

# NetSure 531 A91

## Embedded High-Frequency Switch Mode Power System

### Key Features

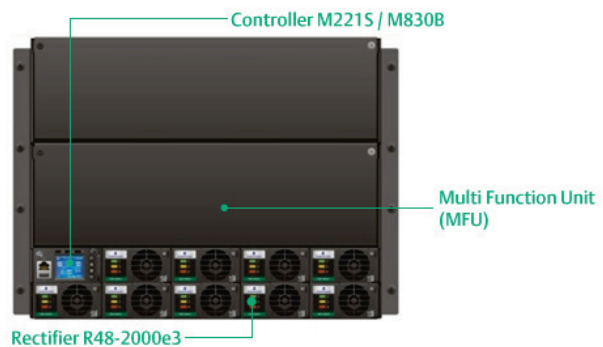
- The data center area and the installation cost can be saved due to its small size and embedded installation
- Wide input voltage range (85-300Vac), strong ability in adapting power grid
- Rectifier working temperature range: -40 +80°C (full load output if the range is -40 +55°C, derating output if exceeding 55°C)
- Perfect lightning protection at AC side, DC side and signal side
- Efficiency of rectifier is above 96%, efficiency of system is above 95%
- Battery management, which prolongs the working life of battery
- Provide multiple communication ports such as RS232, Ethernet port, dry contacts, etc, for flexible networking to achieve remote monitoring

### Application

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



NetSure 531 A91 subrack is designed by Emerson Network Power after many years of development and online operating experience. It is designed to meet the needs of LTE, FTTx, data communication, transmission and access devices. This subrack power system is highly reliable, high power density, high performance and it is fully digital




### NetSure 531 A91

	NetSure 531 A91
System Capacity	18kW
Controller	M221S / M830B
Rectifier	Max: 9×R48-2000e3
AC distribution	(Input ) 1×63A/4P
Battery Capture	2×125A/1P
DC distribution	5×63A/1P, 5×32A/1P, 8×10A/1P
Lightning Protection	C-level lightning protection at AC side, lightning protection at DC side and signal side
Dry Contact	3 alarm inputs, 4 alarm outputs (8 alarm outputs is optional )
Optional	Top Cover, Temperature Sensor, Battery Rack



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### Rectifier

Configuration	Model	R48 - 2000e3
Efficient Module	Normal:R48-2000A3 High Efficiency:R48-2000e3	
Electric Parameter	Description	
Input Voltage	85Vac ~ 300Vac	
Power Factor	≥0.99	
Efficiency	Normal: > 94%; High Efficiency: > 96%	
Max. Input Current	12A	
Output Voltage	-42Vdc -58Vdc	
Output Current	0 ~ 42 A	
Nominal Voltage	-48 Vdc	
Rated Voltage	-53.5 Vdc	
Operation Temperature	-40°C ~ +80°C , Full output power up to +65°C at input voltage range 200-300Vac	

### Controller M221S / M830B

	M221S	M830B
Display	LCD with 8×16 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
Input	Analog	1 battery currents, 1 bus voltage, 1 battery voltage, 2 temperatures, 4 midpoint battery voltage
	Digital	2 load fuses, 4 battery fuses, 1 bi-stable contactor statues, 4 user inputs(Optional, need extra board) load fuse and battery fuse can be configured as midpoint battery voltage, load fuse and battery fuse
Outputs	1 LVD mono or bistable contactors, 1 LVD mono contactor, 8 user relay outputs (Optional, need extra board)	1 input for status of surge protective device auxiliary contacts, 12 load fuses, 6 battery fuses, bi-stable contactor status
		

Mechanical Parameter	Netsure 531 A91	R48-2000e3	M221S	M830B
Structure	19 inches(W), 8U(H)	2 x 1U	2 x 1U	2 x 1U
Dimensions (W×D×H) (mm)	483×310×356	84.5×252.5×41	86.8×211.5×43	86×208×43.4
Weight (Kg)	≤40(exclude rectifier and controller)	<1.13kg	< 0.8kg	< 1 kg

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