VERTIV.

Brochure

DC Power overview

Powerful solutions for critical data and telecom applications

Vertiv™ NetSure™ applications

- Radio base station / microwave site / 5G, 4G, 3G
- Broadband Access Sites
- Central office / MTSO
- CATV headend
- Computer room
- Data center
- Enterprise (PBX, LAN)
- Network closet
- Outside plant cabinets & shelters

From major switching and data centers to remote shelters and computer rooms, Vertiv NetSure 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 Vertiv NetSure line of DC power systems from Vertiv demonstrates unparalleled reliability and industry-leading efficiency ratings. Vertiv 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.

Mini DC power systems, 1 kW to 3 kW power capacity

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

Vertiv™ NetSure™ 2100

Vertiv™ NetSure™ 2100 rear view

Vertiv™ NetSure™ 2100 series

The Vertiv NetSure 2100 series, a compact -48 volt, 48 amp DC power shelf, features an advanced control unit, up to (3) positions for 1000W high-efficiency eSure rectifiers and space for distribution breakers and fuses. The power system supports 19”W and 23”W rack mounting and is available in a number of configurations. The distribution section supports four different options for circuit breakers up to 60A or GMT fuses up to 15A. A low voltage battery disconnect option is available.

Vertiv provides a complete range of communication network infrastructure solutions and services built on an industry-leading reputation for quality, reliability and value.

Small DC power systems, 2 kW to 28.8 kW power capacity

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

Vertiv™ NetSure™ 5100 with integrated distribution

Vertiv™ NetSure™ 5100 with external distribution

Vertiv™ NetSure™ 5100 series

The Vertiv NetSure 5100 series is ideal for broadband access and network edge applications requiring reliable, high power density up to 600A at -48 VDC / 58VDC and up to 400A at +24 VDC. Optimally designed for use with Zone 4 compliant relay racks and cabinets, thanks to a high operating temperature of +65°C and high operating efficiency levels above 96%. Cost-effectively supports climate system provisioning in outdoor enclosure applications.

Vertiv™ NetSure™ IPE series

The Vertiv™ NetSure™ IPE series high-efficiency R48-2000C2 rectifier is designed to support 5G radio applications with low power requirements, such as small cells and Remote Radio Heads (RRHs). Fanless cooling eliminates maintenance and results in silent operation. Ideal for rapid deployment in urban, rural, or protected public areas.

Medium DC power systems, 10 kW to 300 kW power capacity

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

Vertiv™ NetSure™ 7100 series

The versatile Vertiv NetSure 7100 DC power system offers single or three-phase input up to 277/480 VAC and is available as both indoor and outdoor applications in the row. Designed for 3500 watt or 2000 watt rectifiers and up to 3750 watt DC to DC converters this modular design provides up to 12000 amps of current for -48 volt systems with up to 500 amps at -58 volts or +24 volts. The basic components of the power system include the NetSure Control Unit (NCU), module mounting shelf assemblies which house the rectifiers and converters, and a modular distribution cabinet.

Vertiv™ NetSure™ 701 NCU retrofit kit

The Vertiv™ NetSure™ 701 NCU retrofit kit provides an advanced upgrade for legacy Vertiv NetSure plants to the NCU control unit and associated features and options. All power (rectifiers) and distribution remains intact, allowing for installation on a live system without service disruption. Existing connections are re-purposed to minimize installation complexity.

Kits are available for both the main bay and supplemental bay. The main bay accepts the NCU controller (ordered separately) with either the standard configuration or custom configuration upon request.

Once updated, the Vertiv NetSure 701 system will have all the features of the current model (NetSure 7100) including compatibility with the latest monitoring options and supervisory modules. The retrofitted Vertiv NetSure 701 can be expanded with a Vertiv NetSure 7100 supplemental bay as needed.

Rectifier technology

Vertiv™ eSure™ high-efficiency technology

Vertiv™ eSure™ rectifiers deliver world-class reliability and the highest efficiency in the industry. Ranging from 1000W to 12000W DC output, these extremely dense modules minimize energy loss, reduce carbon emissions and lower operating cost, while providing unparalleled reliability.

Large DC power systems, 20 kW to 600 kW power capacity

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

LCD display

Vertiv™ NetSure™8200

Vertiv™ NetSure™ 8200 series

Integrated -48 VDC 3-phase rectifiers, distribution, control and monitoring in a single frame. Expandable to 16,000 amps with additional frames. The NS8200 provides a single solution for powering Core and Datacenter facilities needing -48V powering from 208V or 480V Three Phase AC input. Refreshed with the NCU control, the system provides seamless control and access over the entire facility power needs. Making the NetSure 8200 ideal for large core communications facilities and data centers requiring centralized, scalable -48V DC power.

