

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



 **SmartCabinet™**



 **SmartRow™**

# 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

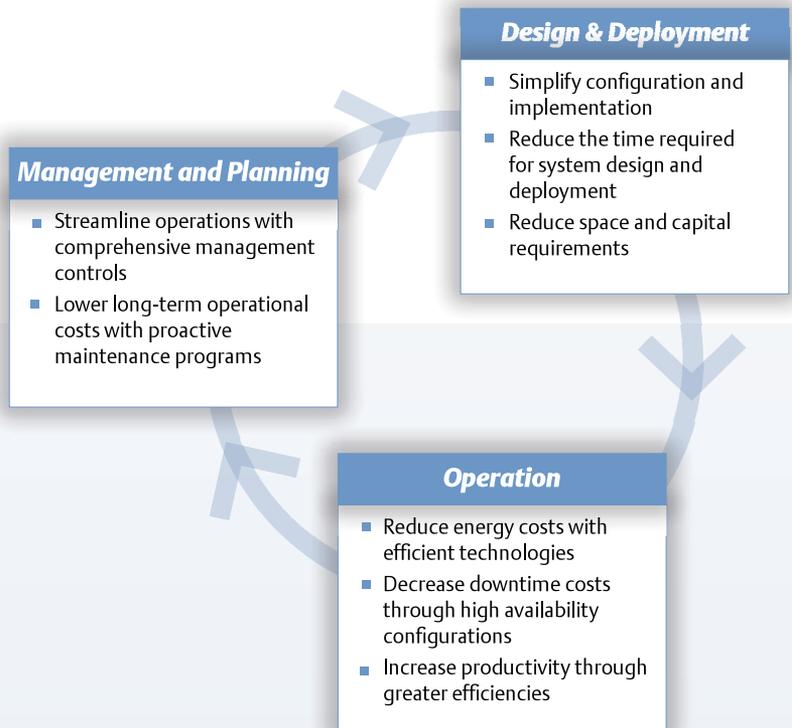
Faced with these challenges, IT and data center managers increasingly want infrastructure strategies that are alternatives to conventional approaches. These new strategies must include solutions that:

- 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%

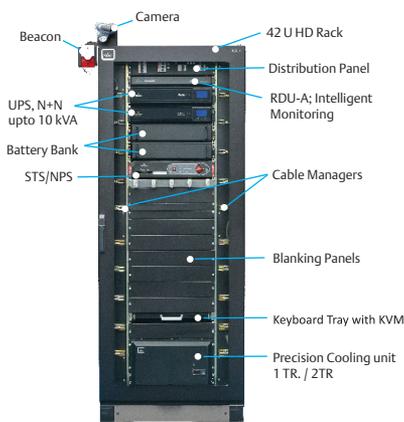
 **Smart Solutions**  
Intelligent, integrated infrastructure for the data center

 **SmartCabinet™**  
 **SmartRow™**

The Smart Solutions family helps you cost-effectively achieve and manage higher levels of density, availability and efficiency.

## 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.**



**Capacity:** 1-10kVA

**Rack:** 1-2 Racks

**Floor:** Primarily non raised

**Key Application:** Server room and Small datacenters



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

**The SmartCabinet™ enables** Enterprise Class IT Infrastructure through the provision of integrated enclosure, power, cooling and service. Critically it also enables the most vital element - namely 360° visibility of all system components.

This enables review, real time monitoring as well as insight into system performance going ahead so SmartCabinet customers can most effectively manage - and plan their IT Infrastructure. Continuous availability in turn rests on the power and cooling infrastructure that supports these systems and is comprised of the following:

- Power Quality
- Cooling
- Enclosure and Physical Infrastructure
- Monitoring and Management



**Capacity:** 10-40kVA

**Rack:** 2-6 Racks

**Floor:** Primarily non raised

**Key Application:** Datacenter, Disaster recovery sites



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

**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

## What Makes These Solutions Unique?



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

### *Efficient*

- **Reduce time and costs** of data center planning, troubleshooting and equipment changes with data center infrastructure management software
- **Increase energy efficiency** through improved power, precision cooling and management system technologies – some data centers are running up to 30% more efficiently
- **Reduce maintenance** costs by as much as 30%, through longer lasting systems and decreased service frequency
- **Free up stranded capacity** and gain server management efficiencies

### *Economical*

- **Maximize space utilization** – footprint savings up to 40% compared to a conventional data center design
- **Avoid costly equipment replacement** and eliminate expensive room upgrades
- **Decrease implementation costs**

### *Interoperable*

- **Simplify design,** implementation and reconfiguration
- **Speed deployment times**
- **Ensure continuity** of business operations with single system startup, warranty, preventive maintenance and repair
- **Utilize industry-leading service** and support provided by local data center design experts

## Smart Solutions

### *Controllable*

- **Increase productivity** by streamlining system monitoring and management processes
- **Monitor and control** equipment operating levels to ensure efficiency and availability
- **Automate and standardize processes** for making data center adds and changes
- **Improve monitoring** to enhance control over your IT environment and anticipate potential problems before they occur

Smart Solution Offering



## SmartRow™ Configuration

Specifications	SR-210	SR-210RC	SR-320	SR-320RC	SR-435*	SR-435RC*	SR-635*	SR-635RC*
IT Capacity	10 KVA	10 KVA	20 KVA	20 KVA	35 KVA	35 KVA	35 KVA	35 KVA
No. of Racks	2	2	3	3	4	4	6	6
Cooling Redundancy	Thru Emergency Ventilation	Yes						
Emergency Ventilation	Yes	NA	Yes	NA	Yes	NA	Yes	NA
UPS Capacity	2 x 10 KVA	2 x 10 KVA	2 x 20 KVA	2 x 20 KVA	4 x 20 KVA	4 x 20 KVA	4 x 20 KVA	4 x 20 KVA
UPS Redundancy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Backup Time **	10 Min	10 Min						
U Space available	68	68	99	99	117	117	199	199
Monitoring	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Access control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

