

## DC/DC Converters 125VDC Input System 48VDC Output

Our revolutionary line of DC/DC modular converters have been designed to provide reliable, high quality DC power for critical loads. It is packaged as a scalable, compact 19" rack-mount solution. The modules will be 125VDC input, 48V/40A output modular units which mount in a 19" shelf.



DC/DC Converter Shelf (19") With Four, 125VDC Input, 48V/40A Output Converter Modules and MCU2500

Single shelf 3RU (5.25") high systems can provide up to 160 amps with four 40 amp modules. A second expansion shelf can be added with an additional five modules for up to a total of 360 amps of 48 VDC power.

The modules share the load in parallel, allowing the system to be configured for redundancy to ensure optimum availability for critical loads. If redundancy is configured and a module fails, it is automatically disconnected from the output bus and the remaining modules pick up the load. Since modules are "hot-pluggable", a faulty module can be swapped out without interrupting power to the load.

### Key Features

- **Super Efficiency**
- **Low Output Ripple**
- **Robust Design**
- **N+ 1 Redundancy**
- **No Single Point of Failure**
- **Ease of Installation, Maintenance and System Expansion**
- **Relay Rack or Cabinet Mounting**
- **Hot-Plug Technology**
- **High Frequency Topology**
- **Compact 5.25" x 19" Shelf Mounted Assembly**
- **Light Weight**



## Technical Specifications

SYSTEM	Maximum System Capacity	40A to 160A (base shelf); 40A to 360A (with expansion shelf)
	Maximum Modules Per System	9 (with base and expansion shelves)
	Short Circuit Current Limitation	200% for 1 to 2.5 seconds, then UI characteristic
	Visual Displays (LED)	Mains: red/green flashing Overvoltage: red flashing Operation: green Fault: red Fuse: red flashing
SYSTEM OUTPUT	DC Output Voltage	48VDC
	AC Output Current Per Module	40A
	Output Voltage Regulation	±1%
	Output Ripple	<1%
DC INPUT	Nominal DC Input Voltage	125 VDC
	DC Input Voltage Range	85 to 264 VDC
	DC Input Current	17.6A nominal
	DC Inrush Current	Soft Start Current Limited
	Efficiency	> 91%
OPERATING CONDITIONS	Operating Temperature Range	23° to +104°F (-5° to +40°C)
	Operating Humidity Range	0-95% non-condensing
	Heat Output Per Module	< 577 BTUs per hour @ 100% load
	Cooling	Temperature Controlled Fans
	Elevation	<3,281 ft. (1000 m) without de-rating; over 1000 m, derate 10% per 1000 m
PHYSICAL	Frame Dimensions (HxDxW)	5.2" x 16" x 19" (132.5 x 406.4 x 483 mm)
	Frame Weight	40 lbs. (18.14 Kg)
	Module Dimensions (HxDxW)	5.2" x 11.9" x 3.4" (132.6 x 301.5 x 85.6 mm)
	Module Weight	7 lbs. (3Kg)
	Module Mounting	Hot Pluggable
STANDARDS	Safety	UL1950
	Protection Class	1 to IEC 60950 En 60950
	Radio Interference	En 55022—B

