eSure™ Converter

C48/24 -1500

Key Features

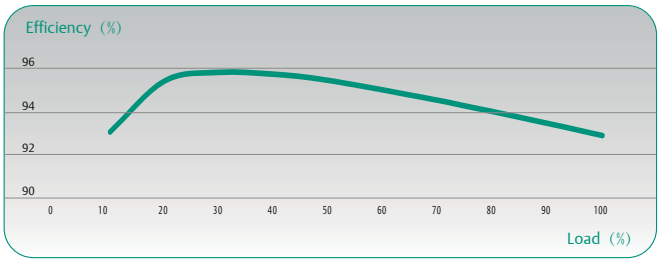
- 1500 Watt high-efficiency converter designed to operate from a nominal 48V DC source to provide 24 VDC load power.
- Optimized depth – reduced footprint allows installation in short-depth racks and cabinets
- DSP (Digital Signaling Processor) – means fewer components, optimized operation and active load sharing for increased reliability
- Compliant with global standards – delivers quality, performance and reliability no matter what the application or location demands
- High efficiency, approaching 96% – reduces power consumption for lower operating costs
- Hot pluggable – facilitates future extensions
- Wide input voltage range to operate in the most demanding environments where input voltage changes
- Wide temperature operating range (-40°C / -40°F to +80°C / 176°F) to meet the harshest climatic environment requirements

In addition to reducing power consumption and lowering operating cost, eSure™ high-efficiency converters offer superior performance and uncompromised reliability.

Description

The eSure™ C 48/24-1500 high-efficiency converter is designed to operate from a nominal 48 Vdc source to provide nominal 24Vdc load power,which is adjustable to application needs. The C 48/24-1500 is a constant power converter designed with the latest patented switchmode technology, using DSP (Digital Signaling Processor) functionality for efficient operation.
For a higher load capacity, converters can be connected in parallel, and intelligent control can be added with the help of a separate controller.





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Technical Specifications

DC Input	
Input Voltage, Nominal	48 VDC
Input Voltage, Permitted Variation	41VDC to 58.5VDC
Max Input Current	39.5A

DC Output	
Output Voltage, Adjustment Range	2 4 t o 2 8 VDC
Output Power	1500W@Vout >24VDC
Output Power, Derated for Input Voltage	See diagram
Output Current	63A
Output Current Limit Set Point	6.3 to 63A
Efficiency	>95%
Psophometric Noise (system)	<2 mV; output noise<38dBrnc
Temperature Derating	See diagram

Control and Monitoring		
Rectifier Alarm and Signaling	Alarm and status reported via CAN bus to system controller	
Visual Indications	Green LED: Yellow LED: Red LED: Flashing Red LED:	Normal Operation Alarm Failure Fan Failure

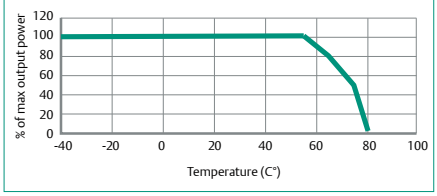
Environmental	
Temperature Range, Operating	-40 to +80°C, -40 to +176°F
Temperature Range, Storage	-40 to +85°C, -40 to +185°F
Relative Humidity	0 to 95%
Altitude	2000 m, 6560 ft at full power
EMC	ETSI EN 300 386 class A, FCC CFR 47 Part 15 class A, Telcordia GR-1089-CORE class A
Safety	IEC 60950, EN 60950, UL 60950

Mechanics	
Dimensions (H x W x D)	42x 8 4.5x252.5mm/1.65x3.33x9.94 inches
Weight	1.13kg/2.49lbs

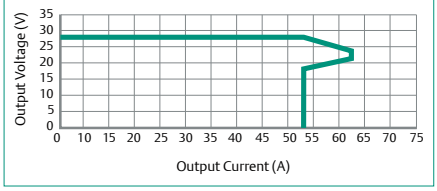
Other Parts	
Controller Units	See separate ACU/ACU+ and SCU/SCU+ datasheets

Diagrams

Output Power vs. Temperature



Output voltage vs. Output current at max. output power 1500 W



Ordering Information

Model Number	Description
1C48/24 1500	Converter 48VDC/24VDC 1500W

EmersonNetworkPower.com/EnergySystems (North America)
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