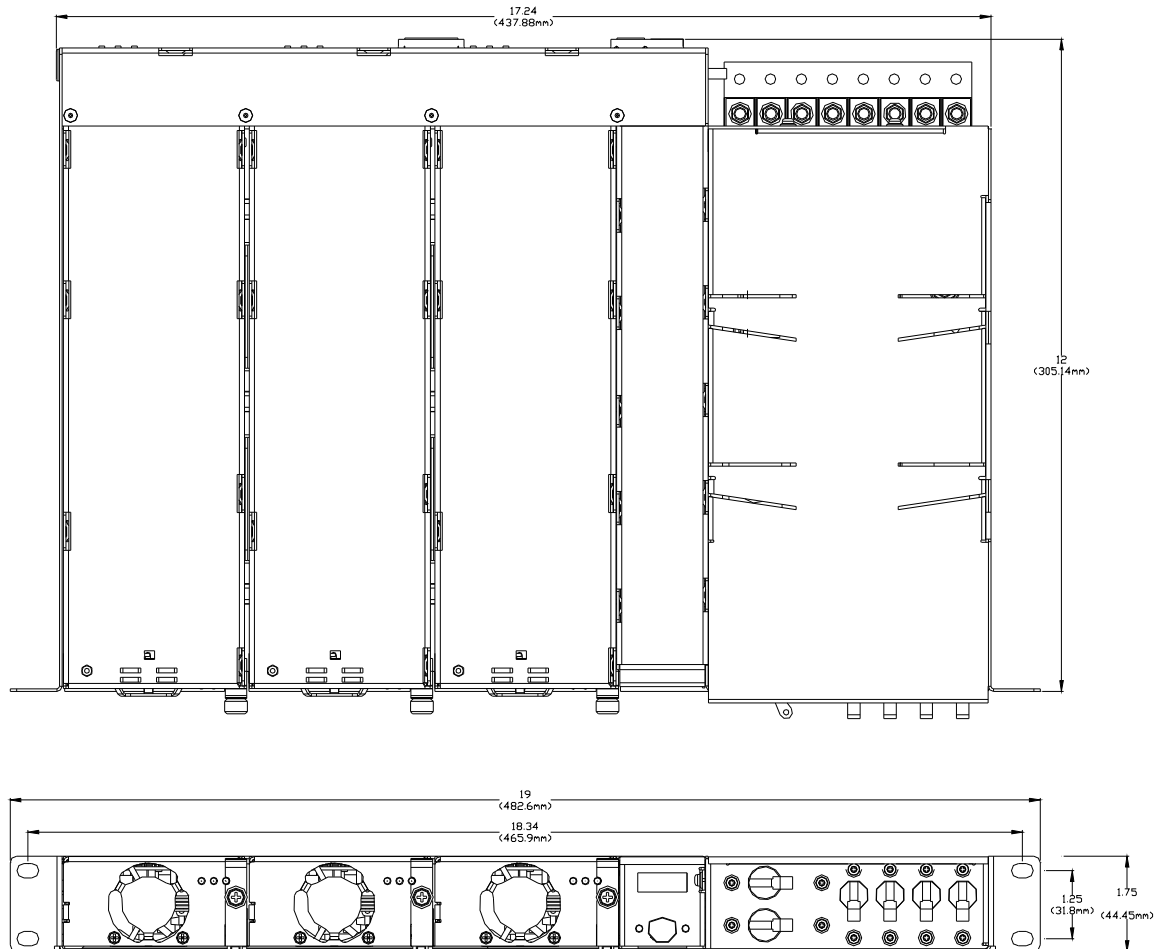
	Height mm (in.)	Max width mm (in.)	Chassis width mm (in.)	Depth mm (in.)	Weight kg (lb)*
EPS3000 CDM	43.6 (1.72)	483 (19.00)	436 (17.16)	301 (11.85)	8.7 (19.14)
EPS3000 PO	43.6 (1.72)	483 (19.00)	436 (17.16)	301 (11.85)	10 (22)

Ordering Information

Please contact your Tyco Electronics sales representative for pricing, availability and optional features.

