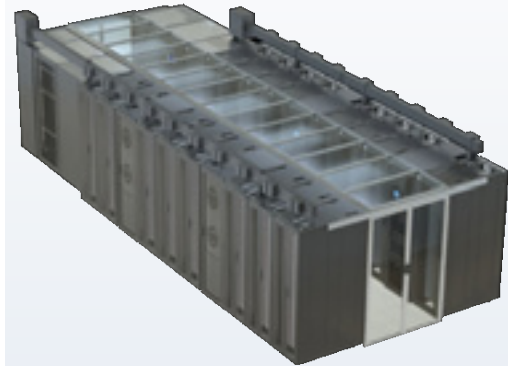
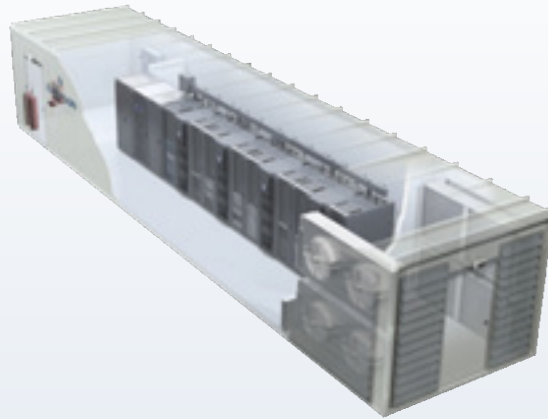


*Smart Solutions*  
Intelligent, Integrated Infrastructure for the Data Center



# Deploy A Data Center Without Compromise

## An Alternative To Traditional Design

Balancing data center objectives for capacity, space utilization, availability and efficiency is difficult without making sacrifices.

Failure to properly design and deploy physical infrastructure can lead to underutilized systems, stranded capacity and higher operating costs, preventing you from gaining the full advantage of your data center.

## What IT and Data Center Managers Want

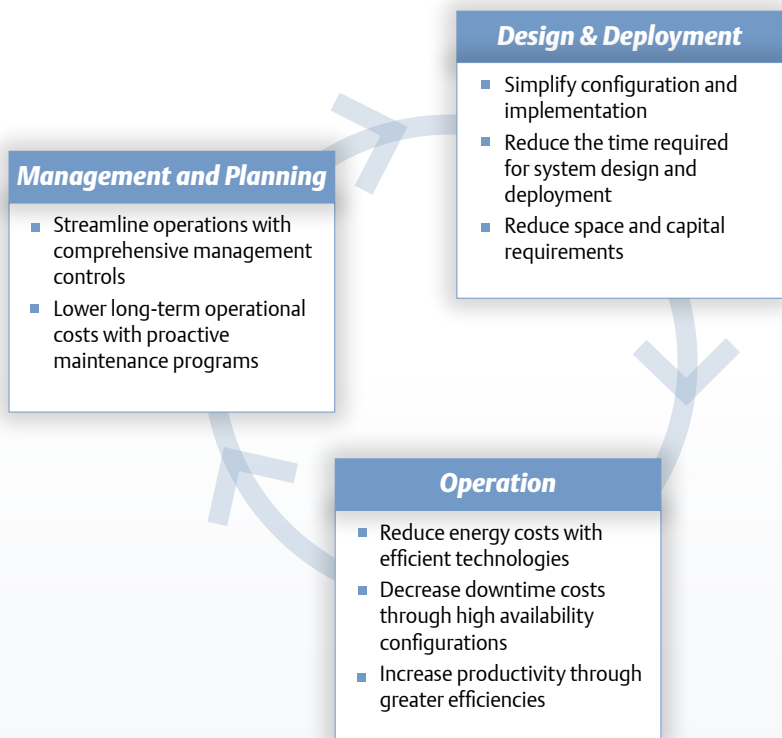
Faced with these challenges, IT and data center managers increasingly want infrastructure strategies that are alternatives to conventional approaches. These new strategies must include solutions that:

- Improve energy efficiency, space utilization and IT productivity
- Offer measurable savings in CAPEX and OPEX
- Offer location flexibility and compatibility with existing infrastructure
- Improve the ability to manage and control the IT environment
- Feature interoperability for fast and easy design and implementation
- Support greater capacity by improving management of density and availability

These are advantages of the Smart Solutions family of infrastructure offerings from Emerson Network Power.

