Vertiv™ Reference Design

Knowledge to Build Optimized Infrastructure Solutions

VERTIV

Vertiv™ Integrated Rack Solution

Premier Conditioned and Controlled 42U 5 Rack Aisle Contained Row 40 kVA 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 high density 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	40 kVA / 40 KW
Rack(s)	Qty. 5 - 42U X 600 X 1100 (HXWXD)
Power 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	20 KW
Containment	Included
Monitoring	Included
Services	Included
Warranty	3 years
Software	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.*

Integrated Solution Includes:

Qty:	Product Summary	SKU	Description:
6	Rack	VR3100	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 600mm x 1100mm (HxWxD).
6	Cable Management	VRA1003 VRA1004 VRA1005	Cable managment accessories including: Lobster claws, Velco straps, and 1U Horizontal cable manager.
1	Power Distribution (Rack Mounted)	PDB2N3002 PDB2N3003	The Vertiv™ Geist™ PDB provides power distribution from the UPS system to all 5 racks. Each power dristribution box provides up to 4 preconfigured cables to connect to each PDU within all 5 racks.
1	UPS	EE611SSDL1 47SA100EBC00000 EEA11PSD01 47MBH36CC1R1DCX	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 and maintenance bypass cabinet.
10	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.
3	Row Based Air Cooling	CR020RA1C7XDFS MCM040E1YDXVR0 301456G15	Vertiv™ Liebert® 35kW CRV row based Air cooling unit, 300mm wide, 208V with MCM040 Condenser 208V including Lee Temp Kit to be used with MCM040 Condenser.
1	Aisle Containment	VACS System	Freestanding, Rack-independent system with the flexibility to maximize efficiency and capacity from the core to the edge for raised floor and slab data centers. Adaptable to hot and cold aisle containment, the Vertiv™ Aisle Containment system allows you to deploy containment before or after racks are installed to simplify installation and speed deployment of new data center equipment.
2	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.
1	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 startup on the UPS and maintenance bypass.
1	Warranty and Service	MBSEA131C1BA8X5 MPEXM10-200ES1 MUEXM208-40ES1 SPEXM10-200UM SUEXM10-40UM	The row based UPS sytem is cover for 3 years and includes 3 years of annual PMs. Also included is startup on the UPS and maintenance bypass.
1	Delivery and Installation	VACS-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.

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