VERTIV™

SmartCabinet™

Intelligent, Integrated Containment for IT Infrastructure

VERTIV™

Vertiv, formerly Emerson Network Power, designs, builds ,and services mission critical technologies that enable vital applications for data centers, communication networks, and commercial & industrial environments
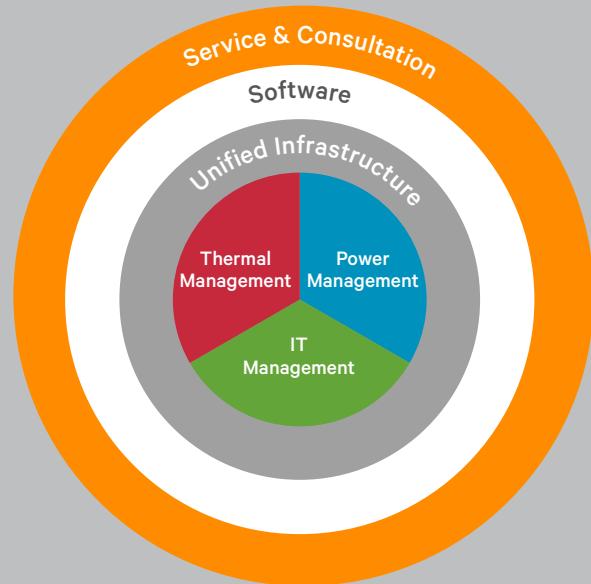
We support today's growing mobile and cloud computing markets with our portfolio of power, thermal and infrastructure management products, software and solutions, all complemented by our extensive global service network.

We help strengthen the world's most vital applications by bringing together global reach and local knowledge, and our decades-long heritage, including brands like Chloride, Liebert, NetSure, and Trellis.

Vertiv
Your Vision, our Passion

With a unique combination of industry expertise, technology, and resources, our mission is to support and power mission-critical technologies that drive possibility.

Service & Consultation

Software

Unified Infrastructure

Thermal Management

Power Management

IT Management

Chloride®

Our global industrial power solutions meet the most demanding technical specifications and provide safe, reliable power no-matter the challenge

NetSure™

Our global intelligently engineered DC power systems deliver high availability, energy efficiency and scalability for converged networks

Liebert®

Our global power and thermal management solutions are some of the world's most efficient and reliable power and cooling technologies

Trellis™

Our industry-leading software gives customers an integrated view of operations across IT and facilities resources, enabling better decisions that save time and money

DAY-TO-DAY CONCERNS IN TYPICAL EDGE APPLICATIONS

Room Renovation

Housing all components
Takes 15 - 20 days to build
Footprint : 10 to 20 sqm.

Cleanliness & Noise

Aesthetics
Balancing operations in an organized DC
Fan noise exceeding 65dB levels

Integrating Design activity

Time-consuming advances step-wise wastage of material

Monitoring

High CAPEX for integration
Complex processes for integrating all systems.

Power distribution

Separate UPS + Battery
Tedious Power management
Wall mounted panels

Cooling system

Cooling requires N+1 Configuration
SHR > 0.95 requires Heaters/Humidifier operation

Primary IT Infrastructure Areas of Concern in mission-critical Edge Applications

- Justifying the area for Edge Application facilities in crunched floor spaces
- Accommodating all the essential components in a minimal footprint
- Compromising your output capacity due to space constraints

Enterprises in today's dynamic era need to address these concerns with a streamlined solution in a well-planned ecosystem followed by easy upkeep, all in a low carbon, compact footprint.

There is a need for a turnkey infrastructure for edge applications that includes:

- 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

SmartCabinet™

Enter SmartCabinet™ - a pre-configured, self-contained solution that offers the efficiency, economy, interoperability, and control to implement an exceptional infrastructure strategy

- **Economical -** Reduces implementation costs compared to conventional solutions

- **Simplified -** Maximize use of existing infrastructure and gets up-and-running in a matter of weeks

- **Controllable -** Enforce add / change policies, speeds IT administration request response times significantly
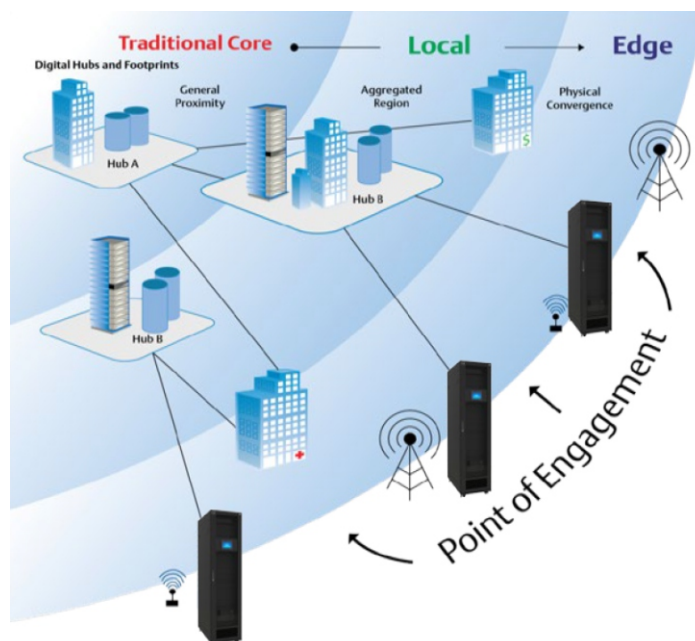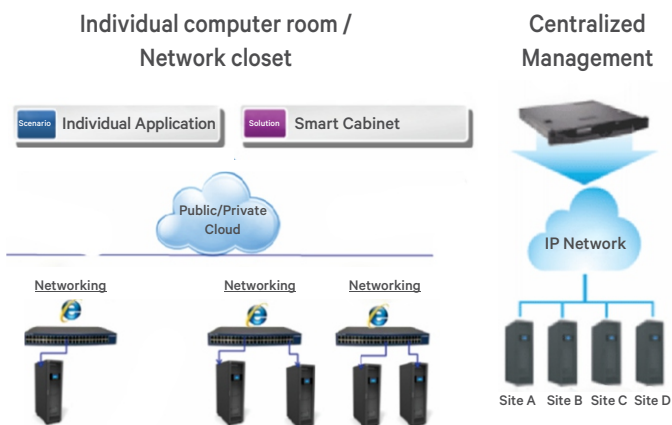

