# Vertiv<sup>™</sup> Reference Design

Knowledge to Build Optimized Infrastructure Solutions



## **Vertiv<sup>™</sup> Integrated Rack Solution**

Reference Design #20

#### Premier Conditioned and Controlled 42U 4 Rack Row 24kVA Capacity

# **Solution Requirements**

#### **Physical Protection:**

 Safeguard network gear from environmental threats and unauthorized access.

#### **Power Protection:**

- Prevent business interruption caused by power loss or power fluctuations with battery backup technology.
- Achieve maximum uptime with redundant gear protecting critical application during an unexpected equipment failure.

#### **On-Site Management:**

- Simplify deployment and support future growth with infrastructure designed for total compatibility and scalability.
- Streamline deployment and get critical applications up and running faster with on-site services and support.

#### **Remote Management**

- Maintain peace of mind one or more remote sites are up and running with real-time notifications.
- Save time by remotely accessing and rebooting unresponsive network equipment without an on-site visit.

#### Site-Maintenance

- Ensure continuity of business with remote access and management of critical systems.
- Maximize your investment with on-site equipment maintenance and extended warranty protection.

#### **Thermal Management**

 Cool critical IT gear in high density or high temperature environments.

#### Form Factor: Row

**Objective**: Support critical IT applications in data center environments designed specifically for IT equipment.

#### **Recommended Environment**

Climate-controlled physically secure environment with power, air conditioning and airflow management in place providing temperature and humidity optimization specifically designed for IT equipment.

- Enterprise Data Center
- Colocation Data Center
- Managed Hosting Facility
- Cloud Data Center



#### **Integrated Solution Summary**

Capacity	24kVA / 24kW	
Rack(s)	Qty. 4 - 42U X 800 X 1100 (HXWXD)	
Power Protection	Protection Online Double Conversion	
Redundancy	N+1 Backup Power, 2N Rack Power Distribution, N+1 Cooling	
Power Distribution	208 Volt Three Phase; 30 Amp	
Cooling	Included	
Containment	ent Blanking Panels	
Monitoring	Included	
Services	Included	
Warranty	3 years	
Software	oftware Included	

Explore all Conditioned and Controlled form factors and power configurations available, Rack, Row, and Site by visiting the Solution Builder on Vertiv.com or by contacting a Vertiv Sales Representative.

1



## **Integrated Solution Includes:**

Qty:	Product Summary	SKU	Description:
4	Rack	VR3150	Vertiv™ VR Rack supports a wide variety of equipment, including servers, storage, switches, routers, PDUs, UPSs, console port servers and KVM switches. Dimensions 42U x 800mm x 1100mm (HxWxD).
4	Cable Management	VRA1003 VRA1004 VRA1005	Cable managment accessories including: Lobster claws, Velco straps, and 1U Horizontal cable manager.
1	Power Distribution (Busway)	MBX25PPNNNBNBNN MBX25PPNN1 MBX25PP06NNNBNN	The Vertiv™ Liebert® Busway provides power distribution from the UPS system to all 4 racks. This busway provides (4) tapboxes, each with (2) L15-30R that feed (2) UU30009L in each rack.
1	UPS	47SA100EBC00000 47MBE32CC0R1000 47BPJPX71L10000	The Vertiv™ Liebert® EXM UPS provides efficient and economical operation with a flexible power system offering scalable and redundant features optimized for midsize IT and critical power applications. This includes a battery cabinet and a maintenance bypass cabinet.
8	Rack PDU	UU30009L FSC3N002	Vertiv™ Geist™ rPDU, Switched Outlet Level Monitoring EC, Variable Power Configuration, Vertical, (30) Locking IEC C13, (6) Locking IEC C19, Universal Inlet. L15-30P Facility side cable included.
2	Row Based Air Cooling	CR019RA1Y7XVR0 MCM040E1YDXVR0 301456G15	Vertiv <sup>™</sup> Liebert® 19kW CRV row based Air cooling unit, 300mm wide, 208V with MCM040 Condenser 208V including Lee Temp Kit to be used with MCM040 Condenser
1	IT Management	MPU2032DAC-001 ACS8032-LN-DAC	The Avocent® MergePoint Unity MPU2032DAC-001 is a 32-port, 2 digital KVM path, with dual AC power supply. The MergePoint Unity switch includes both KVM over IP and Serial Console Management technology in a single appliance. This combination provides IT administrators a complete and secure, remote management solution to access and control servers, networking equipment and other devices found in data centers and branch offices.
2	Warranty and Service	3WC35KWL 3WP35KWL	The row based cooling system is covered for 3 years and includes 3 years of bi-anunal PMs. Also included is a warranty inspections to ensure the system is installed properly.
3	Warranty and Service	MBSEA131C1BA8X5 MPEXM10-200ES1 MUEXM208-40ES1 SPEXM10-200UM	The row based power distribution system is covered for 3 years and includes 3 years of bi-anunal PMs. Also included is a warranty inspections to ensure the system is installed properly.
1	Delivery and Installation	vF-O4N-INSTALL	Vertiv™ factory trained technicians will consolidate, deliver and install the solution.
1	Software	DSV4.5-BASE DSV4.5-500DEV 1YRSLV-500DEV	Avocent® DSView delivers secured web-browser enabled sessions of on-network infrastructure controls. As an IT integrated solution, DSView delivers secured web-browser enabled sessions to Virtual Machines.

<sup>\*</sup>Additional accessories and components are required and included in the integrated solution. Contact a Vertiv Partner for the complete bill of materials, to receive pricing, and to purchase.

# **Recommended Upgrades**

Qty:	Product Summary	Model #:	Description:
1	Software	ENVA-SERVER ENVA-DEV-500 ENVA-STUP-500 ENVA-SERVER-SA ENVA-SA-500	Vertiv™ Environet™ Alert provides industry companies with critical facility monitoring software that is affordable and easy to use. This solution delivers superior monitoring, and alerting.

### **Vertiv.com** | Vertiv Headquarters, 1050 Dearborn Drive, Columbus, OH, 43085, USA

© 2021 Vertiv Group Corp. All rights reserved. Vertiv, and the Vertiv logo trademarks or registered trademarks of Vertiv Group Corp. All other names and logos referred to are trade names, trademarks or registered trademarks of their respective owners. While every precaution has been taken to ensure accuracy and completeness herein, Vertiv Group Corp. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications are subject to change without notice.