

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

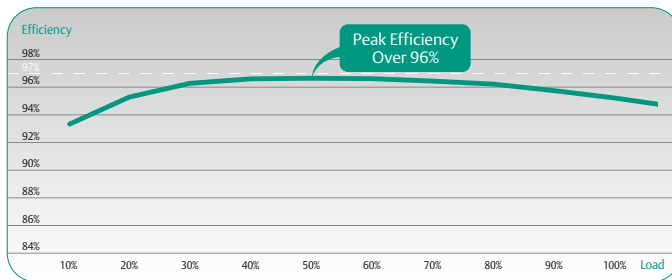


Technical Specifications (System)

| 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

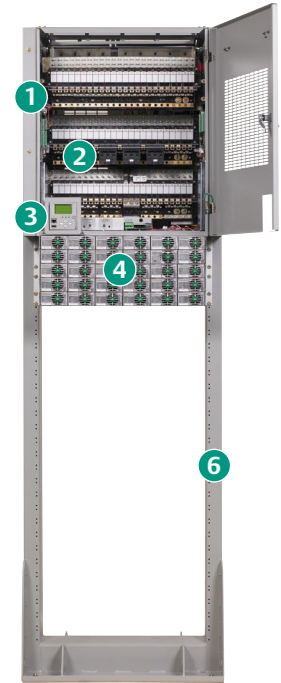
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System Elements



-48VDC NetSure™ 721

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

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