## Discover the Route to Efficient Data Center Operations

Emerson Network Power delivers Efficiency Without Compromise™ through the Smart Solutions infrastructure, to create savings across the data center and improve operation and management. These solutions provide a cost-effective power, precision cooling and management infrastructure to help you achieve your IT objectives regardless of data center size and complexity.



# The Smart Solutions Approach

## Efficiency. Capacity. Availability. Control.

### You Need Them – Now You Can Have Them All. Another First From Emerson Network Power.

To help you achieve efficiency in all aspects of your data center, Emerson Network Power has developed the Smart Solutions intelligent, integrated infrastructure for data centers. The family uses a global design approach that can be localized for specific geographies.

Smart Solutions offerings let you cost-effectively achieve and manage your objectives for efficiency, capacity and availability.

These offerings provide fast and easy implementation, through interoperable systems: precision cooling, UPS, power distribution/conditioning, management software and racks .

### Each Smart Solution offering integrates industry best practices in data center design and operations including:

- Hot air and cold air separation
- Cold air containment
- High availability and high efficiency UPS
- High-efficiency precision cooling
- Space-savings, small-footprint
- Modularity for flexibility and easier expansion
- Integrated monitoring and control to optimize efficiency in planning and management
- Unique local service for design audits, configuration support, installation support, maintenance and repair

Emerson Network Power brings together the industry's finest power, precision cooling, monitoring and management brands and businesses, including Liebert, Knurr, ASCO, Avocent, Chloride, Energy Systems and Surge Protection solutions. The Smart Solutions offerings deliver Efficiency Without Compromise™ within the data center.

The Smart Solutions approach gives you the efficiency, economy, interoperability and control to implement an infrastructure strategy that outperforms any you've ever seen.

### Efficient

- Up to 28% in energy savings
- Increase rack density up to 30%

### Economical

- Reduce implementation costs compared to conventional data center approaches

### Interoperable

- Maximize use of existing infrastructure
- Depending on the solution, you can have a complete infrastructure in just weeks

### Controllable

- Easily enforce add / change policies
- Speed IT administration request response times by up to 30%



## Optimize Your Existing or New IT Environments

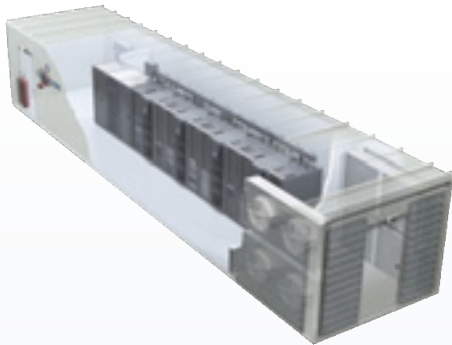
No Other Solution Offers The industry's Leading Power, Precision Cooling And Data Center Infrastructure Management Systems For Such A Wide Array Of Applications And Environments.



### SmartRow™

*Intelligent, integrated infrastructure in a self-contained line-up*

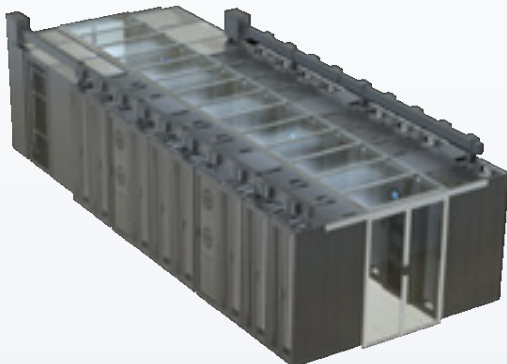
**Capacity:** 20kW  
**Racks:** 3-6  
**Type:** Self-contained  
**Floor:** Primarily non-raised  
**Key Applications:** Small data centers; remote sites; disaster recovery



