NetSure™ Solar Converter Shelf

Benefits

- Decrease operating costs by supplementing grid or generator power at on-grid, off-grid or bad-grid sites with Vertiv's add-on converter shelf
- Easily adapts to most existing telecom DC power systems while occupying minimal rack space
- Appreciate the high-efficiency, wide operating temperature range and convenience of NetSure™ 2kW modular solar MPPT converters
- Reduce the need for costly site visits with the remotely accessible M240 controller
- Enjoy predictable and reliable performance backed by Vertiv's expert training and support personnel

Achieve your sustainability targets and reduce operating costs by augmenting your existing DC power system with the high density, highly efficient NetSure Solar Converter Shelf.

The NetSure Solar Converter Shelf is a compact -48 VDC solution that can easily be added to an existing telecom DC power plant from any manufacturer. Built on the proven reliability of the S48-2000e3 converter module, the NetSure Solar Converter Shelf delivers industry-leading system density and full power up to 60°C.

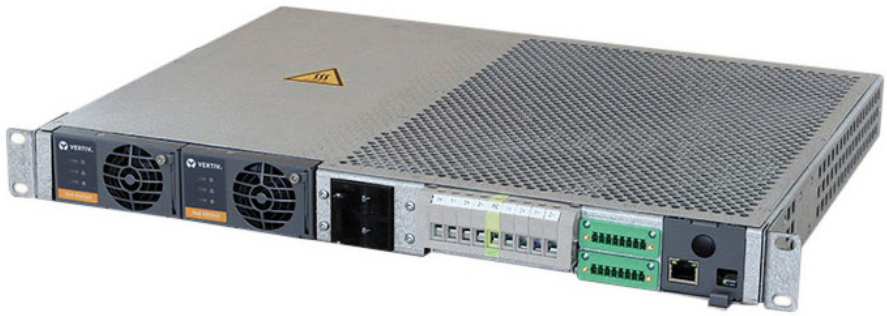
The converter shelf comes equipped with a NetSure™ M240S controller that provides control of the solar converters and enables seamless operation with your existing DC power plant and batteries.

Vertiv supports this solution with a complete array of solar panels, mounting systems, protection, cables, and enclosures. Our comprehensive solar portfolio enables you to easily add trouble-free, secure connections from solar panel to load.

Application

With the cost of energy rising and the environmental need to minimize carbon emissions, adding the NetSure Solar Converter Shelf to your existing network infrastructure is a great way to decrease operating costs.

- Reduce energy consumption at on-grid sites
- Minimize battery stress and replacement at bad-grid sites
- Decrease generator run-time, maintenance and fuel costs at off-grid CDC sites



NetSure™ Solar Converter Shelf

Technical Specifications

DC Input

Voltage and Current	120 VDC to 420 VDC, at a maximum of 12 A
Over-Voltage Protection	Yes
Input Connections	4-10 mm^2 screw terminal
Surge Protection	Available as option, embedded or with a solar protection box
MPPT Accuracy	>99% when output power is greater than 350 W
MPPT Converter Capacity	Up to 2

DC Output

Voltage	-42 VDC to -57.6 VDC
Maximum Power *	4 kW at 60 °C (two converters @ 2 kW each)
Maximum Current	84 A at -48 VDC
Efficiency	96.8%
Protected Feed	100 A, 2P circuit breaker

Control and Monitoring

Controller	M240S
Communication Ports	RS-485, RJ-45, Dry contacts for alarms and remote off request
Wireless Interface	Bluetooth supported by iOS and Android
Communication Protocols	IPv4, HTTP
Temperature Sensor	1 (optional)

Physical

Mounting	Standard 19" rack mounting; supports 23" rack and wall mounting
Dimensions (H x W x D)	47.5 x 444.5 x 347.7 mm (without brackets)
Weight	5 kg (fully installed)

Environmental and Standards Compliance

Operating Temperature	-20 °C to +60 °C, 0 to 95% RH humidity (non-condensing) from 0-2000 m in altitude
Safety	CE 93/69/EC , EN60950-1 and IEC62109-1, and Low Voltage Directive 2014/35/EU
EMC	ETSI EN 300386, Class B
Environment	RoHS 6 and REACH, WEEE

* System operation can be extended to 65 °C when the solar array is operated at 3500 watts or less.

Ordering Information

Part Number	Description
BMK1105 103/003	NetSure solar converter shelf, M240S controller and one solar converter
BMK1105 103/004	NetSure solar converter shelf, M240S controller, two solar converters and installed internal surge protection and fuse kit.
S48-2000E3	Solar converter, -48 VDC, 2000 watt

Note: Other configurations available upon request.

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