Services for
Business-Critical Continuity™

NetPerform™ Optimization Services
Network Infrastructure Management Solutions
In a business that relies on zero downtime, it makes sense to invest in your communications infrastructure, and protect against power-related failures that can bring your communications network to a halt.

Network Infrastructure Support

With today’s market conditions and cost-cutting measures, the demands to do more with less are being placed on individuals accountable for the maintenance and operation of power plants and facilities. Yet even the most reliable systems are subject to failure if not properly supported and maintained. Emerson Network Power takes a holistic approach to the health of your network facilities to ensure that every facet of your communications infrastructure is operating at maximum efficiency and is clear of environmental or systematic hazards. Emerson Network Power applies in-depth knowledge of DC power plants, generators, HVAC, and UPS systems, providing further protection against failure.

We provide energy management, remote and on-site support to augment your in-house staff, enhancing your ability to maintain and operate a world-class network power infrastructure. In addition, we offer remanufactured DC power equipment as an alternative with exceptional value and equivalence to new performance.

Emerson Network Power also provides the solutions that can increase the confidence level in your network’s ability to withstand AC power outages and provide continuous power to networking equipment. We provide an Emerson legacy of energy equipment expertise with customized energy assessment recommendations, remote supervision, asset tracking, predictive failure analysis, documentation and more. We have the assets to supplement your internal resources, as well as the capability to provide a total turnkey service solution — regardless of the equipment manufacturer.

The following information summarizes Emerson’s capabilities as a one-stop-shop for the remote supervision, repair, monitoring and maintenance of your communications infrastructure. For details about any of the services listed here, please contact your Emerson Network Power account representative, or call Emerson toll-free at 1-800-800-1280.
Emerson Network Power Field Engineers have an average of 10+ years industry experience, with training to the highest industry standards and cutting edge test/diagnostic equipment to handle any and all of your field service needs on a national, regional, or local basis.

### NetPerform™ Optimization Services

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<th>Multi-vendor Support Offerings</th>
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<td>Depot Repair</td>
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**FREEDOMCARE**

Emerson Network Power sets the standard for taking care of communications infrastructure networks with our secure customer web site, FreedomCare. Available exclusively to Emerson Network Power Preventive Maintenance customers, the site provides the capability to view and download service and maintenance visit reports.

Subscribers can log on for immediate access to power equipment inventory and history, trending analysis, availability metrics, capacity levels and critical corrective action plans – details that enable informed decisions about communications networks.

Energy Management

**EnergyMaster™ Assessment & Remote Supervision Solutions**
Emerson Network Power offers an integrated approach to managing the energy and health of entire networks. EnergyMaster™ services are designed to minimize energy use and maximize the availability of vital systems. After energy audits are performed and our energy operation centers are connected to your critical energy equipment, the remote supervisory system gathers a continuous stream of vital health parameters and alarms at the site, including AC power consumption/quality, battery status, HVAC, motor performance, genset, UPS, renewable power sources, DC power and inverter statistics. Predictive and corrective maintenance routines complement the offering with on-site inspections and preventive maintenance designed to maximize your facility’s integrity.

**EnergyMaster™ services:**
- Remote supervision
- Optimizing energy consumption
- Remote maintenance routines
- Emergency service
- Alarm analysis and handling
- Advanced reports
- Battery replacement strategies
- Uptime optimization

**EnergyMaster™ benefits:**
- Reduced maintenance costs
- Equipment uptime risks uncovered sooner
- Longer equipment life
- Lower energy consumption
- Inventory tracking
- Asset management optimization
- OPEX & CAPEX Savings

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On-site Support

**Battery Capacity Testing**
Battery capacity tests are considered by the industry to be the most effective method of determining a battery’s ability to support its load for the specified time period. The Emerson Intelligent Battery Load Tester automatically logs voltage and current measurement throughout the discharge without subjecting critical equipment to decreased voltage levels and features 200 amps of built-in power for battery recharging.
- Determines true battery plant capacity per IEEE standards
- Includes Web access to a documented service report, plus:
  - Graph voltage of each string
  - Recommendations for corrective action when necessary

**Field Service**
Whether you need resources to perform a scheduled equipment replacement or emergency on-site technical troubleshooting, Emerson Network Power provides a fully qualified field service engineer on-site as a member of your operations and maintenance staff. Emerson Network Power system and component upgrades put your mind at ease and initiate a plan to put vital components into top-notch condition.
- On-site equipment fault isolation, repair and refurbishment
- Component upgrades: alarm relay, capacitor, contactor, fan, triac, fuse and alarm panel
- Rectifier, inverter, converter & monitoring unit installations
- Service available 24x7, 365 days/year
- Battery spill containment systems
- Battery & distribution replacement and/or removal
- Power system retrofits
Preventive Maintenance
Emerson Network Power serves as the single point of contact for all your power and facility maintenance needs. Emerson understands your specific needs and will tailor a service agreement that meets or exceeds all of your requirements. Complete documentation is provided following each maintenance visit. Reports provide a clear picture of system status and recommendations for corrective steps to prevent future problems.

