

NetSure™ 721 Series

DC Power System

Key Features

- High Efficiency — 96.5% efficient eSure™ rectifiers ensure optimized total cost of ownership
- Modular Design — simple to install and operate; allows incremental cost-effective system growth
- Advanced Controller — offers battery management, site monitoring and configuration management
- Remote Access — options allow users to view, control and interact with the system using an Ethernet interface
- Plug'n'Play — add rectifiers and converters without changing the settings and making adjustments; no system interruption
- Front Accessible — allows for easy installation, additions and maintenance
- Constant Power — delivers more current at lower voltages to meet load or recharge demand
- Safety Compliance — NEBS Level 3 certified; UL Listed to UL subject 1801



High-Efficiency eSure™ Rectifiers
R48-2000e3 (left) & R48-3500e (right)

High efficiency 3500 watt and 2000 watt constant power rectifiers are available to cover a wide range of applications.

Description

The modular NetSure™ 721 power system with 3500 watt or 2000 watt rectifiers and 1500 watt DC to DC converters provides up to 4000 amps of current for -48 volt systems with up to 500 amps at +24 volts. The basic components of the power system include the ACU+ control unit, module mounting shelf assemblies which house the rectifiers and converters, and a modular distribution cabinet.

The NetSure™ 721 power system contains a powerful, microprocessor-based control system capable of monitoring and controlling up to 60 rectifiers and converters. The ACU+ controller provides a 4x16-character alphanumeric display, which can be activated at the touch of a keypad.

Each shelf can accommodate up to six plug'n'play rectifiers, which are controlled by the ACU+. Additional shelves can be added as load requirements increase. The 2000 watt rectifiers and 1500 watt -48VDC to +24VDC converters are housed in shelves that occupy 1RU. Each shelf accommodates rectifiers in all six positions and converters in three positions.

The NetSure™ 721 can be expanded to up to three distribution bays for a total capacity of 4000 amps and up to twelve distribution panels. Each NetSure™ 721 distribution cabinet is modular by row and position. Four distinct distribution cabinet sizes are available to accommodate from one to four distribution panels. This allows the system to be configured in relay racks of various heights for installation in low-profile sites or atop batteries or other equipment to make more effective use of floor space. Several distribution panels are available offering different combinations of distribution positions, low voltage disconnect and battery disconnect options.

Distribution device options include 1 to 250 amp bullet-style circuit breakers, 3 to 125 amp TPS-style fuses in plug-in bullet-style holders, 100 to 800 amp GJ/218-style circuit breakers, 70 to 250 amp TPL-B style fuses and 70 to 800 amp TPH-style fuses. These devices can be configured for both -48V load and battery disconnect and +24V load (bullet devices only). A GMT fuse module is also available.

Application

The NetSure™ 721 system is ideal for wireless, and wireline applications, including cell sites, MTSOs, small COs, datacenters, co-locations, huts, vaults and enclosures.



NetSure™ 721

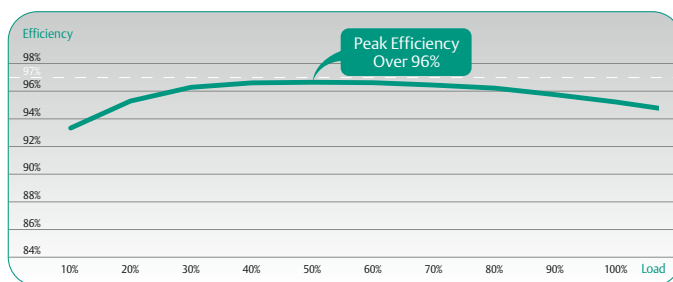


Technical Specifications (System)

System Features	
Nominal System Voltage	-48VDC (-42.0 to -58.0VDC range)
Secondary Output Voltage	+24VDC (+24.0 to +28.0VDC range)
Control	Microprocessor (ACU+)
Rated Output Capacity	
Bay	2000 amps (48VDC) and 500 amps (24VDC)
Rectifier	3500W (R48-3500e) or 2000W (R48-2000e3)
Shelf	438 amps (3RU shelf) or 250 amps (1RU shelf)
Distribution Panel	600 amps
Physical Characteristics	
Framework Type	Relay rack (can be mounted in enclosures)
Mounting Width	23 inches
Mounting Depth	20 inches
Access	Front access for installation, operation and maintenance
Environmental	
Operating Temperature	-40°F to 104°F (-40°C to 40°C) continuous operation
Storage	-40°F to 185°F (-40°C to 85°C)
Humidity	0% to 95% relative humidity, non-condensing
Ventilation	Rectifiers and converters are fan-cooled front to rear
EMI/RFI Suppression	Conforms to FCC rules Part 15, Subpart B, Class B and EN55022 Class B, radiated and conducted
Safety Compliance	UL Listed 1801, cUL, NEBS Level 3

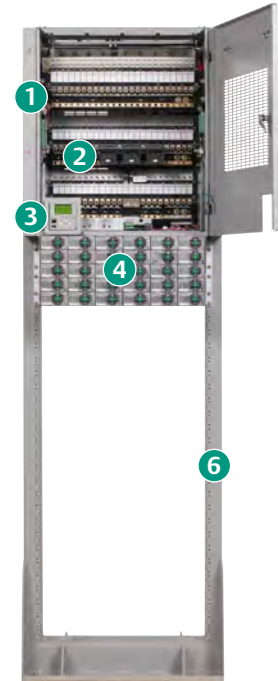
Ordering Information

Part Number	Description
582127000	NetSure™ 721 DC power system
1M820DNA	ACU+ controller
1R483500E	3500 Watt eSure™ rectifier
588705000	Power shelf for 3RU (3500 watt) rectifiers
1R482000E3	2000 Watt eSure™ rectifier
1C48241500	1500 Watt -48VDC to +24VDC converter
588705300	Power shelf for 1RU (2000 watt) rectifiers and converters



eSure™ Rectifier Efficiency Curve

System Elements



-48VDC NetSure™ 721

- 1 AC Connection Panel (both sides)
- 2 DC Distribution Cabinet
- 3 ACU+ Controller
- 4 Rectifiers/Converters
- 5 Relay Rack

EmersonNetworkPower.com/EnergySystems (North America)

EmersonNetworkPower.eu/EnergySystems (EMEA)

© Emerson Network Power, Energy Systems, North America, Inc. 2013.

Business-Critical Continuity™, Emerson Network Power™, the Emerson Network Power logo, Emerson™ and Consider it Solved are service marks and trademarks of Emerson Electric Co. EnergyMaster™, eSure™, NetPerform™, NetReach™, NetSpan™, NetSure™ and NetXtend™ are trademarks of Emerson Network Power, Energy Systems, North America, Inc. Any other product, brand, or company names or logos are the property of the respective owner.

While every precaution has been taken to ensure accuracy and completeness herein, Emerson Electric Co. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications subject to change without notice.

EMERSON. CONSIDER IT SOLVED.™