

# Edge Data Center Solutions

Complete Solutions Engineered to Accelerate Edge Deployments









## How Vertiv™ SmartRow™ simplifies 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.

#### Integrated fire suppression

Easily deploy and effectively manage an integrated IT infrastructure without being limited by building systems such as fire suppression and cooling, and save up to 66% over room-based systems by avoiding room upgrades.

#### Remote management

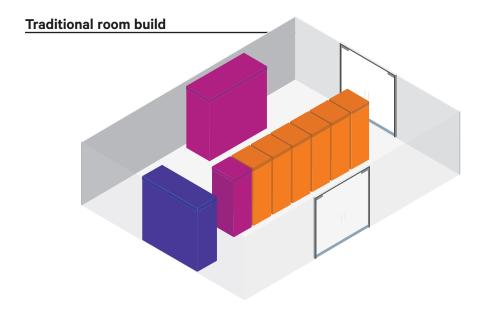
Standardized, single-vendor solutions include remote management options to simplify environments.

#### **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



#### **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



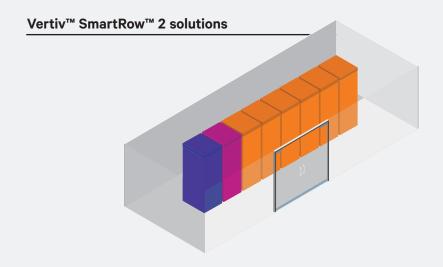
of the deployment cost







Racks Pov



#### What's included

- Rack enclosures
- In-row cooling
- Hot & cold aisle containment
- Power distribution & UPS
- Power and cooling Redundancy options
- Optional Fire Suppression System
- Remote management
- Physical security
- Fire suppression





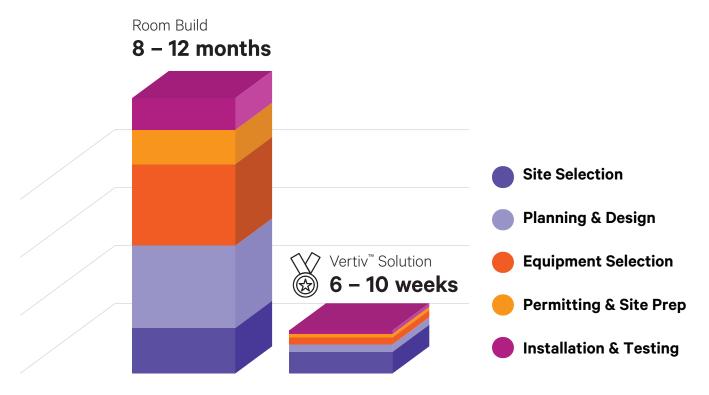


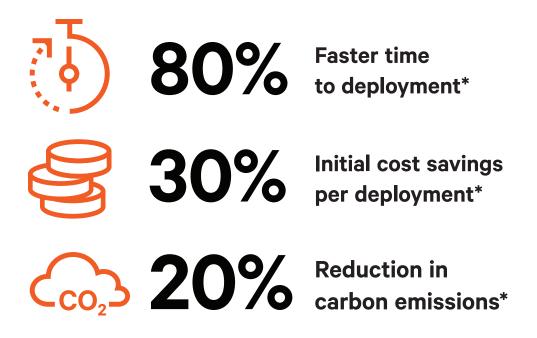


Pre-Engineered Systems eliminate most of the design and planning that goes into Edge deployments.

## Vertiv™ SmartRow™ 2 vs Room Build

The Vertiv™ SmartRow™ 2 offers a simplified approach to deploying an Edge Data Center when compared to designing and building or retrofitting a room.





<sup>\*</sup>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<sup>™</sup> SmartRow<sup>™</sup> 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<sup>™</sup> SmartAisle<sup>™</sup> 2

Deployment-ready contained aisle solution for Edge Data Centers.

8 - 20 Racks

Up to 200kW 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** 



Vertiv<sup>™</sup> Smart Solutions can be installed in days, not months.



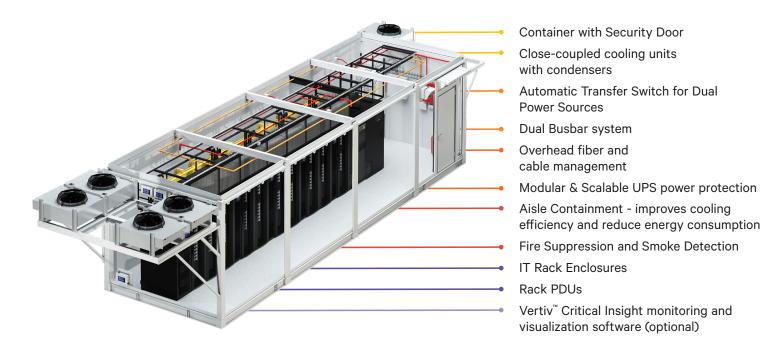
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## **Vertiv** SmartMod™

Modular Data Center with Everything Needed to Achieve Your IT Objectives.

