

DC Power for
Business-Critical Continuity™

DC Power Systems

Powerful Solutions for Critical Data and Telecom Applications





Emerson DC Power Solutions are Ideal for...

- CATV Headend
- Central Office /MTSO
- Computer Room
- Data Center
- Enterprise (PBX, LAN)
- Network Closet
- Outside Plant Cabinets & Shelters
- Radio Base Station / Microwave Site
- Wireless & Wireline Access

From major switching and data centers to remote shelters and computer rooms, Emerson DC power systems have the features and proven performance to match your network application needs.

A Brilliant Combination of Technology and Real-World Capability

The Emerson Network Power line of DC power systems demonstrates unparalleled reliability and industry-leading efficiency ratings at -48 and +24 VDC. Emerson Network Power rectifiers — the heart of the power system — possess some of the highest power densities and smallest footprints in the business. These power solutions can be further enhanced with the addition of intelligent controllers, remote system monitors, battery management units and a full range of distribution modules.



NetSure® 211, 1RU configuration



NetSure® 211, 2RU configuration with optional GMT distribution panel

Mini DC Power Systems, 120 or 220/240VAC Single Feed

High-density mini-sized DC power solutions for outside plant enclosure, central office or embedded applications.

NetSure® 211 Series

The NetSure® 211 Series of compact -48V DC power systems offers 1RU and 2RU configurations, combining reliable NetSure® rectifiers with an advanced Ethernet-accessible controller for mini power applications. The 1RU model allows for up to three 1000-watt 48VDC rectifiers in a 23" shelf and two 1000-watt rectifiers in a 19" configuration.

The 2RU model allows for up to six 1000-watt 48VDC rectifiers in a 23" shelf and up to four 1000-watt rectifiers in a 19" configuration.



Optional NetSure® 211 Battery Cabinet

Emerson Network Power provides a complete range of communications network infrastructure solutions and services built on an industry-leading reputation for quality, reliability and value

Small DC Power Systems, 120/240VAC Single Phase

Highly reliable, uninterruptible cost-effective power systems for small data or telecom installations.

NetSure® 502 Series

The NetSure® 502 DC Power Solution is a flexible system capable of providing DC power through the use of 2000W rectifiers and a variety of output distribution options. The system is available in a bulk output configuration, integrated distribution configuration and a distribution panel style configuration.

The NetSure® 502 is available with both 19" and 23" rack-mount options, suited for up to 22kW power requirements in the most harsh environments. The system is supported by a single SCU+ controller that provides all operational conditions, as well as historical site data and external signal conditioning and monitoring. Distribution is either provided by output bus bars, fuses or breakers located in the power shelf, or an externally mounted distribution panel.



*NetSure® 502,
2RU 23" Configuration with Internal Distribution*



*NetSure® 502,
4RU, 23" Configuration with
External Bulk Output Distribution*



*NetSure® 502,
19" Configuration with External Distribution*

Medium DC Power Systems, 240VAC Single Phase and 208/240VAC 3-Phase

Modular, flexible design for switching, wireless base stations, transmission, LAN, WAN & other networking operations.

NetSure® 700 Series

The NetSure® 700 power system with 2500 watt rectifiers and 1500 watt converters is a modular power system providing up to 4,000 amps of power at +24VDC and 400 amps at -48VDC.

NetSure® 701 Series

Modular power system providing up to 4,000 amps of power at -48VDC with 3200 watt rectifiers. The 3200 watt rectifier is available with eSure™ technology providing efficiency levels near 97% and reducing heat and energy loss by more than 50%.



NetSure® 700



NetSure® 701



NetSure® 702

NetSure® 702 Series

Combines the advantages of the smaller 3200 watt eSure high-efficiency rectifiers from the NetSure™ 701 system with the controller capability and plant architecture of the NetSure 801 system. Arranged for 208/240VAC three-phase input, the rectifier bays are rated at 2000A each for up to 10,000 amps of power at -48VDC with 3200 watt rectifiers.

