Edge Data Center Solutions
Complete Solutions Engineered to Accelerate Edge Deployments
### Edge Deployment Challenges

Adding compute capacity at the Edge can be a long and complicated process for IT and Facility leaders.

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<tr>
<th><strong>Time Consuming Process</strong></th>
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<td>The process from planning to commissioning takes 6 – 12 months on average and is difficult to predict with confidence.</td>
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<th><strong>Hidden Costs</strong></th>
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<td>Over half the cost of a deployment goes to the process, including planning, consulting, site prep, etc.</td>
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<th><strong>Cooling Capacity</strong></th>
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<td>Computing generates too much heat for the existing infrastructure, requiring additional cooling capacity.</td>
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<th><strong>Power Upgrades</strong></th>
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<td>New compute technologies may require more power than the current facility can handle.</td>
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<th><strong>Management</strong></th>
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<td>IT distributed across multiple sites and from different vendors is very challenging for IT teams to manage efficiently.</td>
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<th><strong>Sustainability</strong></th>
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<td>With energy costs and demand both rising at the Edge, the pressure is on to find more sustainable technologies.</td>
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*Did you know that 60% of network outages are related to power or cooling?*
How Vertiv™ Solutions Simplify Deployment

Pre-engineered systems simplify edge deployments with a repeatable and scalable solution, enabling business agility for future growth.

**Accelerate Deployments**
Accelerate the deployment process by reducing planning, build, and overall deployment time.

**Reduce Costs**
Reduce costs associated with planning, construction and renovation and make the budget for the project more predictable.

**Integrated Cooling**
Many solutions offer integrated cooling and containment to maximize cooling capacity and energy efficiency in the space.

**Pre-Integrated Power Distribution**
Solutions can include Busway, UPS battery backup, surge protection, and pre-integrated power distribution to IT rack enclosures to simplify installation and commissioning.

**Remote Management**
Standardized, single-vendor solutions include remote management options to simplify environments.

**Contained In-Row Cooling**
Contained systems with dedicated cooling are proven to reduce cooling energy use and carbon emissions by as much as 30%.

Vertiv is a Global Leader in Data Center Power and Cooling Solutions
It is Time to Rethink the Traditional Process

**Traditional Room Build**

**Complex Process**

Months of planning, design, procurement, legal permitting, and consulting go into creating custom designs for a room build or upgrade. It takes months for each deployment, and each room is typically repeated all over again for every location.

**Planning and labor consume 50% of the deployment cost***

**Vertiv™ Smart Solutions**

**What’s Included**

- Sealed Racks
- In-Row Cooling
- Power Distribution & UPS
- Fire Suppression
- Physical Security

*Pre-Engineered Solutions eliminate most of the design and planning that goes into Edge deployments.*
**Smart Solutions vs Room Build**

*Pre-engineered systems greatly reduce time spent on planning and design, which drives down deployment cost.*

**Room Build**

8 - 12 months*

**Vertiv™ Solution**

6 - 10 weeks*

- 80% Faster time to deployment*
- 30% Initial cost savings per deployment*
- 20% Reduction in carbon emissions*

*For illustration purposes only. Figures are estimations based upon Vertiv’s internal engineering studies and analysis. Actual deployment times, costs, and savings may vary depending upon scope, specifications, geographic locations, etc.*
2. **Pre-Engineered Edge Solutions**

**Vertiv™ SmartRow™ 2**
Deployment-ready contained row of racks for Edge Data Centers.

2 – 8 Racks
Up to 40kW with full redundancy (N+1)

**What’s Included**

- IT Rack Enclosures
- Contained In-Row Cooling
- UPS Battery Backup
- Power Distribution
- System HMI
- Remote Management
- Built-in Security

*Pre-engineered solutions from Vertiv include virtually everything needed to keep IT infrastructure running 24/7.*

SCAN FOR MORE DETAILS
Vertiv™ SmartAisle™ 2
Deployment-ready contained aisle solution for Edge Data Centers.

8 – 20 Racks
Up to 200kW with full redundancy (N+1)

Smart Solutions can be installed in days, not months.

What’s Included
- IT Rack Enclosures
- Contained In-Row Cooling
- UPS Battery Backup
- Power Distribution
- System HMI
- Remote Management
- Built-in Security

SCAN FOR MORE DETAILS
Vertiv™ SmartMod™
Modular Data Center with Everything Needed to Achieve Your IT Objectives.