### 2 - 14 Racks | Up to 100kW







SCAN FOR MORE DETAILS

# Check out our product in the Vertiv™ XR App



## **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



Data Center Owner

Data Center Provider

Civil Works Site Prep

Construction

# Vertiv<sup>™</sup>SmartCabinet ID Product Highlights

Complete Datacenter Solution

Zero-U Rack Space Cooling

3.5kW & 7kW Split-System Cooling

IP54 Rated (Dust/Water Resistant)

Mountable UPS Power

Mountable PDU's

Remote Monitoring

HMI Screen

Physical Security Lock

24U & 42U Cabinets

NAM & International

Sevice Offering

Complete Vertiv Solution





#### **Outdoor heat rejection**

Maintain proper temperature control inside the rack with outdoor heat rejection. And with the option to mount the condenser on the roof of the rack, added flexibility is built in.



## Fully sealed rack

IP54 rating protects mission-critical IT equipment from dust and water, providing a longer life to the equipment and peace of mind to business owners.



## Zero-U cooling solution

The Zero-U cooling solution maximizes the investment in your business by utilizing the full cabinet, allowing for more IT equipment to be installed.



# HMI display with built-in communications

Easy remote access for monitoring and management of power, thermal conditions, and unit security, allowing for more precise control over your most valuable assets.



## Integrated power distribution

Enable your IT
investment to stay
protected and online by
installing a rack PDU on
the pre-integrated
mounting brackets.
For added visibility,
choose from select
intelligent Vertiv™ Geist™ rPDU
models that are compatible
with the integrated HMI display
(rPDU's sold separately).



## Emergency backup power

Reliable backup operations in the event of utility power failure through the use of the Vertiv™ Liebert® GXT5 UPS (sold separately).

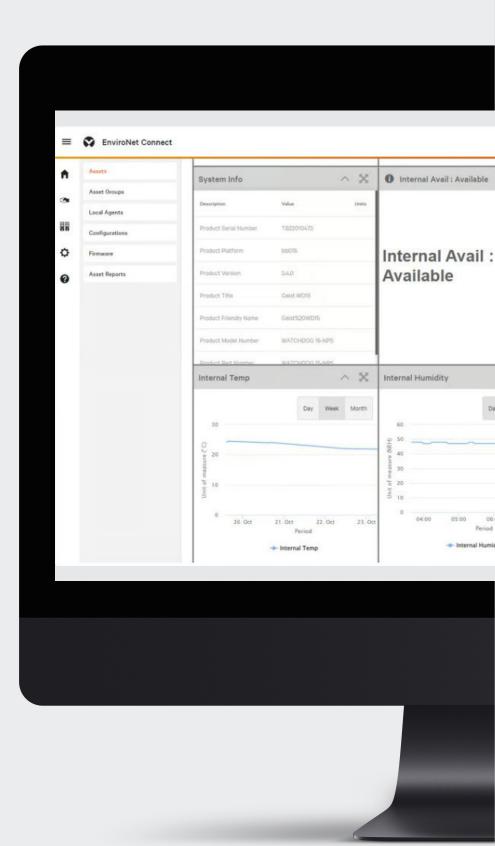


#### Protect your investment with service offerings from Vertiv

We are here to support you with service solutions for your critical infrastructure and to maintain your vital applications. From thermal management to power and power distribution, the  $Vertiv^{\mathsf{TM}}$  SmartCabinet $^{\mathsf{TM}}$  ID has a full suite of service offerings to help protect your investment and your business.

## **Vertiv**<sup>™</sup> **Environet**<sup>™</sup> **Connect**

Cloud-native platform for managing and monitoring IT infrastructure. It offers fleet management, bulk provisioning, device settings updates, firmware management, trending, and alarming.





