NetSure™ 7100 Series

48V DC Power System

Key Features

- **Easily Adaptable** - Tolerates a wide range of input voltage, i.e. from 85 to 305 VAC
- **High Efficiency** - **96.3%** efficient eSure rectifier delivers optimized total cost of ownership
- **ECO Mode** - Embedded with an advanced energy optimization technique that enables signifi-cant savings, even at low load operation
- **Advanced Battery Management** - Automatic battery tests in conjunction with battery midpoint monitoring (optional) ensures early detection of battery problems
- **Multiple Communication Interface:** Built-in communication ports such as RS 232, RS 485, USB, and Ethernet enable flexible remote controlling & monitoring

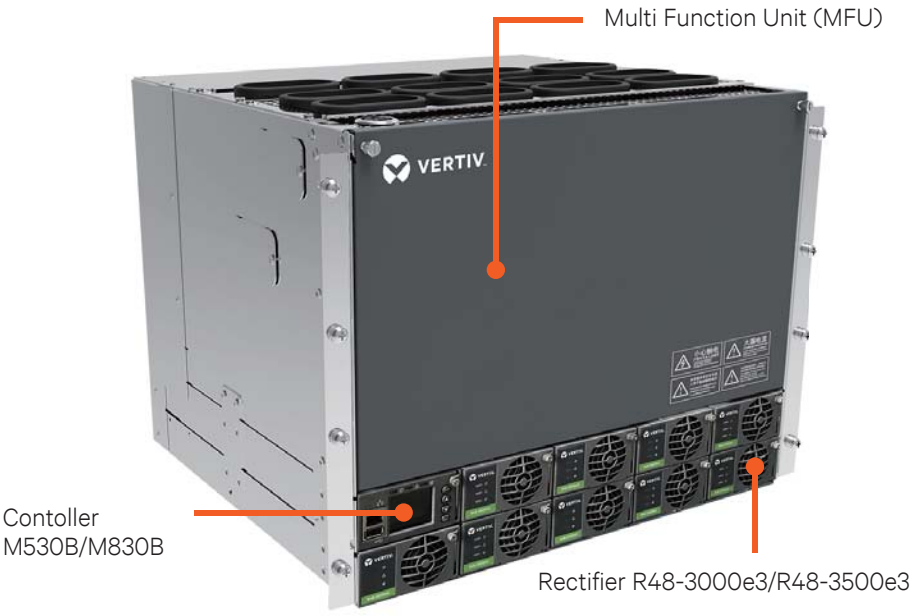
Highly reliable, uninterruptible cost-effective power systems for telecom installations

Description

The NetSure™ 7100 series, a compact -48 VDC power solution, features an intelligent controller, a high-efficiency rectifier, and multiple distribution options to meet a variety of application demands. .

The NetSure™ 7100 series provides both reliable DC output power and low total cost of ownership. The 3500W eSure rectifier delivers peak system efficiency above 96%. Maximum efficiency is achieved by an advanced energy optimization function known as ECO mode, enabling significant energy savings even at low load operation.

Standard remote monitoring and software upgrades are available through ethernet. Remote access via RS485 (Modbus), as well as GPRS/3G/4G modems are available as options.



***NetSure*™ 731 A91**

Applications

The NetSure™ 7100 series is ideal for telecom access and network edge applications requiring reliable, high power density up to 540 A at -48 VDC. The system is available as a subrack for integration in an outdoor enclosure or existing cabinet, mounted on top of a battery rack.

Technical Specifications

Model		NetSure™ 731 A91-S1	NetSure™ 731 A91-S2	NetSure™ 731 A91-S3
Capacity		540 A	540 A/450 A	450 A
Rectifier		R48-3500e3, Max 9 numbers	R48-3000e3 / R48-3500e3, max 9 numbers	R48-3000e3, Max 9 numbers
Controller		M 830B	M 530B	M 830B
Input Voltage		3P + N + PE / 380 -415 VAC		
Input Frequency Range		45 to 65 Hz		
Input Voltage Range		85 VAC to 305 VAC (output derating below 176 VAC)		
Input Power Factor		≥0.99		
Rectifier Efficiency, Peak		R48-3500e3: 96.3%; R48-3000e3: 95.5%		
Output DC Voltage		-43.2 to -57.6 VDC		
DC Power Distribution	BLVD	63 A / 1P × 2 MCB; 32 A / 1P × 2 MCB; 16 A / 1P × 2 MCB		
	LLVD	63 A / 1P × 3 MCB; 32 A / 1P × 3 MCB; 16 A / 1P × 2 MCB		
Battery MCB		4 × 125 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		
Weight		≤60 kg (Including Rectifiers & Controller)		
Dimensions (H x W x D) in mm		352 × 483 × 400		

Controller		M830B	M530B
Display		128 x 160 Pixels TFT LCD	128 x 160 Pixels TFT LCD
Communication Interface		RS 232, RS 485, Ethemet, USB	RS 485, RS 232, 10/100Mbps Ethernet, IPv4 & IPv6, CAN
Protocol		IPv4, IPv6, HTTPS, SNMP V2/V3, EEM Soc Tpe, Rsoc, Modbus	HTTP, SNMP, YDN23
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	3 battery current, 1 bus voltage, 3 AC voltages, 3 AC currents, 9 battery current, 1 DC energy meter-voltage, 3 DC energy meter-current
	Digital	1 input for status of surge protective device auxiliary contacts, 12 load fuses, 6 battery fuses, bi-stable contractor status	20 load fuses, 4 battery fuses, 1 SPD alarm
Outputs		3 LVD mono & bistable contractors	2 Mono Contactors

Rectifier	R48-3500e3	R48-3000e3
Input Voltage	85 to 305 VAC (output derating below 176 VAC)	
Input Frequency	45 Hz to 65 Hz	
Power Factor	>0.99 for 50% to 100% load	
Efficiency, Peak	96.3%	95.5%
Maximum Input Current	22 A	
Output Voltage	-42 VDC to 58 VDC	
Maximum Output Current	73 A @ -48 VDC	62.5 A @ -48 VDC
Operating Temperature	-40 to +75 °C (-40 to +167 °F)	-40 to +70 °C (-40 to +158 °F)

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