NetSure™ 731 A41

48V DC Power System

VERTIV

Key Features

- **Ultra-high efficiency: 98%** efficient eSure™ rectifiers ensure optimal total cost of ownership.

- **Compact power system:** Delivers -48 V, 240 A DC power output in a minimal footprint-Saves a considerable amount of user space, leading to more room space for revenue generating equipments.

- **Easily adaptable in a harsh grid environment:** Supports a wide range of input voltage ,i.e. from 85 VAC to 300 VAC ; enhances the battery life significantly.

- **Advanced battery management function:** Includes BLVD, temperature compensation, auto voltage regulation, reserve time prediction, and online battery test, among others to effectively prolong the battery life.

- **ECO mode function:** Embedded with an advanced energy optimization technique ensuring high efficiency at varying load levels.

- **Multiple communication interface:** Built-in communication ports such as RS 232, Dry contacts, and Ethernet, enable flexible remote controlling & monitoring.
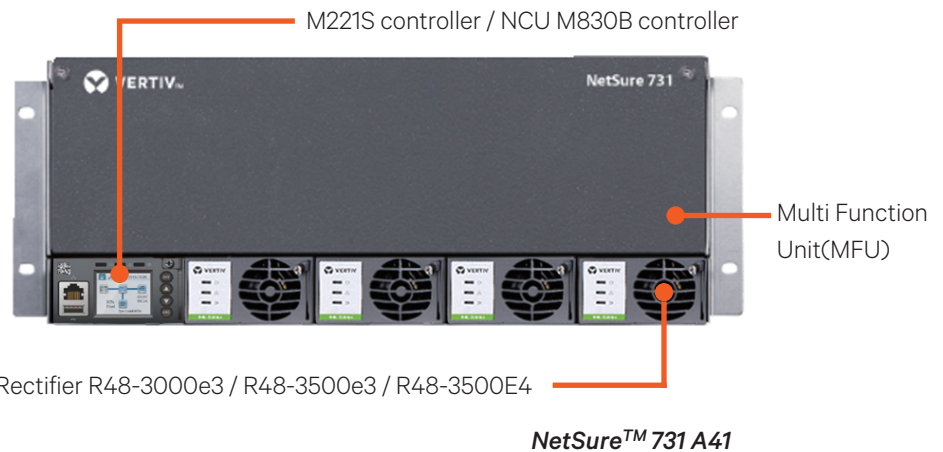
Applications

- LTE coverage power supply

- Outdoor cabinet power supply

- Integrated FTTx access and traditional base station, equipment room power supply

Description

The NetSure™ 731 A41 series showcases the new platform's higher power densities, designed to deliver reliable and uninterruptible DC power for the telecom access applications. Up to four 3000W/3500W eSure rectifiers can be accommodated that deliver a system efficiency of greater than 97.5% and even enable significant energy savings at low loads in the ECO mode. The system's unmatched environmental tolerance and streamlined architecture, combined with intelligent monitoring and controls, make the industry's most reliable DC power systems even more robust.

The NetSure™ 731 A41 series has an integrated standard control unit; alternatively, an advanced unit with enhanced load management capabilities is also readily available. Remote Monitoring and software updates are available through web browsers with access via multiple gateways, resulting in rapid deployment, upgrades, and efficient service.

M221S controller / NCU M830B controller

Multi Function Unit(MFU)

Rectifier R48-3000e3 / R48-3500e3 / R48-3500E4

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Rectifier		4 x R48-3000A3 / R48-3000e3 / R48-3500e3 / R48-35000E4
Controller		M221S / M830B
AC Distribution	Input	1 x 125 A / 2P
	Output	1 x 16 A / 16P
Battery Distribution		2 x 125 A / 1P
DC Distribution	BLVD	2 x 63 A / 1P, 4 x 32 A / 1P, 2 x 16 A / 1P
	LLVD	2 x 32 A / 1P, 2 x 16 A / 1P
Lightning Protection		The AC side of the system is equipped with Class C lightning protection and the DC side is equipped with class D lightning protection
Dry Contact		M221S: 3 alarm input, 4 alarm output, 8 alarm output at most (optional) M830B: 8 alarm input, 8 alarm output
Optional		Cover, temperature sensor, battery rack, dummy plate of module

Note: Customizable to support up to five rectifier slots.

Rectifier

Model Name	R48 - 3000A3 / R48-3000e3 / R48-3500e3 / R48-3500E4
Input Voltage	85 VAC to 300 VAC (For A3 & e3 series), 85 VAC to 264 VAC (E4 series)
Power Factor	>0.99 for 50% - 100% load
Efficiency, Peak	R48-3500E4: 98%; R48-3500e3: 96.3%; R48-3000e3: 95.5%
Max. Input Current	22 A
Output Voltage	-42 VDC to 58 VDC
Output Current (@-48 VDC)	R48-3000A3 / R48-3000e3: 62.5A ; R48-3500e3 / 3500E4: 72.9 A
Nominal Voltage	-48 VDC
Operating Tempeature	-40 to +70ºC, -40 to +158ºF

R48-3500e4

R48-3000e3

R48-3500e3

Controller-M221S

Display		LCD with 8 X 16 characters
Communication Interface		RS 232, Ethernet
Protocol		HTTP, SNMP, YDN23
Inputs	Analog	1 battery current, 1 bus voltage, 1 battery voltage, 2 temperatures, 4 midpoint battery voltages
	Digital	2 load fuses, 4 battery fuses, 1 bi-stable contractor status, 4 user inputs (Optional, need an extra board)
Outputs		1 LVD mono or bistable contractors, 1 LVD mono contractor, 8 user relay outputs (Optional, need extra board)

M221S

Controller-M830B

Display		128 x 160 Pixels TFT LCD
Communication Interface		RS 232, RS 485, Ethemet, USB
Protocol		Ipv4, IPv6, HTTPS, SNMP V2/V3, EEM Soc Tpe, Rsoc, Modbus
Inputs	Analog	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	1 input for status of surge protective device auxiliary contacts, 12 load fuses, 6 battery fuses, bi-stable contractor status
Outputs		3 LVD mono & bistable contractors

M830B

NetSure™ 731 A41

Structure	19 inches (W), 4U (H)
Dimensions (W x D x H) in mm	483 x 390 x 178
Weight	≤25 kg (including rectifier and controller)

ES-EN-ASIA-2-1-2-19-5