

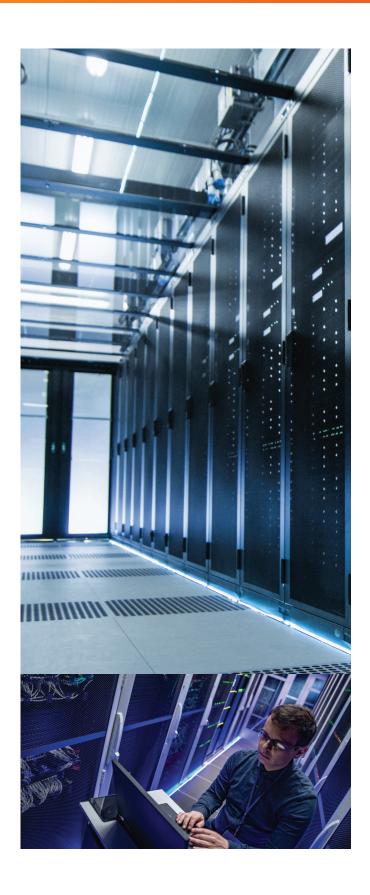
Optimizing Data Center White Space

Solutions for enhanced data center reliability, redundancy and scalability



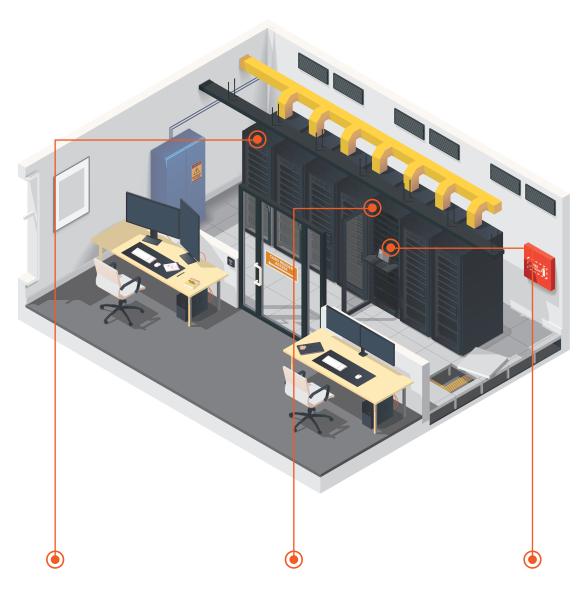
In setting up new data centers, data center managers are faced with the challenge of embracing new technology trends and business strategies, while minimizing operational cost without compromising on efficiency.

In addition, there is increasing need to set up data centers that not only enable the deployment of new IT technologies but are also scalable and flexible to support future growth.





Whether it's an edge data center, a disaster recovery room or simply business expansion, the following components are essential in building your data center white space:





Racks & Enclosure

The most critical part of your infrastructure as it houses IT equipment, cabling and other essential components.



Power Distribution

Intelligent data center rack power distribution units give you the enhanced protection to ensure availability in critical times. Features such as real-time power consumption monitoring, daisy-chaining and remote switching can help you easily manage your data center.



IT Management

Having the right data center infrastructure management solutions (DCIM) will give you the visibility of all your data center's physical components. From environmental monitoring to network security, DCIM will give you the increased reliability to easily manage your data center even without being physically present.

Vertiv Solutions for your Data Center White Space

Vertiv has a full-range of solutions for your data center white space. From rack PDUs to DCIM to enclosures, our solutions can help you achieve efficiency, scalability and reliability, without the complications.

Integrated Solutions

FOR NETWORK EDGE & CONVERGED SYSTEM DEPLOYMENTS

Rapidly deploy and manage IT infrastructure in just weeks without building new data center space. Our Smart Solutions products help you meet your IT needs with significant savings. With simplified, standardized designs, you can start small and expand over time.

SmartCabinet™ 2-M

The SC2-M contains all the supporting infrastructure needed to successfully deploy your distributed IT equipment. All the components are pre-integrated into the cabinet so all you have to do is mount your IT equipment. By using the SC2-M solution, you can quickly establish a standardized rack system that simplifies deployment, integrates essential infrastructure, maximizes uptime and protects assets.



Key Benefits:

- Improve Productivity and Agility: The SC2-M solution enables IT managers to standardize processes and centrally manage all services.
- Increase Security: The SC2-M decreases the security risks with rights-based access and control, optional on-site intrusion prevention and detection and video surveillance.
- **Rapid Deployment:** The standardization, factory integration and industry leading deployment services enable SC2-M to be quickly installed.
- Reduced Cost: The SC2-M solution significantly reduces your total cost of ownership compared with establishing unique solutions.