### SmartMod™

*Intelligent, integrated infrastructure in a rapid deployment enclosure.*

**Capacity:** 30-400kW  
**Racks:** 6-28  
**Type:** Self-contained  
**Floor:** N/A  
**Key Applications:** Supplemental data center capacity; remote data centers; disaster recovery



### SmartAisle™

*Intelligent, integrated infrastructure using row-based building blocks.*

**Capacity:** Most cost effective up to 400kW  
**Racks:** Most cost-effective up to 40  
**Type:** Open or aisle containment available  
**Floor:** Raised, non-raised  
**Key Applications:** Small and medium data centers; high-density zones in all data centers; new or retrofit



**The SmartRow™ solution** has a room neutral design that lets you avoid many of the significant costs that come with a conventional data center buildout.

- Favorable implementation costs compared to using a conventional data center approach, due to savings from integrated fire suppression and ability to work in an existing non-raised floor environment without dedicated room cooling
- Reduce energy consumption by up to 27% compared to a data center with conventional design, perform less maintenance and reduce the costs of adding new equipment
- Order and install in just weeks

**The SmartMod™ enclosure** lets you save on upfront design and implementation by delivering fully integrated power, precision cooling, integrated fire suppression and management systems in a modular, standalone design.

- Rapidly deploy a comprehensive data center infrastructure solution
- Implement a stand-alone solution that won't burden the existing infrastructure
- Save on design, equipment purchase and installation
- Order and install in just months
- Reduce energy consumption by up to 28% compared to a data center with conventional design

**The SmartAisle™ offering** can increase your efficiency through row-based power and precision cooling systems.

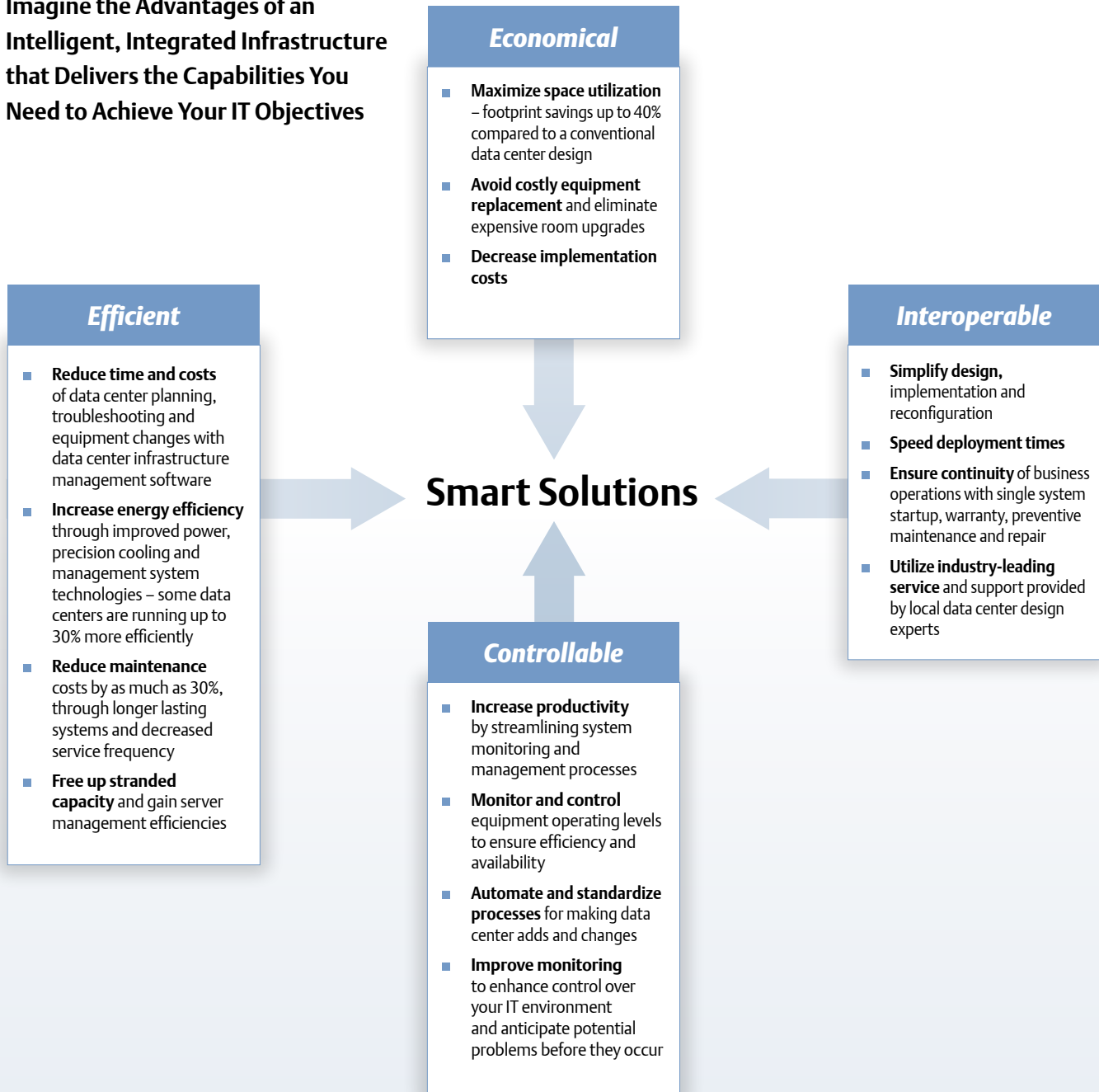
- Save up to 27% in energy costs
- Keep infrastructure on pace with equipment changes, with systems that operate together and can be quickly reconfigured
- Increase capacity without replacing old infrastructure

