VERTIV.

SMART SOLUTIONS

Intelligent, Integrated Infrastructure for the Data Center

Data Center Solutions: Achieve Advanced Modular Data Center Design

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.

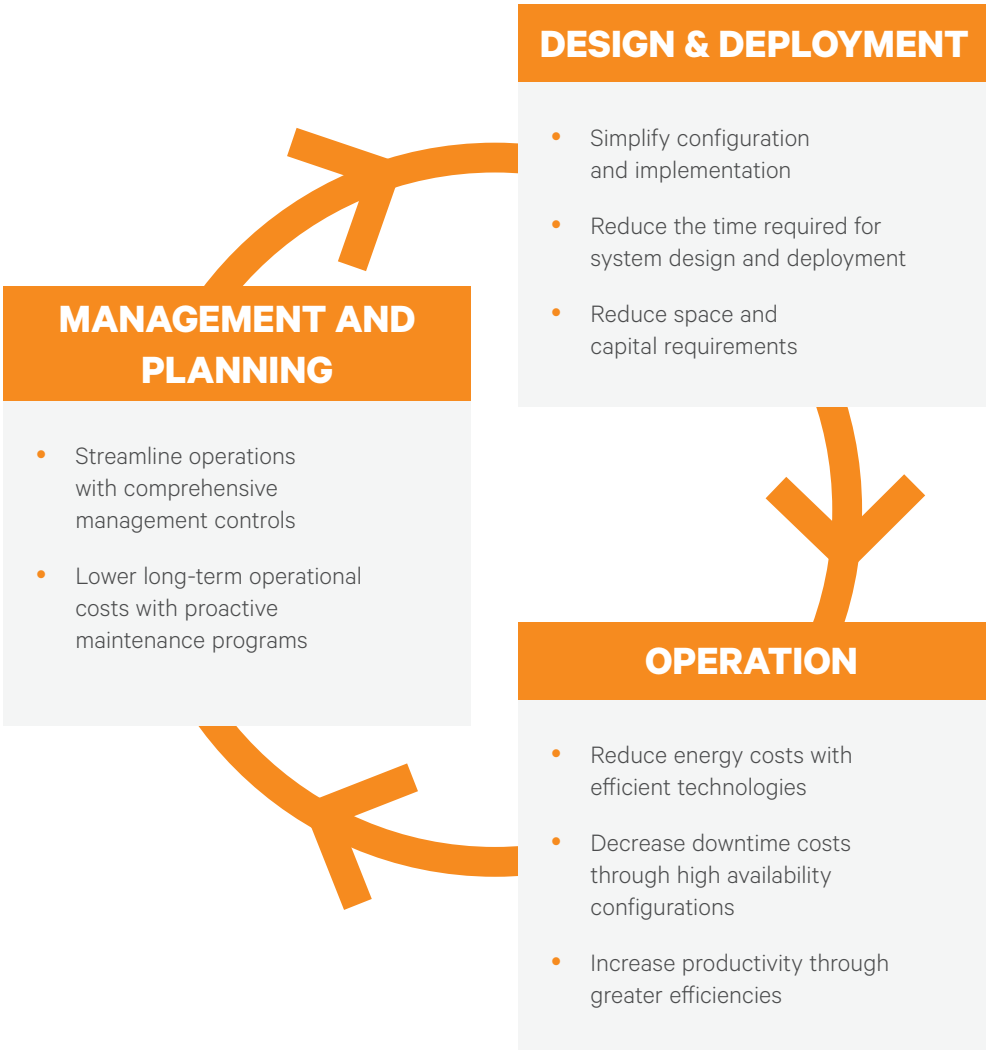
What IT and Data Center Managers Want

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:

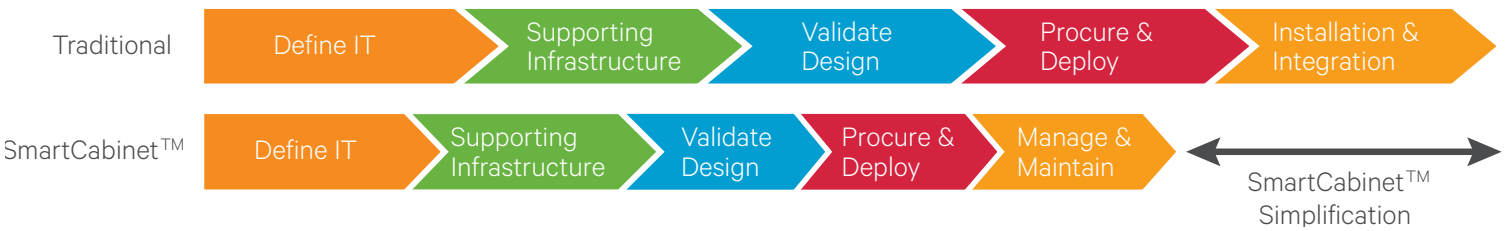
- Improve energy efficiency, space utilization and IT productivity
- Offer measurable savings in CAPEX and OPEX
- Offer location flexibility and compatibility with existing infrastructure
- Improve the ability to manage and control the IT environment
- Feature interoperability for fast and easy design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

Discover the Route to Efficient Data Center Operations

Vertiv delivers Efficiency Without Compromise™ through Smart Solutions, 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.