Vertiv™ NetSure™ 801 NCU retrofit kit

A cost-effective upgrade that modernizes existing NetSure 801 power plants with a 10-inch touchscreen interface, enhanced NCU controller, and updated monitoring assemblies. The retrofit kit improves visibility, simplifies system management, and supports advanced security and network compatibility—extending the life and performance of installed NetSure 801 systems.

Vertiv™ NetSure™ 802 NCU retrofit kit

The Vertiv™ NetSure™ 802 controller retrofit kit enables seamless modernization of primary, secondary, and distribution-only bays, preparing them for future expansion with the Vertiv NetSure 8200 platform. The primary bay kit includes a new 10-inch touchscreen display and enhanced control chassis, while secondary and distribution-only bays receive updated control and monitoring assemblies for streamlined communication and integration. With advanced security, intuitive remote and local monitoring, and compatibility with multiple networks, the Vertiv NetSure 802 retrofit kit is a comprehensive solution for improving site management and efficiency.

DC power distribution

Individual current measurement for each fuse/breaker

Vertiv™ NetSure™ distribution bay

Vertiv™ NetSure™ distribution series

High capacity, modular bays deliver effective secondary -48V DC load distribution with increased visibility and detailed understanding of all loads in your core facility. These top or bottom feed distribution bays deliver 4,800 amp (eight panel) or 3600 amp (six panel) continuous rating with an interrupting capacity of 10,000 amps. Ideal for colocation and core facilities including cable headends, MTSOs and MSOs requiring protection of power plants up to 640 amp capacity per load.

Distribution panels

Vertiv™ NetSure™ distribution panel

DC distribution panels for Vertiv NetSure systems are designed to provide overcurrent protection for multiple small loads. Panels accept either fuses from 1A to 20A or load breakers up to 150A. Options include up to (36) GMT fuses or up to (4) load breakers and (12) GMT fuses. The fuses plug into one of the mounting positions on the front panel. Each position has a localized return landing.

Battery solutions

Batteries & accessories

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

Converter technology

Vertiv™ eSure™ power extend converter

The Vertiv™ eSure™ C48/58-1000 power extend converter is a 1000W, -48 VDC to -58 VDC converter with bullet terminals designed to increase power output to Remote Radio Heads (RRHs) and function as an overcurrent protection device for the RRH circuit. It is ideal for upgrading legacy DC power plants at macro cell sites to support the increasing power requirements of 5G applications. A subsequent C48/24-1000 Power Extend Converter is available for supporting smaller 24VDC loads at sites that don't justify a full bank of 24VDC load support panels.

Power for critical AC systems

Vertiv™ NetSure™ inverter series

Vertiv™ NetSure™ Inverter systems deliver outstanding reliability, modularity and scalability. With market leading inverter module density, the systems support your AC loads in a compact footprint. Rectifiers and inverters are connected to the same battery bank which not only facilitates zero second transfer time should commercial AC fail but also saves space and reduces financial investment.

Emerging DC architectures

Power systems designed to address emerging applications in telecommunications, data centers, and commercial building.

50V DC Power Direct for the data rack

Vertiv™ PowerDirect rack 33kW 50V DC power system

Centralizing power in the rack allows both main power and backup power to scale at the same rate as the IT load. With this 50V DC integrated rack solution from Vertiv™, IT loads and power are configured to minimize stranded capacity and to size hold up times according to the user's needs. The result is an efficient and economical power strategy that provides ultimate flexibility by enabling IT capacity to be added one rack at a time.

Vertiv™ NetSure™ solar converter shelf

The Vertiv™ NetSure™ solar converter shelf is a compact -48 VDC solution that can easily be added to an existing telecom DC power plant from any manufacturer. Built on the proven reliability of Vertiv's eSure solar converter, the Vertiv NetSure solar converter shelf delivers industry-leading system density and full power up to 55°C. It can support one or two 4300W solar converter modules and features front access connections.

Enclosure solutions

Vertiv supports a wide range of indoor and outdoor enclosure solutions for communications and data infrastructure deployments. Today, Vertiv now incorporates the Great Lakes BOX enclosure portfolio, offering a comprehensive offering for OSP deployments consisting of standardized and configurable solutions optimized for power, thermal, and equipment integration across access, edge, and core applications.

