

## Creating An Efficient, Flexible IT Infrastructure

**Achieving data center efficiency is not limited to lowering energy usage – it must encompass efficiency of all aspects of design, operation and management. Focusing purely on energy efficiency can result in compromising the efficiency or reliability of other critical IT operations. Emerson Network Power delivers Efficiency Without Compromise by identifying and improving on areas of opportunity to create both energy savings and improved operation and workflow.**

Emerson Network Power solutions are TAA and BAA compliant to ensure a smooth purchasing process, **perfect for stimulus/ARRA projects or federal contract vehicles** supporting DoD or civilian agencies.

### Knurr Rack/Enclosure

The Knurr rack line from Emerson Network Power is the value/price champion for data center professionals. Gain all the features you need —plus an expansion path that makes it nearly future-proof. Eliminate obstacles when deploying new technologies. Adapt quickly, easily and cost-effectively. Knurr racks form a solid platform for forward-thinking data center pros.

- More base airflow from the 83% perforated design.
- More reconfiguration flexibility from the tool-less rails and accessory add-on design.
- More accessories to meet your specific needs.
- More sizes –height, width and depth.

- More power distribution options with Liebert MPX or Liebert MPH intelligent rack PDUs.
- More flexible high power distribution through optional Liebert MB Busway.
- More ways to remove high density heat using the flexible and efficient Liebert XD cooling systems (top of rack, row-based, or doormounted solutions).
- More power availability with the optional rack-mounted Liebert GVG on-line UPS.
- More monitoring and control options of key electrical and thermal parameters.

Knurr racks provide a lightweight but sturdy, fully assembled aluminum extruded frame with a patented T Slot, offering many quick mount options and configurations including:

- 42 and 47U, with widths of 24, 28 and 32" and depths of 40, 44 and 48".
- Excellent airflow.
- Fast and flexible cable management.
- Key, combination and HID/Biometric security options.
- Strong, lightweight material.
- Endless accessories.
- TAA and BAA compliant.

### Rack PDU Family Enables Availability, Flexibility, Control And Metering In A Zero-U Configuration

Emerson Network Power's rack PDU solutions bring operational and visibility advantages to the equipment in your racks. You can select from the most flexible units on the market, from basic to advanced, varying the modularity and

intelligence levels to suit your needs. Change and expand your systems with ease. Monitor and manage power loads. Conduct remote receptacle control.

PDU solutions operate with the industry's leading standard operating temperature – up to 131°F (55° C) – to reliably withstand any hostile rack environment, and they are TAA compliant.



# Trade Compliant Power, Cooling, Monitoring And Rack Solutions

| Liebert MPX<br>Adaptive Rack PDU                                                                                                                                                           | Liebert MPH<br>Managed Rack PDU                                                                                                                      | Knurr DI-STRIP<br>Basic Rack PDU                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Leading design for dynamic IT operations. All key features, plus the ability to mix and match modules. Adapt when you need to. Save money by not replacing entire units.                   | Handles critical IT demands through models that provide monitoring and control at the receptacle level. A perfect solution for growing data centers. | Supports large segment of market requiring basic PDUs and is engineered and built to last compared to competitive models. |
| Hot-swappable power output modules.<br><br>Reconfigurable input power.<br><br>Strip, branch and receptacle monitoring.<br><br>Controlled receptacles.<br><br>Network-based communications. | Remote monitoring at strip and branch.<br><br>Controlled receptacles.<br><br>Network-based communications.                                           | Standard and high capacity models.<br><br>Basic Rack PDU Expansion Unit allows for system growth of any rack PDU system.  |

## Liebert GVG Network UPS

Liebert GVG 1.5-3 kVA and Liebert GXT2 6-10kVA UPSs are TAA compliant and combine low cost of ownership with rich functionality, small size and high capacity. This true on-line UPS is rack mountable, offers internal batteries, extended external batteries, network connectivity and internal bypass capability. Liebert GVG ensures continuous uptime for connected equipment.