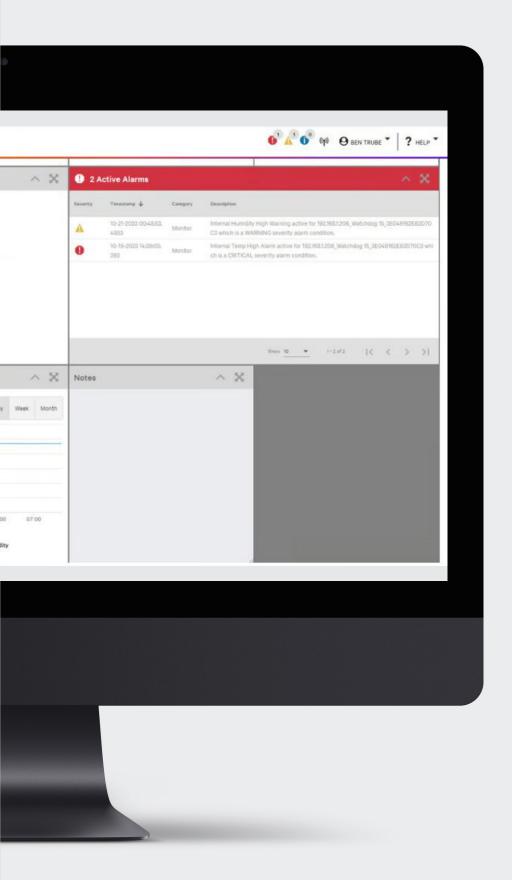
## **Secure Cloud-Native Platform**

Maintain the safety and reliability of your critical infrastructure.



## **Seamless Device & Fleet Management**

Supports distributed IT infrastructure and multi-tenant environments.











## **Always Up-to-Date and Accessible**

Always have the latest software, features, and supported devices.



## **Unified Cloud Portal**

Effortlessly manage device lifecycles through a portal, keeping firmware and device settings current.

## Vertiv<sup>™</sup> Avocent<sup>®</sup> DSView<sup>™</sup> 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)



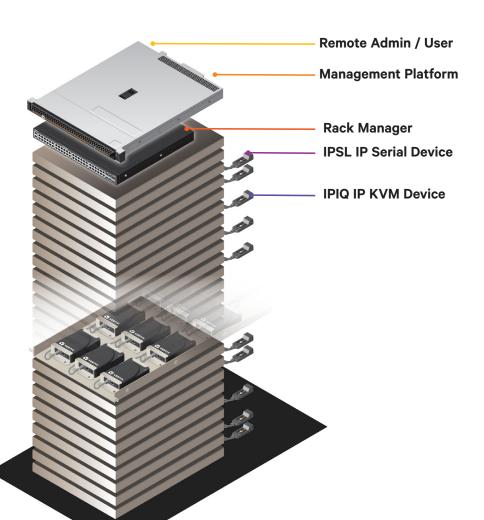
#### **Interface Modules**

IP modules provide KVM & Serial access to devices









## Compatibility

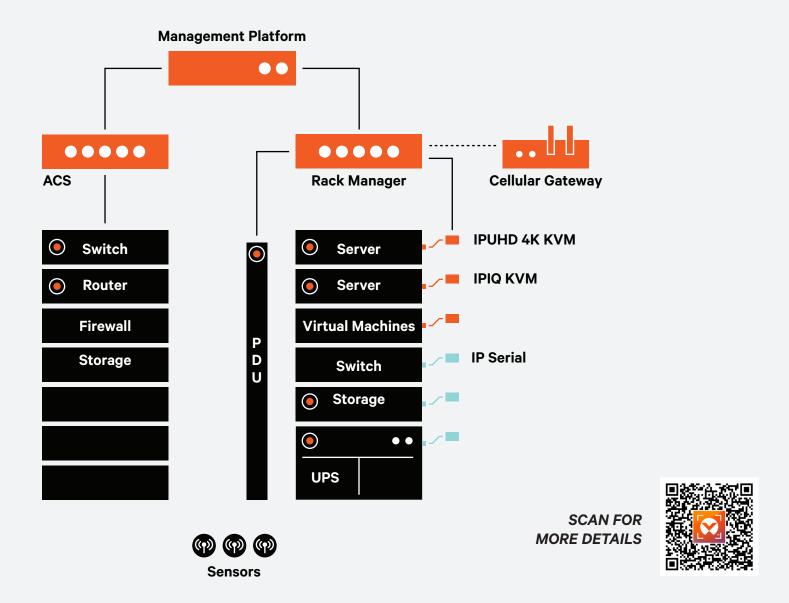
#### **IT Devices**

- 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.

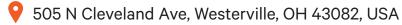


## Only Vertiv<sup>™</sup> Avocent<sup>®</sup> DSView<sup>™</sup> Solution provides the following:

- 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

## Vertiv.com



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