

NetSure™ 731 A41 Series

48V DC Power System



Key Features

- **Ultra-compact power system:** Delivers -48V, 300A 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 85-300 Vac ; enhances the battery life significantly.
- **High efficiency:** Upto 96% efficient eSure™ rectifiers ensure optimal total cost of ownership.
- **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, that are designed to deliver reliable and uninterruptible DC power for the telecom access applications. Up to five 3000W /3500W eSure rectifiers can be accommodated that deliver a system efficiency of greater than 95% 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.



NetSure™ 731 A41

NetSure™ 731 A41		
Rectifier	5 x R48-3000A3 / R48-3000e3 / R48-3500e3	
Controller	M221S / M222S / M830B	
AC input	Compatible	1P/220V and 3P/380V
Battery distribution	4 x 125A / 1P	
DC distribution	BLVD	3 x 50A / 1P, 2 x 25 / 1P
	LLVD	3 x 16A / 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 / M222S: 3 alarm input, 4 alarm output 8 alarm output at most (optional) M830B: 8 alarm input, 8 alarm output	
Busbars and wires	Pure copper with current density<3A/sqmm for all busbars & wires	

Rectifier

Electric Parameters	Description
Model name	R48 - 3000A3 / R48-3000e3 / R48-3500e3
Input Voltage	85 VAC ~ 300VAC
Power Factor	>0.99 for 50% - 100% load
Efficiency	R48-3000e3: 95.5% (Peak) ; R48-3500e3: 96.3%(Peak)
Max. Input Current	22A
Output Voltage	-42VDC-58VDC
Output Current (@-48Vdc)	R48-3000A3 / R48-3000e3: 62.5A ; R48-3500e3: 72.9A
Nominal Voltage	-48VDC
Operating Temperature	-40 ~ +70°C, -40~ +158°F



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, Ethernet, 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-Vertical direction

Mechanical Parameters NetSure™ 731 A41 Series

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