# Vertiv<sup>™</sup> eSure<sup>™</sup> Inverter

1230-1200



### **Benefits**

With market leading power density, the eSure inverter is a key component in space saving power solutions for your 5G and Edge sites.

- Save precious space with market leading inverter power density (24 VA/in³)
- Minimize cost for energy with dual conversion functionality and high efficiency operation up to 96.3%
- Maximize site availability thanks to zero transfer time
- Ensure full control of site performance with NCU supervising complete back-up solution

If you're looking for a reliable AC and DC backup solution without sacrificing space and efficiency, the eSure<sup>TM</sup> inverter from Vertiv is the perfect choice.

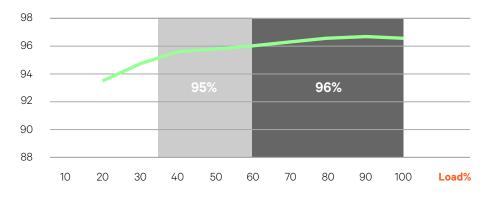
The eSure inverter I230-1200 is based on Vertiv's long experience from both highly reliable DC power and UPS systems, combining the best technologies from two worlds. The result is a power dense dual input (AC and DC) inverter with zero transfer time to keep the important equipment running at any time. With the dual conversion topology of this inverter we can ensure that the load is running in the most efficient way and the rectifier investment can be kept to a minimum – supporting only battery recharge and DC loads.

The eSure inverter offers a highly reliable, modular AC back-up solution that can be paralleled in steps of 1200 watts / 1250 VA. In terms of back-up capability, it can provide many hours of battery reserve. Batteries are modular in steps of 48V blocks.

eSure inverters can be configured in converged NetSure™ systems together with eSure rectifiers or it can be used as a stand-alone inverter solution. The entire system is controlled and monitored by the capable NCU control unit.



#### % Efficiency



1230-1200 Efficiency Curve at 230VAC Nominal

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## **Technical Specifications**

AC Input	1230-1200
Voltage	185 to 275 VAC, 200 to 240 VAC (nominal)
Frequency	50 Hz or 60 Hz
Current	6.8 A maximum
Power Factor	> 0.99 @100% load
Total Harmonic Distortion	< 5% @100% load

#### **DC Input**

Voltage	40 to 58.5 VDC, 48 VDC (nominal)
Current	27 A @-48 VDC

#### **AC Output**

Voltage	200 VAC, 208 VAC, 220 VAC, 230 VAC and 240 VAC
Frequency	50 Hz or 60 Hz
Maximum Power	1200 W / 1250 VA
Maximum Current	Up to 6 A @200 VAC
Peak Efficiency	96.3% AC/AC, 93.5% DC/AC
Temperature Performance	Full output power up to +45 °C at input voltage range of 200 VAC to 240 VAC
Over Capacity (fault clearing)	105%-125% @40-48V (15 s), 125%-200% (1 s), >200% (120 ms)
Total Harmonic Distortion	< 3% @100% load

#### **Control and Monitoring**

Alarms and Signaling	Alarm and status reported via CAN bus to system controller
Visual Indications	Green LED: Normal Operation Yellow LED: Alarm Red LED: Failure

#### **Environmental**

Operating Temperature	-20 to 80 °C, -4 to +176 °F (see figure for derating)
Storage Temperature	-40 to 70 °C, -40 to +158 °F
Relative Humidity	0 to 95%
Altitude	3000 m, 10000 ft. (2000 m, 6562 ft. at full power)

#### **Standards Compliance**

Safety	EN/IEC 62040; CE
EMC	IEC/EN 62040-2, GR-1089-CORE, FCC Part 15 Subpart B, Class A (B radiation, A conductive)

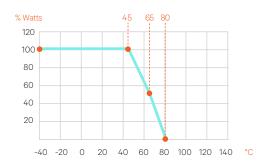
#### Mechanics

Dimensions (H x W x D)	41 x 84.5 x 252.5 mm / 1.6 x 3.3 x 10.0 inches
Weight	1.3 kg / 2.86 lbs

## **Ordering Information**

Part Number	Description
112301200	eSure™ inverter, 230 VAC, 1200 W

## **Figures**



Output Power vs. Temperature at 185 VAC > Vin > 275 VAC

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