- Replacement parts coverage available
- Thermal scan analysis & thermography available
- FreedomCare Web access to documented service reports
- 24x7 technical support service
- Emergency dispatch coverage with service level response times
- Regular inspections, maintenance, and testing of equipment at scheduled intervals

Site Evaluation
Concentrate on your core business objectives, and allow Emerson Network Power to conduct a comprehensive site inventory and inspection. Documented results, which are multi-vendor focused, provide current, complete site awareness and a baseline for the condition, expansion or integration of your power and facility network infrastructure.

- Equipment condition, model, spec and serial numbers
- Capacity and back-up power analysis
- AC and DC power distribution
- Rectifier and battery status
- Floor diagram
- Grounding

Test and Turn-up Certification
Valuable assessment following a third party installation of a Emerson Power System. The assessment identifies problems before they occur and offers the security of knowing the system is problem-free prior to turn up.

- Complete test and turn-up report available via the Web
- Telcordia GR1275 or customer-specified standards

Thermography
Infrared imaging technology to pinpoint potential power interruption areas early and prevent costly shutdowns later. Trained Field Service Engineers, equipped with the ultimate in infrared imaging technology, detect and document actual temperatures of the power system and components, locating problem areas invisible to the human eye.

- Web access to documented service report
- Current system condition and a prioritized correction plan for any issues discovered
- Thermographic photographs with temperature measurements and a calibrated color scale

On-Site Training
Emerson Network Power is fully equipped to bring a training course, seminar or workshop to your site, targeted to the specific needs of your people and organization. This provides a cost effective solution to the public courses we offer, while minimizing the impact to your staff productivity.
Remote Support

**Depot Repair and Refurbishment**
When total replacement is impractical or too costly, repair and refurbishment of aged power system components to like-new performance can keep you running at peak operating efficiency.
- Standard one-year parts and labor warranty
- Third-party equipment repair
- Components include: converters, inverters, PC cards, and rectifiers
- Emerson components upgraded to the latest specifications

**Spare Parts**
To meet the ever-changing needs of your communications network infrastructure, Emerson Network Power offers individual parts and pre-packaged kits of spare parts and fuses for Emerson Network Power and multi-vendor equipment.
- Emergency orders — 24x7, 365 days/year
- Uncommon replacement parts
- Retrofit kits to improve performance and reliability of older equipment
- Same-day shipment of in-stock orders received by 4:00 p.m. ET

**Technical Support**
Dedicated support service is available 24 hours/day, 365 days/year from Emerson’s Technical Assistance Centers at 1-800-800-5260. Once a case is logged, Emerson works with you through complete resolution. These services feature highly skilled technical support representatives delivering remote support via phone or e-mail for diagnosis and resolution of power system and site infrastructure issues and outages. We are able to resolve 95+% of all calls without the need for a field service dispatch.

**Remote Training**
Emerson Network Power offers World-class education to help your employees understand the full potential of your network infrastructure equipment investment.
- Classes feature 50% hands-on training
- Modular and ferroresonant power systems, monitoring products and battery systems
- Basic maintenance & troubleshooting techniques
With Emerson Network Power’s 24x7 technical support and field service, you have toll-free access to experienced technical support engineers 365 days/year and a nationwide network of highly mobile, fully equipped technicians for around-the-clock dispatch to your sites.

Emerson Network Power is fully equipped to bring a training course, seminar or workshop to your site, targeted to the specific needs of your people and organization.

Remanufactured Solutions

**Custom Configuration**
Emerson Network Power offers like-new, custom-configured power systems that are practical and affordable. These custom systems are tested and built to perform like new equipment.
- Custom configuration
- +24V or -48V systems
- One-year warranty
- Refurbished equipment fully tested to meet manufacturer standards
- Competitive prices

**Refurbished Equipment**
When new equipment is impractical or too costly, Emerson Network Power offers like-new power system components. This refurbished equipment provides exceptional value and performance.
- Refurbished equipment fully tested to rigorous criteria
- Standard 7 - 15 day turnaround time
- +24V or -48V components available: rectifiers, inverters, custom systems
- One-year warranty
Emerson (NYSE: EMR), based in St. Louis, Missouri (USA), is a global leader in bringing technology and engineering together to provide innovative solutions to customers 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 and precision cooling systems, embedded computing and power, integrated racks and enclosures, power switching and controls, monitoring, 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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<td>Depot Repair 1-800-978-8810 <a href="mailto:dcpower.repair@emerson.com">dcpower.repair@emerson.com</a></td>
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<tr>
<td>4350 Weaver Parkway, Warrenville, IL 60555 USA</td>
<td>Spare Parts 1-800-927-2780 <a href="mailto:dcpower.spares@emerson.com">dcpower.spares@emerson.com</a></td>
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<td>Telephone: 440-246-6999 Fax: 440-246-4876</td>
<td>Training 1-800-398-8867 <a href="mailto:dcpower.training@emerson.com">dcpower.training@emerson.com</a></td>
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