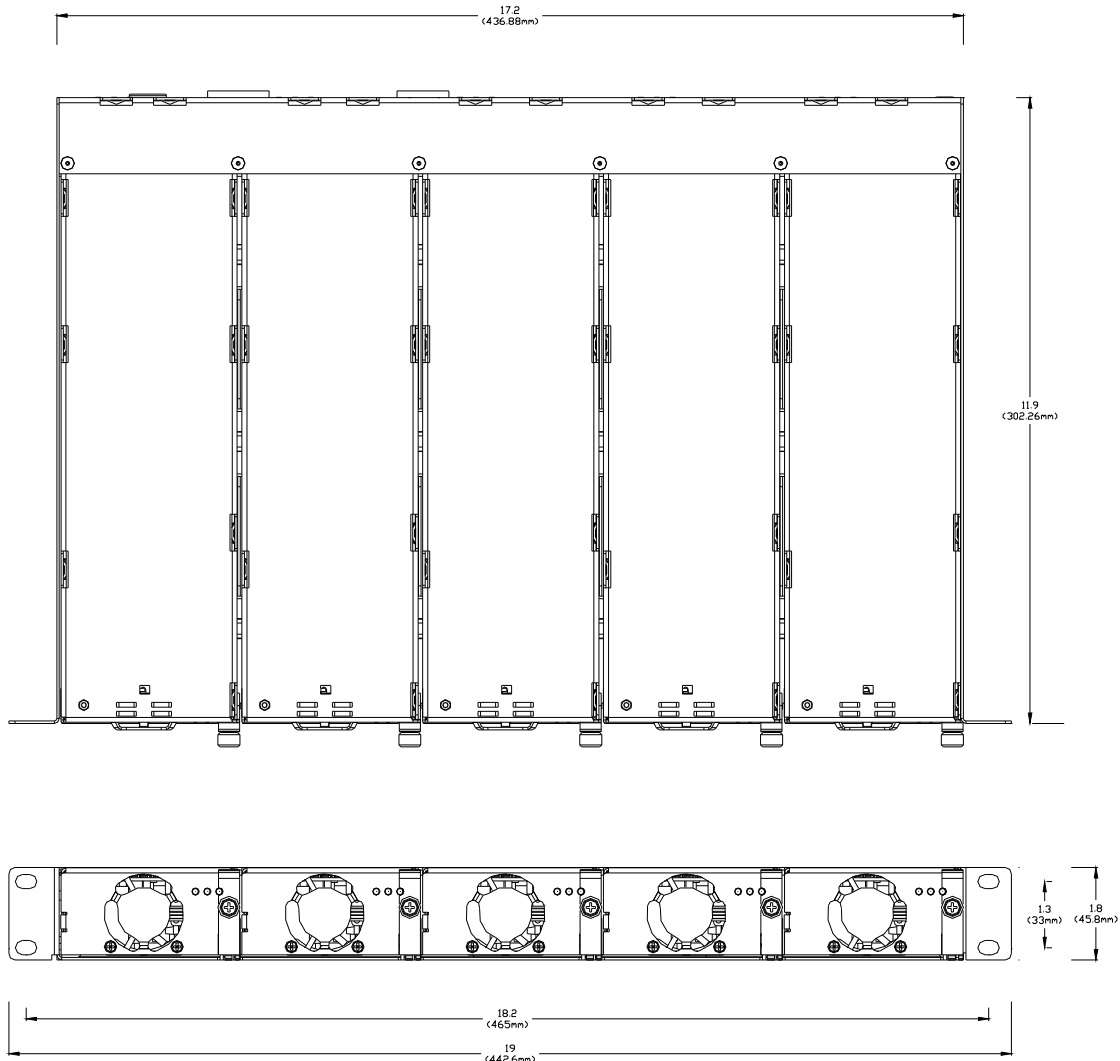
CDM Shelf

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The **EPS 1U CDM Shelf** includes System Controller, LCD Display, Keypad, one LVBD contactor, 6 DC circuit breakers, 2 configurable as battery breakers (50A each) and 4 configured for DC loads (30A each), and slots for up to 3 EP0600 rectifiers

PO Shelf



The EPS 1U PO Shelf has slots for up to 5 EP0600 rectifiers



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