\* Option of water chilled cooling model also available

\*\* Additional backup possible with external batteries

\*\*\* Also available additional accessories as optional - KVM, LCD Console, Intelligent Rack PDU, Camera with local surveillance

### Dimensions

Width	2400	3000	3000	3600	3600	4200	4800	5500
Height	2450	2300	2450	2300	2450	2300	2450	2300
Depth	1800	1800	1800	1800	1800	1800	1800	1800

## Smart Solution Offering



## SmartCabinet™ Configuration

Specifications	SC-13-AC	SC-26-AC	SC-210-AC	SC-210-AC DS	SC-210-RC	SC-210-RC DS
Capacity	3 KVA	6 KVA	10 KVA	10 KVA	10 KVA	10 KVA
No. of Racks	1	2	2	2	2	2
Cooling Redundancy	No	No	No	No	Yes	Yes
Cooling Capacity	3.5 KW	2X3.5 KW	7KW	7KW with DS	2X7KW	2X7KW with DS
UPS Capacity	2 X 3 KVA	2 x 6 KVA	2 x 10 KVA	2 x 10 KVA	2 x 10 KVA	2 x 10 KVA
UPS Redundancy	Yes	Yes	Yes	Yes	Yes	Yes
Backup Time (Common)	10 Min	10 Min	10 Min	10 Min	10 Min	10 Min
Fire Detection	Yes	Yes	Yes	Yes	Yes	Yes
Usable U Space	23	58	55	55	45	45

Dimensions						
Width	800	1600	1600	1600	1600	1600
Height	2100	2100	2100	2100	2100	2100
Depth	1000	1000	1000	1000	1000	1000

Note: Battery backup & cooling unit capacity can be modified as per requirement. U space available is subjected to change as per configuration.

\*Also available additional accessories as optional - KVM, LCD Console, Intelligent Rack PDU, Camera with local surveillance and Fire suppression

### 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.

## Country Office

Emerson Network Power (India) Private Ltd.  
Plot No. C-20, Road No. 19, Wagle Estate,  
Thane (W), Maharashtra - 400 604. India.

Tel.: 91-22-33154400

Fax: 91-22-25828358

Toll Free No 18002096070

Email: [marketing.india@emerson.com](mailto:marketing.india@emerson.com)

 <p>2014 CIO CHOICE 2014</p>	<p><b>CIO CHOICE 2014 Awards (Centre Of Recognition &amp; Excellence) Most Preferred Brand</b></p> <ul style="list-style-type: none"> <li>• Integrated Data Center Solution</li> <li>• ICT Infrastructure Cooling</li> <li>• Data Center Infrastructure Management</li> </ul>	
 <p>2013 BEST PRACTICES AWARD</p>	<p><b>Frost &amp; Sullivan 'Voice Of Customer' 2013</b></p> <ul style="list-style-type: none"> <li>• Most Preferred UPS Brand - IT/JITES</li> <li>• Most Preferred UPS Brand - Manufacturing &amp; Process Industries</li> <li>• Most Preferred UPS Brand - Power, Oil and Gas</li> <li>• Overall Customer Service Leadership (Above 20kVA) Award</li> </ul>	
 <p>2013 CIO CHOICE 2013</p>	<p><b>CIO CHOICE 2013 Awards (Centre Of Recognition &amp; Excellence) - Most Preferred Brand</b></p> <ul style="list-style-type: none"> <li>• Data Center (UPS)</li> <li>• Data Center (Cooling)</li> <li>• Power Distribution</li> <li>• Infrastructure Appliance</li> </ul>	<p>2013 (Global recognition) <b>EMA Radar Report™ for Data Center Infrastructure Management</b> 'Most Comprehensive DCIM Solution' - Trellis</p>
<p>2012 (Global recognition) <b>Forrester's March 2012: "Market Overview: Data Center Infrastructure Management Solutions" report</b> 'Dominant supplier in data center infrastructure management (DCIM)'</p>		
 <p>2012 (APAC recognition) BEST PRACTICES AWARD</p>	<p><b>Frost &amp; Sullivan 'Asia Pacific Market Share Leadership 2012' - data centre cooling solutions market</b></p>	<p>2010 Frost &amp; Sullivan 'India UPS Market Leadership Award'</p>
 <p>ISO 9001 DNV REGISTERED FIRM</p>	 <p>ISO 14001 REGISTERED DNV Certification B.V., The Netherlands</p>	 <p><b>FORTUNE 2013</b> WORLD'S MOST ADMIRABLE COMPANIES Emerson Among Top 50 On Fortune Survey Of "Worlds Most Admired" Companies.</p>

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

For disposal of Batteries Please visit the below link:  
<http://www.cpcb.nic.in/divisionsofheadoffice/hwmd/lead.pdf>

**Note:** Specifications & Features may vary based on the condition.

## Emerson Network Power.

The global leader in enabling Business-Critical Continuity™.

[www.emersonnetworkpower.com](http://www.emersonnetworkpower.com)

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

Emerson, Business - Critical Continuity and Emerson Network Power are trademarks of Emerson Electric Co. or its affiliated companies. © 2013 Emerson Electric Co.

EMR / SMART SOLUTION / SMART SOLUTIONS / 05.12.14