## Emerson Network Power's SmartAisle™

### SmartAisle Is Designed To:

- Optimize cooling system efficiency.
- Eliminate hot/cold air mixing.
- Increase space efficiency.
- Increase capacity.
- Allow easy retrofit.
- Leverage redundancy/availability.
- Provide fast return on investment (ROI).
- Reduce energy consumption.

### SmartAisle™ Features:

- Liebert iCOM control.
- Temperature and airflow sensors.
- Knurr DCM cabinets.
- Plexiglass roof panel system or containment curtain.
- Sealed entry doors.
- Liebert Precision Cooling systems.
- Roof-mounted wiring module.



# Trade-Compliant Products

| Our Trade Compliant Solutions                                                       |      |                                                                                     |      |                                                                                      |      |                                                                                       |      |
|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|------|
| Power                                                                               | Code | Monitoring                                                                          | Code | Racks and Integrated Cabinets                                                        | Code | Cooling                                                                               | Code |
| Liebert GVG UPS<br>(TAA version of GXT)                                             | T    | Liebert SiteScan Web                                                                | B    | Knurr DCM Rack                                                                       | B    | Liebert Datamate                                                                      | B    |
| Liebert GXT 6-10kVA                                                                 | T    | Liebert Nform                                                                       | B    | Knurr Rack accessories                                                               | B    | Liebert Mini-Mate 2                                                                   | B    |
| Liebert Nfinity UPS                                                                 | N    | Liebert MultiLink                                                                   | B    | Liebert MCR                                                                          | B    | Liebert CRV                                                                           | T    |
| Liebert NX<br>(* some exceptions apply)                                             | N    | Liebert Leak Detection                                                              | B    | Liebert XDF                                                                          | B    | Liebert Challenger 3000                                                               | B    |
| Liebert NXL UPS                                                                     | B    | Albér Battery Monitoring                                                            | B    | Liebert MPX Rack PDU                                                                 | T    | Liebert Challenger ITR                                                                | B    |
| Liebert 610 UPS                                                                     | B    | Albér Battery Monitoring accessories                                                | B    | Liebert MPH Rack PDU                                                                 | T    | Liebert DS                                                                            | B    |
| Liebert FS Flywheel                                                                 | B    |                                                                                     |      | Knurr DI-STRIP Rack PDU                                                              | T    | Liebert CW                                                                            | B    |
| Liebert FPC PDU                                                                     | N    |                                                                                     |      |                                                                                      |      | Liebert XD System<br>(all modules)                                                    | B    |
| Liebert FDC PDU                                                                     | B    |                                                                                     |      |                                                                                      |      | Liebert ICS                                                                           | B    |
| Liebert RDC PDU                                                                     | B    |                                                                                     |      |                                                                                      |      | Liebert IntelCool2                                                                    | B    |
| Liebert PPC PDU                                                                     | N    |                                                                                     |      |                                                                                      |      | Liebert Condensers,<br>Drycoolers and<br>Condensing Units                             | B    |
| Liebert MPX Rack PDU                                                                | T    |                                                                                     |      |                                                                                      |      |                                                                                       |      |
| Liebert MPH Rack PDU                                                                | T    |                                                                                     |      |                                                                                      |      |                                                                                       |      |
| Knurr DI-STRIP Rack PDU                                                             | T    |                                                                                     |      |                                                                                      |      |                                                                                       |      |
| Liebert STS2 Static<br>Transfer Switch                                              | B    |                                                                                     |      |                                                                                      |      |                                                                                       |      |
|  |      |  |      |  |      |  |      |

Government Compliant coding by product. (images not to scale)

B = BAA, T = TAA, N = NAFTA. Please see Government section of the website for chart updates.

**Please direct orders involving Stimulus/ARRA funds through an appropriate contractor or channel partner. Call your local representative for details.**

**Currently excluded products:** Liebert PS.

\*Models manufactured in Mexico are eligible.