*“Using the SmartRow system, we did not have to sacrifice availability and we gained efficiency, so we found that the SmartRow system gave us the best of both worlds. SmartRow saved Pasco County significant dollars. We are able to utilize an average room, we did not have to build a special computer room to install this. That saved us money in raised floor, that saved us money in fire suppression, and that saved us money in room cooling.”*

**—Todd Bayley**, Technical Architect-Network information Technology Department, Pasco County, FL

## What Makes These Solutions Unique?

Imagine the Advantages of an Intelligent, Integrated Infrastructure that Delivers the Capabilities You Need to Achieve Your IT Objectives



## Why Emerson Network Power?

### Local Expertise

Our network of local data center design experts have decades of experience building strong, infrastructures for IT environments of all sizes and types. These experts will work with you to identify and implement the exact solution for your needs. And they can thoroughly assess your IT environment to address your power, cooling and management challenges.



### Industry-Leading Services

Our globally-renowned service and support organization is the largest in the industry – twice the size of our next largest competitor. Liebert Services can provide service capability for your entire facility infrastructure: from AC and DC power and battery system service solutions to environmental services, for all Emerson Network Power brands and businesses.



*“We wanted a vendor that could deliver an integrated solution set, and Emerson Network Power was the only company that could deliver an integrated power, cooling and monitoring solution that provided energy efficiency without compromising on availability.”*

**—Tom Wye**, President & CEO,  
Bay Area Internet Services

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. Liebert AC power, precision cooling and monitoring products and services from Emerson Network Power deliver *Efficiency Without Compromise™* by helping customers optimize their data center infrastructure to reduce costs and deliver high availability.

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

Emerson Network Power  
European Headquarters  
Via Leonardo Da Vinci 8  
Zona Industriale Tognana  
35028 Piove Di Sacco (PD)  
Italy  
39 049 9719 111 Phone  
39 049 5841 257 FAX

Emerson Network Power Asia Pacific  
29/F, The Orient Square Building  
F. Ortigas Jr. Road, Ortigas Center  
Pasig City 1605  
Philippines  
+63 2 687 6615  
+63 2 730 9572 FAX

[liebert.com](http://liebert.com)

24 x 7 Tech Support  
800 222 5877 Phone  
614 841 6755 (outside U.S.)

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.

© 2011 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-11440 (R1/11) Printed in USA

#### Emerson Network Power.

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

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

[EmersonNetworkPower.com](http://EmersonNetworkPower.com)