2 – 14 Racks | Up to 100kW

Check out our product in the Vertiv™ XR App

Container with Security Door
Close-coupled cooling units with condensers
Automatic Transfer Switch for Dual Power Sources
Dual Busbar system
Overhead fiber and cable management
Modular & Scalable UPS power protection
Aisle Containment - improves cooling efficiency and reduce energy consumption
Fire Suppression and Smoke Detection
IT Rack Enclosures
Rack PDUs
Vertiv™ Critical Insight monitoring and visualization software (optional)

SCAN FOR MORE DETAILS
Prefabricated Modular Solutions

Vertiv prefabricated modular data centers deliver low risk deployments through faster delivery and easier on-site assembly.

Rapid Design
Standardized subsystems enable efficient design process.

Tailored Integration
Customized documentation provides concise information for module assembly.

Simplistic Assembly
Mechanical & Electrical integrations are completed at the factory.

Vertiv partnered with a government agency to deploy a prefabricated modular data center solution for their core data center site. PFM data centers deliver low risk, high value implementations with the added benefits of faster delivery and easier on-site installation, resulting in a data center that’s up and running in hours or days instead of weeks or months. Watch the video here.

Traditional New Build

- Project Concept
- Engineer & Purchase
  - Schematic Design
  - Design Development
  - Construction Documents
  - Part Acquisition & Purchase
- Civil Works Site Prep
- Construction
- On Site Installation
- Startup

Prefabricated Modular New Build

- Project Concept
- Engineer & Purchase
  - Schematic Design
  - Design Development
  - Construction Documents
  - Part Acquisition & Purchase
- Factory Install & Testing
- Site Assembly & Testing
- Startup
3. **Industry Leading**

Vertiv offers an industry-leading portfolio of physical infrastructure, services, and monitoring software.

**Portfolio of Edge Infrastructure**

- Rack Enclosures
- IT Management
- Power Distribution
- Services
- UPS
- Cooling

“Services available from global leaders in data center infrastructure services. Nobody keeps more data centers up and running than Vertiv.”

**Want to Learn More?**

Contact us: AskTheExpert@Vertiv.com
Vertiv™ SmartCloset™
Deployment-ready rack solution for Network Closets and Distributed IT

**Fast**
Stocked to enable rapid deployment.

**Seamless**
Pre-validated by Vertiv to ensure easy deployment.

**Scalable**
Standardized components provide a scalable solution.

What’s Included
- Rack Enclosure
- UPS Battery Backup
- PDU
- Environmental Monitoring
- Power Management

Check out our product in the Vertiv™ XR App

Scan for more details

Download the Vertiv™ XR app
Vertiv™ Environet™ Alert
Vendor-neutral data center infrastructure monitoring software provides centralized monitoring, alerting, and trending.

Vendor Neutral
3rd party device support at no additional charge.

Scalable Platform
Plans can scale to thousands of devices.
Customized Dashboards
Choose your views to focus on the most important data to you.

Centralized Visibility
Connect your DCIM and BMS to get one complete picture of your operations.

Monitoring
Alerting
Trending
Vertiv™ Avocent® DSView™ Solution

Provision, Automate, and Control all your IT devices with a Vendor-Neutral Platform.

Management Platform

Brain of the Avocent® DSView™ Solution
1 required per fleet

Rack Manager

Aggregates Interface Modules
1 per rack (optional)

Interface Modules

IP modules provide KVM & Serial access to devices

Compatibility

IT Devices
- Servers
- Service Processors
- Virtual Machines
- Routers
- Switches
- Firewalls
- Storage Devices

Power Devices
- Rack PDUs
- UPS
Centralized IT Management enabling automation, provisioning, management, monitoring, and control of all your IT devices like no other solution in the market.

Only Vertiv™ Avocent® DSView™ Solution provides the following:

- Common architecture with an open platform and APIs
- Flexible and scalable deployments
- Fastest and most feature rich KVM experience
- Most expansive management of IT devices
- KVM, Serial, Service Processor on a single device
- 100+ simultaneous users
- All digital architecture
- Multilevel security for users and devices
- USB-C native to match IT trends