## Data Center Assessments

Need help determining your requirements or course of action? Consider a Liebert Data Center Assessment or Audit. Our experts can conduct a basic evaluation or comprehensive thermal and electrical analysis to uncover vulnerabilities, gaps and energy inefficiencies.

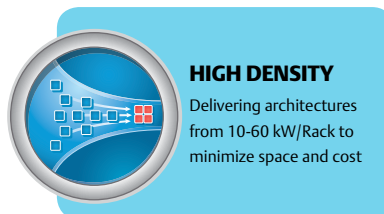
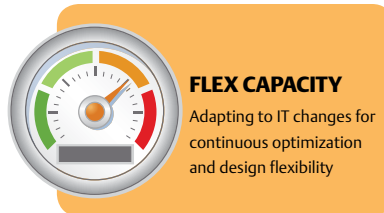
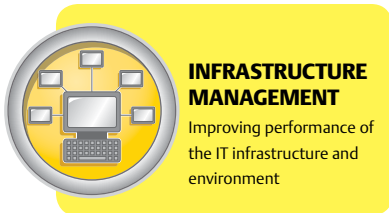
## Maximize Your Efficiency And Availability

Deploy new systems with assurance. Eliminate downtime, hot spots, rack/enclosure limitations; monitor critical systems.

- **Energy Efficiency** – requires cost reduction and Liebert products from Emerson Network Power can reduce data center energy costs 30-60%.
- **Consolidation And Virtualization** – often brings greater density, more power and heat, and higher availability requirements. Liebert cooling, power and monitoring systems alleviate these data center constraints.
- **High Availability** – requires improved power schemes, precision cooling solutions, and better monitoring of critical components.
- **IP Telephony** – calls for more rigorous power, more cooling and an improved infrastructure. Emerson Network Power delivers everything needed to ensure success.
- **Security Initiatives** – can mean opportunities to harden the data center. This often demands greater power protection, monitoring and uptime requirements.

## Efficiency Without Compromise™

Efficiency Without Compromise provides a path to optimize data center infrastructure around design, operating and management efficiencies—while maintaining or improving availability. This is achieved through the proper selection and utilization of cooling, power and monitoring technologies, supported by key services and local expertise. Only Emerson Network Power has the skills and technologies to effectively design and implement for efficiency and availability at the same time.



## Emerson Network Power

Liebert Corporation  
World Headquarters  
1050 Dearborn Drive  
P.O. Box 29186  
Columbus, Ohio 43229  
United States Of America  
800 877 9222 Phone (U.S. & Canada Only)  
614 888 0246 Phone (Outside U.S.)  
614 841 6022 FAX

**liebert.com**

### 24 x 7 Tech Support

800 222 5877 Phone  
614 841 6755 (outside U.S.)

## Emerson Network Power.

The global leader in enabling  
*Business-Critical Continuity™*.

- AC Power
- Connectivity
- DC Power
- Embedded Computing
- Embedded Power
- Infrastructure Management & Monitoring
- Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

## Emerson Network Power.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Liebert Corporation assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

© 2010 Liebert Corporation. All rights reserved throughout the world. Specifications subject to change without notice.

All names referred to are trademarks or registered trademarks of their respective owners.

© Liebert is a registered trademark of the Liebert Corporation.

SL-11287 (R05/10) Printed in USA

*Business-Critical Continuity*, Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2010 Emerson Electric Co.

**Rely on Emerson Network Power for answers when you need them. In addition to hundreds of local experts, a government manager near you is ready to help:**

### Brad Nacke

Director of Government Business  
614.841.6326  
brad.nacke@emerson.com

### East

Rich Towers  
610.858.2367  
rich.towers@emerson.com

### Midwest

Ramon Torres  
610.841.6429  
ramon.torres@emerson.com

### West

Brian Bills  
719.550.8670  
brian.bills@emerson.com