Legacy Vertiv XTE enclosures remain deployed across North America and continue to support a broad installed base, while new deployments increasingly leverage the Great Lakes BOX portfolio.

Vertiv™ XTE 400 series

The Vertiv XTE 400 series is a family of three small to medium sized enclosures that are designed to support a wide range of equipment for communication networks, monitoring equipment and general industrial applications. Even though these enclosures are relatively small in size, there is a long list of rack, backboard, power, thermal and mounting options that make these enclosures very adaptable to your specific requirements.

Vertiv™ XTE 600 series

By far our broadest line of enclosures, the Vertiv XTE 600 series ranges from 8RU all the way to 44RU of equipment space. They can be configured in literally thousands of combinations such that they are ideal for any wireline or wireless application, including - DSLAM, FTTx, backhaul, macro cell, and C-RAN. Supporting battery backup enclosures are also available. These enclosures have field proven reliability and have been deployed widely throughout North America by all major operators for over ten years.

Vertiv™ XTE 800 series

Our largest size of enclosures supports seven-foot-tall relay equipment racks and give you the ability to walk into them for protection from the elements. In addition to multiple sizes that can be configured to your specific application, they have the added benefit of being classified as a ‘cabinet’ vs. a ‘shelter’ in most jurisdictions which keeps permitting and deployment costs to a minimum.

Enclosure Solutions & Integration Capabilities

The Vertiv OSP solution portfolio now includes Great Lakes BOX integrated enclosure solutions across access, edge, and core deployments.

Installed Base Enclosure Solutions

- Vertiv-supported enclosure solutions are deployed across a broad installed base in access, edge, and core applications
- Customers continue to leverage integrated power and enclosure configurations across existing deployments
- These solutions support DC power, batteries, thermal, and equipment integration, including Fiber broadband equipment when requested

Great Lakes BOX Portfolio

- Standardized outdoor enclosure offerings
- Configurable cabinet solutions optimized for power, thermal, and equipment integration
- Designed to support scalable, repeatable infrastructure deployments

Single Bay Cabinet (NEMA 3R/4)

A durable, space-efficient cabinet designed to securely house and organize equipment for IT, network, industrial, and broadband applications.

Double Bay Cabinet (NEMA 3R/4)

A robust double bay cabinet that provides expanded capacity for secure, organized equipment storage in IT, network, industrial, and broadband applications.

Integration Capabilities

Factory integration services enable pre-installation of DC power, batteries, distribution, cabling, cooling, and fiber into enclosure solutions, reducing onsite labor, deployment risk, and installation time.

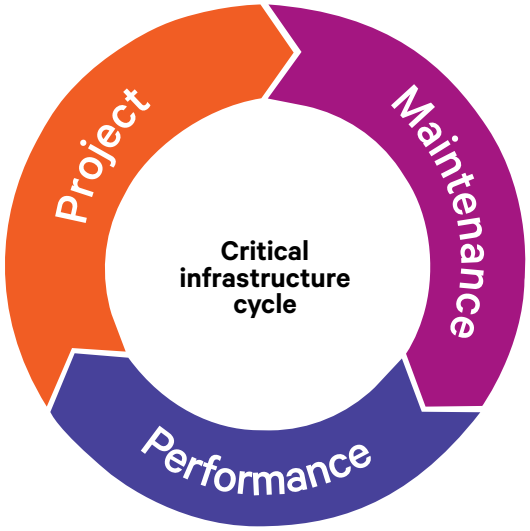
USA Proud / BABA Compliance

USA Proud. USA Quality.

Great Lakes enclosures are manufactured in the United States and support Build America, Buy America requirements. Domestic sourcing and manufacturing support compliance-driven deployments while maintaining high quality and reliability.

BABA compliance documentation available upon request

Services



A complete life-cycle approach to service, from project launch to ongoing maintenance and performance optimization

We strive to keep your network infrastructure highly available, efficient and adaptable, so you can:

- Increase mean time between failure.
- Decrease operating cost.
- Implement future technologies while maximizing your resources.

Project

When launching new facilities or powering up new equipment, you want to do it right – right from the start.

- Plan
- Design
- Engineer
- Integrate
- Commission
- Project management

Maintenance

Services that help keep your business-critical infrastructure operating reliably, safely and efficiently.

- Preventive and corrective maintenance
- Remote services and monitoring
- Cap / fan / battery replacements
- Repair
- Spare parts

Performance

Full range of services designed to optimize infrastructure performance and reduce complexity.

- Assess
- Audit
- Model
- Configure
- Upgrade
- Train

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DC-00086 (R02/26)