

# NetSure™ 531 A31

48V DC Power System -6kW



## Key Features

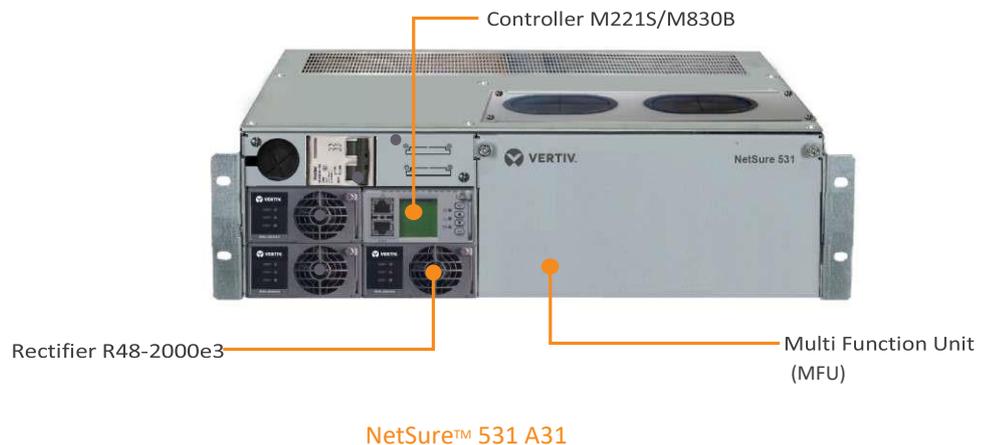
- The installation space and cost can be saved due to its small size and embedded installation
- Wide input voltage range(85-300Vac), strong ability in adapting power grid
- Rectifier working temperature range: -40 +80°C
- Supports ECO sleep technology, that optimizes system efficiency
- Efficiency of the rectifier is above 96%, efficiency of the system is above 95%
- Intelligent battery management system, which prolongs the working life of the battery
- Provide multiple communication ports such as RS232, Ethernet port, dry contacts, etc, for flexible networking to achieve remote monitoring

## Applications

- Power supply for LTE in-building solutions
- Power supply for FTTx broadband multi-solutions
- Power supply for macro station and outdoor cabinet

## Description

The Netsure™ 531 A31 series from Vertiv is a fully-integrated DC power system consisting of a rectifier and controller that provides maximum efficiency for mobile communication applications such as LTE and FTTx deployments or macro stations. It is designed to meet the high-efficiency demands of mobile applications, with high reliability, high power density, and fully digital features. The built-in high efficiency R48-2000e3 rectifier also provides an ultra high efficiency of up to 96%, significantly improving the energy efficiency.



NetSure™ 531 A31	
System Capacity	6kW
Controller	M221S / M830B
Rectifier	Max: 3xR48-2000e3/R48-2000A3
AC distribution	1x63A/2P
Battery Capture	2x63A/1P
DC distribution	8 Routes:1x50A/1P, 3x32A/1P, 4x16A/1P 6 Routes:1x40A/1P, 2x30A/1P, 3x20A/1P
Lightning Protection (Optional)	C-level lightning protection at AC side (20kA) D-level lightning protection at DC side (10kA)
Dry Contact	M221S or M830B:4 alarm outputs (8 alarm outputs is optional)
Optional	Top Cover, Temperature Sensor, Battery Rack, Extended Board, LVD2

Rectifier	
Configuration	Model

Efficient Module Normal: R48-2000A3 High Efficiency: R48-2000e3

Electric Parameters	Description
Input Voltage	85VAC ~ 300VAC
Power Factor	≥0.99
Efficiency	Normal: >94%; Efficiency: >96%
Max. Input Current	12A
Output Voltage	-42VDC-58VDC
Output Current (@-48Vdc)	0~42A
Nominal Voltage	-48VDC
Rated Voltage	-53.5Vdc
Operating Temperature	-40°C ~ +80°C, -40°C ~ +65°C Full load output voltage up to +65°C at input voltage range 200-300Vac

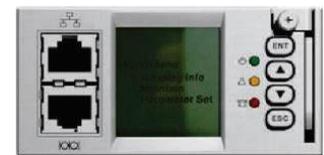
### Controller M221S/M830B

		M221S	M830B
Display		LCD with 8x16 characters	128 x 160 Pixels TFT LCD
Communication Interface		Rs232, Ethernet	Rs232, RS485, Ethernet, USB
Protocol		HTTP, SNMP, YDN23	Ipv4, IPv6, HTTPS, SNMP V 2/ V 3, EEM, SocTpe, Rsoc, Mod Bus
Inputs	Analog	1 battery currents, 1 bus voltage, 1 battery voltage, 2 temperatures, 4 midpoint battery voltage	2 battery currents, 1 load current, 1 bus voltage, 2 battery voltages, 3 temperatures, 1 fuel level sensor and much more with additional interface boards
	Digital	2 load fuses, 4 battery fuses, 1 bi-stable contactor status, 4 user inputs(Optional, need extra board) load fuse and battery fuse can be configured as midpoint battery voltage, load fuse and battery fuse	1 input for status of surge protective device auxiliary contacts, 12 load fuses, 6 battery fuses, bi-stable contactor status
Outputs		1 LVD mono or bistable contactors, 1 LVD mono contactor, 8 user relay outputs (Optional, need extra board)	3 LVD mono & bistable contactors

Mechanical Parameters	NetSure 531 A31	R48-2000e3	M221S	M830B
Structure	19 inches(W), 3U(H)	2 x 1U	2 x 1U	2 x 1U
Dimensions (W x D x H)(mm)	483 x 310 x 132	84.5x252.5x41	86.8x211.5x43	86x208x43.4
Weight (kg)	≤16 (including rectifier and controller)	<1.13	< 0.8	< 1



R48-2000e3



M221S



M830B