Converter Systems

NetSure® DCS Series

This compact 2RU +24V to -48V DC to DC converter system provides a 30 amp capacity. The DCS Series includes integrated distribution and alarming within a 19" or 23" mount. Bulk converter systems from -48V to +24V are also available.



Rectifiers

eSure™ High-Efficiency Technology

The eSure™ rectifier, R48-3200e, approaches 97% efficiency and is the first of the ultra high efficient eSure™ rectifier line from Emerson. eSure™ rectifiers deliver world-class reliability and the highest efficiency in the industry, reducing power consumption and lowering operation cost.





Large DC Power Systems, 208/480VAC 3-Phase

Power systems for data center and central office applications such as wireline & wireless switching, transmission, data routing and large telecom hotels.

NetSure™ 801 Series

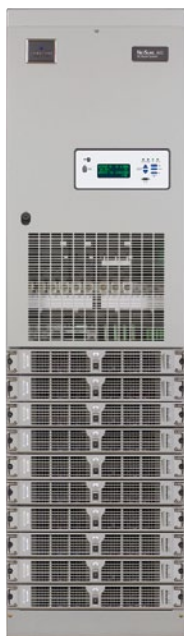
The NetSure™ 801 high-density power system offers the increased flexibility of a cabled plant in a centralized or distributed architecture. The system consists of individual power bays and distribution bays that may be configured with modular 5800 watt rectifiers that operate at 93% efficiency to meet any -48 volt application requirement.

NetSure™ 802 Series

Integrated -48VDC 3-phase rectifiers, distribution, control and monitoring in a single frame. Expandable to 16,000 amps with additional frames.



NetSure™ 801



NetSure™ 802

DC Power Distribution

NetSure® 801DB Series

The NetSure® 801DB (formerly the Lorain DB 484800) Battery Distribution Fuse/Circuit Breaker Bay (BDF/CBB) features high capacity, modularity, and simplified installation. These features provide effective secondary load distribution and protection for multiple -48 VDC feeds up to 600 amps.



NetSure™ 801DB

LORAIN® DB 48500 Series

This modular system provides effective secondary load distribution for single or multiple -48VDC feeds.



Lorain® DB



The NetXtend™ Flex Series utilizes a proven structural system, integrated mechanical components, and a sealing system that withstands rain, dust, snow and hurricane winds.

Inverter Systems

MEDIA 3000

Utilizing 48VDC input, these high density systems range from 1500VA to 3000VA and are mountable in either a 19" or 23" open relay rack.

LORAIN® IS 6000

Compact modular design offers expansion in 1kVA increments up to 6kVA.

LORAIN® IS 21000

Modular inverter system that grows in 3.5kVA increments up to 21kVA.



MEDIA 3000



LORAIN® IS 6000



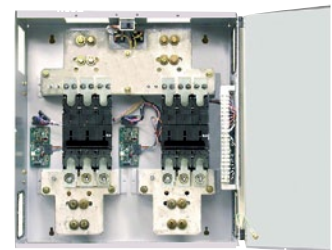
LORAIN® IS 21000

Batteries & Accessories

Products frequently used together with DC power systems are available, including battery disconnects, batteries, battery strands, battery trays, bus covers, assorted panels, circuit breakers and much more.

LBD800 & LBD2000

Battery disconnects that provide disconnection and overcurrent protection from 300A to 2,000A for +24VDC or -48VDC battery strings.



Enclosure Solutions

Custom designed or standard enclosures available for all types of data and telecom equipment.

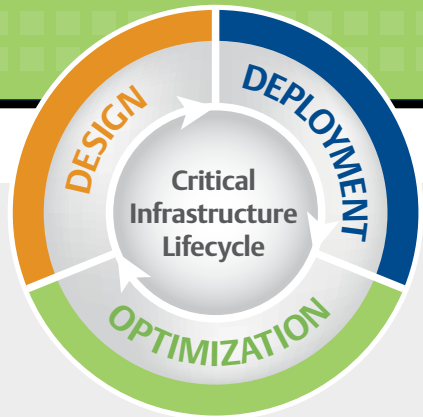
NetXtend™ Flex Series

Emerson's NetXtend™ Flex Series of integrated outdoor enclosure solutions is designed to ensure environmental stability for sophisticated electronic equipment, and provide years of trouble-free service wherever the outdoor enclosure is deployed. The NetXtend Flex Series utilizes a proven structural system, integrated mechanical

components, and a sealing system that withstands rain, dust, snow and hurricane winds. This innovative global design is consistent throughout all geographic regions and can support both wireless and wireline outside plant enclosure requirements.