Deployment Time Savings



Smart Solutions - A New Approach

Availability, Capacity, Efficiency.

You Need Them – Now You Can Have Them All. Another First From Vertiv™.

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

Smart Solutions 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.

Vertiv Smart Solutions offer Industry best practices and best of breed solutions in data center design and operations such as:

- Remote Manageability of IT and facility assets
- 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

Vertiv brings together the industry's finest power, precision cooling, monitoring and management brands and businesses.

Smart Solutions

- SmartCabinet™
- SmartRow™
- SmartMod™
- SmartAisle™
- SmartDesign™

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

OVERVIEW

Smart Solutions give 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 60%

Economical

- Reduce implementation costs compared to conventional data center approaches

Simplified

- 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.

SmartCabinet™

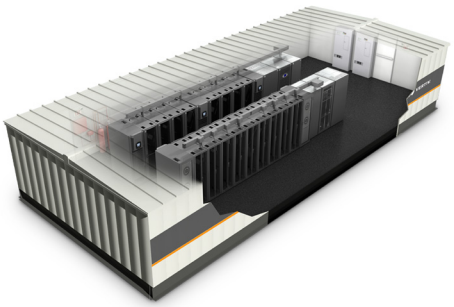
Intelligent, integrated infrastructure ready to house IT in a single rack

Capacity: 1.5-16kW;
Rack Sizes: 13U, 24U, 42U and 48U
Type: Single rack
Floor: Primarily non-raised
Key Applications: Computer rooms; network closets; data centers

SmartRow™

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

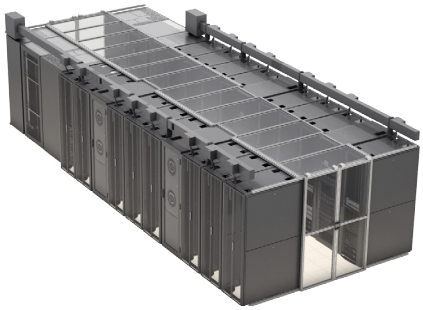
Capacity: 20-36kW; 3-10 racks
Type: Self-contained
Floor: Primarily non-raised
Key Applications: Small data centers; remote sites; disaster recovery



SmartMod™

Intelligent, integrated infrastructure in a rapid deployment enclosure.

Capacity: 30-400kW; 6-28 racks
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
Type: Open
Floor: Raised, non-raised
Key Applications: Small and medium data centers; high-density zones in all data centers; new or retrofit

The SmartCabinet™ solution is a turn-key infrastructure offering for network closets, small server rooms or data center seeking standardization.

- Standardized configurations that are tailored to the application, factory integrated, validated and tested
- High availability with network independent remote management and extensive emergency service coverage
- Secure physical and remote access with on-site intrusion detection and user rights driven remote management

The SmartRow™ infrastructure 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

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

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

Smart Solutions

SIMPLIFIED

- 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

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

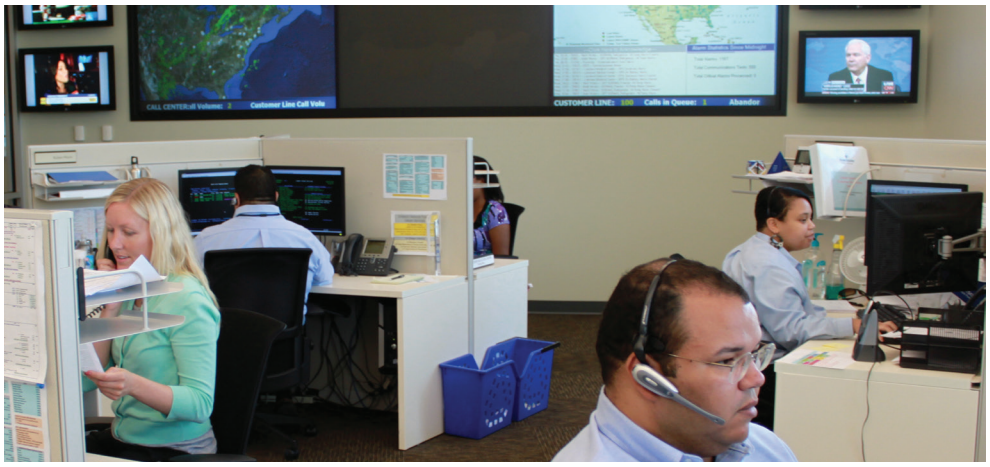
Why Vertiv™?

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 Vertiv brands and businesses.



"We wanted a vendor that could deliver an integrated solution set, and Vertiv 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

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