600 mm Width with integrated condenser

800 mm Width with external condenser

600 mm Width with external condenser

SmartCabinet™ - The Spirit of Innovation

- Constructed in a single day
- No room renovation required
- Enclosed sealed cabinet
- Aesthetically designed
- Advanced Microprocessor controller
- Silent operation suited for office spaces
- Dedicated Rack mount cooling + Emergency fans
- Built-in PMU Feature
- SPOC for all components, global service network
- Built-in UPS + Battery Installed
- Pre-wired connections for all components
- Predesigned and factory assembled

SMARTCABINET™ - PERFECT SOLUTION FOR EDGE APPLICATIONS

Advanced monitoring solution to all the SmartCabinet™ using RDU-M

Individual computer room / Network closet

Centralized Management

Distinctive Benefits in small sizes

- Components work as an integrated force
- Fully-protected from dust, moisture, and rodents
- Emergency temperature control cooling
- Integral UPS & back-up autonomy
- Standard Class C lighting protection
- Integrated fire suppression system

Efficient I & C

- Rapid deployment with single day boot-up
- Factory-assembled and pre-loaded
- Doesn't require outdoor units to be installed
- Fits in your existing whitespace

SmartCabinet™ Delivering value

Savings on Electricity Bills

- Equipped with a variable frequency compressor for capacity modulation at part loads
- Pre-defined path for cold air and hot air circulation
- Annualized PUE < 1.5

Think Smart, Act Smart

- 9-inch touch screen + remote WEB access
- Remote door access control
- Centralized control for 256 units
- SMS & Emails can be registered for notifications
- The door & in-cabinet lights operate intelligently
- Intelligent monitoring & control with RDU-M

KEY COMPONENTS

Built-in Power Management Unit (PMU) - Provides MCB to UPS, Cooling unit, PDU, and UPS bypass. It also provides surge protection to SmartCabinet™ solution
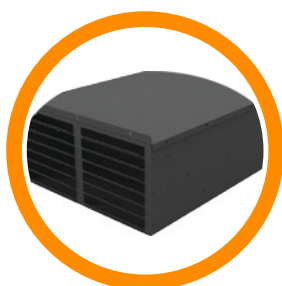
Lighting System - Low power consumption LED lights that automatically light up on opening the door

Intuitive LCD Display Panel - 9" Inch Touch Panel display that provides easy access to information for power, thermal management, and security

Centralized Monitoring Empowered by RDU - M One stop management utility for supervision and management of power, thermal, environment and security ecosystem via the interactive touch-based LCD display

UPS & Batteries - 5kVA On-line double conversion UPS and battery cabinet ensures clean power feeding to critical IT equipment. It also provides backup power to emergency fans during power outages

Thermal Management & Emergency Fans Provides up to 3.5kW cooling capacity directly to the IT equipment Front and rear emergency fans automatically run during power outages ensuring continuous air ventilation

Technical Specifications

Parameter	600 mm wide integrated unit	600 mm wide split unit	800 mm wide split unit
Cabinet Size (HxWxD)	2100 x 600 x 1200 (mm)	2000 x 600 x 1200 (mm)	2000 x 800 x 1200 (mm)
Usable U space	18U	29U	29U
Air Flow Management Panel	5U x 3, 2U x 3, 1U x 2	5U x 3, 2U x 3, 1U x 2	5U x 3, 2U x 3, 1U x 2
Outdoor Unit for Air conditioner	Integrated	Yes (Split)	Yes (Split)
Vertical Cable Management Panel	2	2	2
Area (incl. service space)	1.5 m2	1.5 m2	2.0 m2
Color	RAL7021 Black		
IP Marking	IP5X		
Display panel	9" Touch Panel LCD		
Display Languages	English / Chinese		
LED Lighting	2, Front & Rear		
System Luminance	88lux/1M		
UPS Capacity	5 kVA / 5 kW		
UPS Backup time	10 minutes @ 3 kW		
System Capacity	3 kW		
System Input Requirement	50A, Single Phase 220/230/240 V		
System Frequency	50Hz or 60Hz		
Power Distribution Units (PDU)	16A input , 12 x C13 + 4 x C19, 2 pcs	32A input , 18 x C13 + 6 x C19, 2 pcs	
Lightning Protection Device	Level 3, 20KA		
UPS Maintenance Bypass	Included		
Cooling Capacity	1,800W ~ 3,500W, variable speed		
Refrigerant	R410A		
Emergency fan	Two, one at front bottom and one at rear top		
System Management (UPS/Cooling/PDU)	Yes		
Temperature Sensor	2		
Water Leak Detection	1 piece, 5 meters long		
Door Access Sensor	2		
Safety Standards	EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013		
EMC Standards	EN 55022:2010 EN 61000-3-11:2000 EN 55024:2010 EN 61000-3-12:2011		
Noise Level	< 58 dB[1]	< 50 dB[1] (excluding outdoor unit)	
Net Weight	374.5kg	332.5kg	362.5kg

*Conditions apply
* Specification are subject to change without any further notification
* 1 - Higher than Class 2 Decibel level in Environmental Quality standard for Noise local standards

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