SmartCabinet™ 2-W

The SC2-W is the latest standalone self-contained rack from Vertiv, which facilitates installation of active IT equipment in server rooms. It is a prefabricated, pre-engineered system that is optimized, validated, and tested to support IT needs. The SC2-W solution also minimizes security risks (physical and virtual) and downtime. The standardization, factory integration and industry leading deployment services enable SC2-W to be quickly wall mounted.



Key Benefits:

- Standard Configuration: The SC2-W is a pre-fabricated, preengineered system that is optimized, validated, and tested to support anapplication.
- Remote monitoring, Control & Analytics:
 The SC2-W solution minimizes security risks
 (physical and virtual) and downtime.
- Real-Time Management: The SC2-W enable the IT access and control through remote monitoring.
- Rapid Deployment (Wall Mount): The standardization, factory integration and industry leading deployment services enable SC2-W to be quickly wall mounted.
- Less footprint in floor space and easy maintenance via unique vertical mounting system design
- Provides options to meet server computing and networking application purpose.

SmartCabinet™

Pre-configured, self-contained solution that offers the efficiency, economy, interoperability, and control to implement an exceptional infrastructure strategy.

Features:

- All-in-one design and easy to use
- No dedicated IT room required
- Dust protection and noise insulation
- Built-in high efficiency UPS, air-conditioning, power distribution, and security control
- Integrated power management
- Large LCD touch panel for local monitoring
- Suitable for network closet and small office



600mm width with external condenser



800mm width with external condenser



SmartCabinet™ Premium



SmartCabinet™ ECO





Configurations

·	
• 1+2	• 2+5
• 1+3	•2+6
• 1+4	• 2+7
• 2+4	•2+8



SmartRow™ Plus

SmartRow™ Plus is a fully-integrated data center infrastructure solution equipped with power, thermal management and infrastructure management and monitoring solution from Vertiv.

Features

- All-in-one design and easy to use
- Suitable for high or low density cooling requirement
- Low PUE, thanks to the high efficiency ITA2 UPS and CRV+ with digital scroll compressor
- Integrated power management
- Local touch panel LCD and remote IP-based monitoring
- Mobile App monitoring
- No raised-floor or room required

New SmartAisle™

Liebert® SmartAisle™ the most advanced fully integrated data center infrastructure solution with the futuristic capabilities embedded with sophisticated technology to make the data center operations efficient, quickly deployable, and provide monitoring and control of the entire operations.

Features

- Lowest Total Cost of Ownership Increase of 30+% cooling efficiency utilize SmartAisle™ logic ensures the most accurate cooling environment.
- An integrated design facilitates guick deployment in less than 2 weeks
- Simple Architecture, an integrated stand-alone build-to-install approach for the entire DC set-up in one go
- A 15-inch large HMI control panel enables administrators and facility managers to visualize the entire system operation in real time
- Uptime Tier IV Ready

Racks and Containment

You want the optimum benefits of your investments. And you want to be prepared for the unknown and unexpected. Our rack and containment products deliver flexibility, adaptability and cost-effective solutions to your specific data center requirements.

Vertiv™ VE Rack

The Vertiv VE Rack is an innovative enclosure system that integrates your computing hardware, power management technologies and peripherals in data centers and computer rooms. It offers superior design and flexibility, allowing optimal data center performance and easy installation.

Features

- Strong and durable nine-folded solid frame profile which can hold a static load of up to 1,600 kg
- 75% open high perforated doors for optimal air flow
- · Convenient tool-less installation of cable and air flow management
- Internal and external battery configurations for optimized back up time management
- Fast deployment leveling feet heavy duty caster wheels for easy movement

Enhanced Rack Installation Space Efficiency

- Solid steel frame with installation slots
- Rack static load capacity of 1,600 kg

Excellent Rack Cooling Efficiency

- Optimal heat management with 75% perforation rate for both front and rear doors
- Optional blanking panels for air flow are available

Enhanced Rack System Applicability In Data Centers

 Accessories available for cabling and air flow management Optional features for specific requirements in data centers available

Increased Convenience In Installation and Maintenance

- Tool-less design for cable, air flow management, and PDU mounting for flexible and quick installation
- Low profile casters preconfigured for easy deployment and mobility
- Self-leveling feet for easy installation

Power Distribution Units

Your power distribution system impacts both availability and scalability. Our room, row and rack power distribution units give you the flexibility to adapt to changing environments. They also support monitoring to ensure availability and provide insight into energy use.





Vertiv™ Geist® rPDU Basic

Features

- Available in vertical and horizontal rackmount form factors.
- Flexibility to meet a broad range of requirements, with a variety of electrical and receptacle configurations available.
- Simple and quick installation in all standard racks or cabinets with included mounting brackets.

