

# Vertiv™ eSure™ Converter

C48/24 -1500



## Key Features

### Converter, 48 to 24 VDC, 1500 W

- High efficiency over 95% – reduces power consumption lowering operating costs
- High power density – provides more space for revenue generating equipment
- Hot pluggable and interchangeable – for easy expansions and maintenance
- Digital signal processing (DSP) – means fewer components, optimized operation and active load sharing for increased reliability
- Wide input voltage range (41 VDC to 58 VDC) – allows for flexibility, durability and resilience
- Wide operating temperature range from -40°C to +65° – meets the harshest climatic environment requirements
- Compliant with global standards – delivers quality, performance and reliability no matter what the application or location demands

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

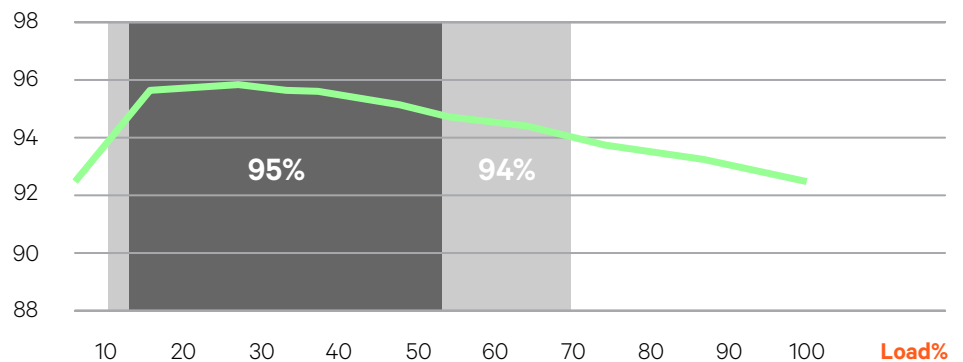
## Description

The eSure C48/24-1500 high-efficiency converter is designed to operate from a nominal 48 Vdc source to provide nominal 24 VDC load power, which is adjustable to application needs. This constant power converter designed with the latest patented switchmode technology, uses digital signal processing (DSP) for efficient operation.

When redundancy is critical or loads are high, multiple C48/24-1500 converters can be connected in parallel to support a variety of telecom applications. Unified remote management and control of the power system is enabled when combined with a Vertiv™ controller.



## % Efficiency



C48 24-1500 Efficiency Curve at 24 VDC Nominal

## Technical Specifications

| DC Input        | C48/24-1500                          |
|-----------------|--------------------------------------|
| Voltage         | 41 VDC to 58.5 VDC, 48 VDC (nominal) |
| Maximum Current | 39.5 A                               |

| DC Output                   |  |
|-----------------------------|--|
| Voltage                     | 24 VDC to 28 VDC   |
| Maximum Power               | 1500 W @ Vout >24 VDC  |
| Maximum Current             | 63 A @ 48-24 VDC, limit set point 6.3 to 63 A (see figure 1) |
| Peak Efficiency             | >95%   |
| Psophometric Noise (System) | <2 mV; <32 dBrc  |

### Control and Monitoring

|                      |   |
|----------------------|---|
| Alarms and Signaling | Alarm and status reported via CAN bus to system controller  |
| Visual Indications   | Green LED: Normal Operation<br>Yellow LED: Alarm<br>Red LED: Failure<br>Flashing Red LED: Fan Failure |

### Environmental

|                       |   |
|-----------------------|---|
| Operating Temperature | -40°C to +80°C / -40°F to +176°F (see figure 2) |
| Storage Temperature   | -40°C to +85°C / -40°F to +185°F                |
| Relative Humidity     | 0 to 95%  |
| Altitude              | 2000 m / 6560 ft at full power                  |

### Standards Compliance

|             |   |
|-------------|---|
| Safety      | EN 60950, IEC 60950, UL60950  |
| EMC         | ETSI EN 300 386 class A, FCC CFR 47 Part 15 class A, Telcordia GR-1089-CORE class A |
| Environment | REACH, RoHS, WEEE   |

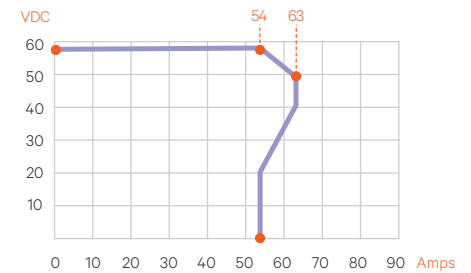
### Mechanics

|                        |  |
|------------------------|--|
| Dimensions (H x W x D) | 41 x 84.5 x 252.5 mm / 1.61 x 3.33 x 9.94 inches |
| Weight                 | 1.13 kg / 2.49 lbs                               |

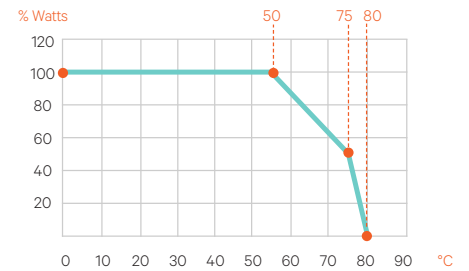
## Ordering Information

| Part Number | Description                            |
|-------------|--|
| 1C48241500  | eSure™ converter, 48 to 24 VDC, 1500 W |

## Figures



**Figure 1:** Output Voltage vs. Output Current at Maximum Output Power 1500 W



**Figure 2:** Output Power vs. Temperature