Vertiv[™] Reference Design

Knowledge to Build Optimized Infrastructure Solutions



Vertiv[™] Integrated Rack Solution

Reference Design #22

Premier Conditioned and Controlled 42U 3 Rack Row 20kVA Capacity

Solution Requirements

Physical Protection:

- Safeguard network gear from environmental threats and unauthorized access.
- Prevent dust, debris, and moisture from damaging equipment.

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	20 KVA / 20 KW	
Rack(s)	ty. 3 - 42U X 800 X 1100 (HXWXD)	
Power Protection	ection Online Double Conversion	
Redundancy	N+1 Backup Power, 2N Rack Power Distribution, N+1 Cooling	
Power Distribution	ibution 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.

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Integrated Solution Includes:

Qty:	Product Summary	SKU	Description:
3	Rack	E428100312Y1Z1X E428100A12Y1Z1X	Vertiv™ DCX 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).
3	Cable Management	VRA1003 VRA1004 VRA1005	Cable managment accessories including: Lobster claws, Velco straps, and 1U Horizontal cable manager.
1	Power Distribution (Busway)	MBX25PPNN1 MBX25PPNNENNB MBX25PPNNNBNBNN	The Vertiv™ Liebert® Busway provides power distribution from the UPS system to all 3 racks. This busway provides (3) tapboxes, each with (2) L15-30R that feed (2) UU30009L in each rack.
1	UPS	47SA040CBCM0000 47MBH36CC1R1DCX EEA11PSD01 EED11P0D01	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.
6	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	CR020RA1C7XDFS MCM040E1YDXVR0 301456G15	Vertiv™ Liebert® 20kW CRV row based Air cooling unit, 300mm wide, 208V with MCM040 Condenser 208V including Lee Temp Kit to be used with MCM040 Condenser.
1	Warranty and Service	3WC35KWL 3WP35KWL	The row based cooling system is covered for 3 years and includes 3 years of bi-anunal PMs.
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	vF-D3N-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.

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