Vertiv™ Geist® rPDU Monitored/Switched

Features

- Secure standard power cords and avoid accidental disconnections with U-Lock.
- Monitor power consumption at the outlet-level for a detailed view of power distributed to a specific equipment and outlet level control to turn on, off or reboot individual outlets.



Vertiv™ Geist® UPDU

Features

- No need to maintain multiple rPDUs with different power output configurations. The UPDU power configuration can easily be changed by using geographically specific Facility Side Cables.
- Flexibly and easy to install in any location with vertical and horizontal rackmount form factors and pivoting connectors that adjusts from 0 to 90 degrees.
- Built for high temperature data center environments of up to 60°C.



Vertiv™ Geist® Combination Outlet C13 / C19

Features

- For ultimate rack power flexibility, select a Vertiv Geist UPDU, Universal Power Distribution Unit, with the Combination Outlet C13 / C19 to accommodate all initial deployment needs and any future equipment adds, moves, or changes.
- The Combination Outlet C13 / C19 meets global electrical compliance requirements and is UL Certified, CE Marked, China RoHS & RoHS Compliant and RCM Mark (EMC Only).
- Combination Outlet C13 / C19 is a 2-in-1 receptacle functioning as both an IEC C13 and C19 providing flexibility to connect C14 and C20 plugs in the same outlet.



Monitoring, Control and Management

Our solutions provide comprehensive functionality, scalability and security across the facility. By expanding data access and analysis, we provide unprecedented insight which lowers costs and enables rich remote management while ensuring security.



Vertiv[™] Avocent CLRA

- Space Savings: Eliminates the need for cumbersome and inefficient crash cart access, with optional pre-integrated KVM that requires only 1U rack space for the entire package.
- Reduce Downtime: Manage up to 16 servers with the optional 16-port KVM, allowing rapid troubleshooting of server issues.
- Secure access: Limit server access to authorized personnel by setting with individual users and passwords.
- Ease of Use: High-definition (1920 x 1080) 18.5" LED panel, fullsized keyboard, touch pad and USB pass through ports provides a superior computing experience.
- Easy installation: Tool-less design for ease of installation.



Avocent ACS 8000 Serial Console

- Fast Deployment: Fast, automated configuration with Zero Touch Provisioning and support for IPv6 and IPv4 network deployments.
- Reduce server downtime: Secure in-band and out-of-band network remote management for rapid remote troubleshooting.
- Remote troubleshooting: Access and troubleshoot remote locations using automatic network failover to cellular, Ethernet or analog modem
- Third-party support: No need for adaptors with automatic Cyclades™ and Cisco pin-out conversions, with expanded support for UPS and rPDUS from Vertiv and other brands.



Vertiv™ Environet™ Alert

- Increase Flexibility: Vendor neutral SNMP device management to simplify deployment.
- Affordable Solution: Environet Alert is a budget-friendly yet powerful solution.
- Fast and Easy Configuration: Intuitive interface to manage your own system configuration and changes.
- Customizable: Set your own views with our modern user interface.
- Connect Your Operations: Use our API to connect to remote DCIM and building management systems.



Trellis™ Smart Infrasight

- Enhanced User Interface: From multisite mapping to space, power and rack-level monitoring, Smart InfraSight has it all.
- Advanced Access Control: Control door access and stream up to 9 high-definition video cameras to ensure the right persons are in the right place at the right time.
- Integration simplified: Common user interface across Vertiv
 monitoring solutions makes it easy for personnel to be cross-trained.
 Smart InfraSight also uses multi-vendor SNMP protocol to support
 your existing equipment.



Liebert RDU501

- Fast Deployment: Offered as a modular design with plug-and-play RJ45 ports, the RDU501 can be quickly deployed for both local and remote management.
- Environmental Monitoring: Instant visibility on heat, power and assets monitoring on a single pane of glass.
- Server Management: Up to 40 IT servers can be connected to the RDU501 for scheduled and adhoc shutdown and power up.
- Access Security: Control up to 48 cabinet door locks and up to 2 room locks to ensure the right personnel has access to the right assets.



Vertiv™ Geist™ SwitchAir®

(Passive and Active Switchair)

- **Targeted Airflow:** Provides a path for cool air to flow to the intake of network switch equipment.
- Airflow Management: Creates a barrier to effectively prevent hot exhaust air from entering switch intakes.
- Fast Installation: Easily install the SwitchAir into the front of the cabinet
- Easy Selection: Utilize the SwitchAir Finder to identify the SwitchAir with the airflow pattern needed



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