The highly configurable and expandable enclosure can also provide multiple battery housing options and support indoor racks for use in outdoor applications. The NetXtend Flex Series is designed and tested to meet global industry standards.

NetPerform™ Program Management Solutions offer a turnkey platform of telecom services ranging from network design and planning, to engineering, furnishing and installing, and all the way to field service, parts and repair – enabling speed to market worldwide.



Optimization Services

- **EnergyMaster™ Remote Supervision**
For the complete range of site infrastructure equipment, Emerson Network Power combines state-of-the-art monitoring technology to provide energy savings, intelligent maintenance and expert reporting.
- **Preventive Maintenance**
We can customize DC power preventive maintenance plans according to the specific needs of your business. And with the comprehensive documentation and equipment inventory we provide, you get a clear picture of the system's status as well as recommendations for corrective steps to prevent future problems.
- **Training**
We offer courses targeted at those who want to achieve and demonstrate a high degree of proficiency in the operation, troubleshooting and maintenance of Emerson Network Power products.
- **Repair and Refurbishment**
When total replacement is impractical or too costly, we can help you refurbish aged power system components to keep your business running at peak operating efficiency with our Depot Repair and Refurbishment service.
- **Spare Parts**
Maximize the benefits of our Preventive Maintenance service with individual parts and pre-packaged kits of expendable spare parts and fuses for Emerson Network Power systems.
- **Technical Support**
Our dedicated remote support service provides you an immediate interface with experienced technical experts 24 hours a day to help you resolve unexpected system incidents.

Design Services

- **Engineering**
Our extensive staff of design engineers work closely with you to provide detailed specifications and ensure that your project is completed according to appropriate standards and practices.

Deployment Services

- **Installation**
Backed by industry-leading experience and resources, we respond quickly to your project requirements and ensure the successful installation and testing of your network infrastructure equipment.
- **Materials Management**
We coordinate with our network of regional centers to consolidate materials from multiple sources and deliver them precisely when needed.
- **Test and Turn-up**
We work with you to assess third-party installation of Emerson Network Power systems and identify problems before they occur.

Emerson (NYSE:EMR), based in St. Louis, Missouri (USA), is a global leader in bringing technology and engineering together to provide innovative solutions for customers in industrial, commercial, and consumer markets through its network power, process management, industrial automation, climate technologies, and appliance and tools businesses. For more information, visit: Emerson.com.

Emerson Network Power, a business of Emerson (NYSE:EMR), is the global leader in enabling *Business-Critical Continuity*[™] from grid to chip for telecommunication networks, data centers, health care and industrial facilities. Emerson Network Power provides innovative solutions and expertise in areas including AC and DC power, embedded computing and power, integrated racks and enclosures, power switching and controls, infrastructure management, precision cooling systems, and connectivity. All solutions are supported globally by local Emerson Network Power service technicians. For more information on Emerson Network Power's full suite of solutions specifically supporting the communications network infrastructure, including NetSpan[™], NetReach[™] and NetXtend[™] outside plant enclosures and equipment, NetSure[®] DC power systems, and turnkey services, visit: EmersonNetworkPower.com/EnergySystems.

Learn more about Emerson Network Power products and services at: EmersonNetworkPower.com.

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Emerson Network Power.
The global leader in enabling *Business-Critical Continuity*[™].

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| ■ Connectivity | ■ Embedded Power | ■ Power Switching & Controls | ■ Services |
| ■ DC Power | ■ Infrastructure Management & Monitoring | ■ Precision Cooling | ■ Surge Protection |