

## Vertiv™ Integrated Rack Solution

## Reference Design #9

### Premier Conditioned and Controlled 42U Rack 6kVA 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.
- Recover business critical floor space with IT infrastructure designed with tight spaces in mind.
- 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.

#### Form Factor: Rack

**Objective:** Support critical IT applications in high density environments designed specifically for extreme computing requirements.

#### 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.

- Network Closet
- Enterprise Data Center
- Managed Hosting Facility
- Server Closet
- Colocation Data Center
- Cloud Data Center



#### Integrated Solution Summary

<b>Capacity</b>	6000 VA / 6000 W
<b>Rack(s)</b>	42U x 600mm x 1100mm (HxWxD)
<b>Power Protection</b>	Online Double Conversion
<b>Redundancy</b>	N
<b>Power Distribution</b>	Switched Outlet Level Monitored 30A, 208V vertical. 20 locking IEC C13 and 4 locking IEC C19 receptacles and a NEMA L6-30P input plug
<b>Cooling</b>	Optional Upgrade
<b>Containment</b>	Blanking Panels
<b>Monitoring</b>	Included
<b>Services</b>	Included
<b>Warranty</b>	3 years

## Integrated Solution Includes

Qty	Product Summary	SKU	Description
1	Rack	VR3100	VR3100 - 42U x 600mm x 1100mm (HxWxD) Vertiv™ VR Rack
1	Cable and Airflow Management	VRA1000, VRA1008, VRA2000	VR Rack Accessories utilized to seamlessly integrate communications and power cables in to the cabinet while maintaining proper airflow separation of equipment intake and exhaust.
1	UPS	GXT5-6000MVRT4UXLN	The Vertiv™ Liebert® GXT5-6000MVRT4UXLN UPS offers premium power outage protection and continuous power conditioning in a flexible rack/tower design. It is ideally suited for both centralized and edge network applications. This single-phase UPS has user selectable output in 208V and 120V, 4-wire system L-L-N-G, standard POD hardwire in/out with maintenance bypass and optional PODs available. A factory pre-installed Vertiv™ RDU101 SNMP/Webcard provides remote, SNMP and web UI-based monitoring.
1	UPS	PD5-003	Integrated output distribution for easy plug-and-play deployment to ensure continues uptime. It will make UPS input Nema L14-30P, Outputs: (2) L6-30R, (4) 5-15/20R.
1	Rack PDU	VP8641	Vertiv™ Geist™ Switched Outlet Level Monitored Rack PDU VP8641 is a 30A, 208V vertical with input and outlet level power monitoring and outlet level switching. It has 20 locking IEC C13 and 4 locking IEC C19 receptacles and a NEMA L6-30P providing 4.9kW of power capacity.
1	Environmental Sensors	GT3HD	Temperature, humidity, and dew point sensor with dual inputs for included 3ft / .9m and 6ft / 1.8m temperature sensors for monitoring top, middle, and bottom of a rack or cabinet. Includes a supplementary input for daisy-chaining additional sensors. Includes 10ft / 3m cable. Compatible with Vertiv™ Geist™ rPDUs and Environmental Monitors.
1	IT Management	MPU2016DAC-001, ACS8016SAC-400	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. control of up to 16 servers from a single console. The Vertiv™ Avocent® ACS8000 Serial Console System delivers. secure in-band and out-of-band visibility and control to downstream equipment in enterprise data centers, as well as cloud and colocation facilities.
1	Warranty and Service	PAPGXT-5K6KLF	Power Assurance Package includes start-up & installation of UPS (with optional removal/disposal), 5 years of coverage, 24/7 on-site response for emergency services with 100% parts/labor/travel coverage, LIFE™ Services for continuous remote monitoring, expert analysis and proactive response.
1	Software	DSV4.5-BASEDSV4.5-100DEV1YR SLV-100DEV	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	Rack Based Air Cooling	VRC100-Kit-NA	Vertiv™ VRC Rack Cooling is designed to satisfy cooling requirements for small server room, network closet, and edge applications up to 3500 watts per cabinet, the Vertiv™ VRC IT rack cooling unit packs powerful, scalable and energy-efficient cooling into a compact unit. It fits into most standard 19-inch network racks, freeing up valuable floor space. It is available in Self-contained or Split version to fit different building architectures.
1	IT Management	AC8016-LN-DAC	The Vertiv™ Avocent® ACS8000 Serial Console System delivers secure in-band and out-of-band visibility and control to downstream equipment in enterprise data centers, as well as cloud and colocation facilities. This serial console system serves as a secure management gateway and single point of entry keeping you connected to critical IT equipment even in the event of partial or total data center outages. Includes the upgraded Cellular capability.
1	Software	ENVA-SERVER ENVA-DEV-100EN VA-STUP-BSC ENVA-SERVER-SA ENVA-SA-100	Vertiv™ Environet™ Alert provides industry companies with critical facility monitoring software that is affordable and easy to use. This solution delivers superior monitoring, alerting, trending and data organization capabilities for companies in such verticals as healthcare, financial services, government and more, helping them protect and grow their business. Customers get monitoring, alerting and trending at a price that's right for their business.

Explore all **Commercial and Office** form factors and power configurations available, **Endpoint, Rack, and Row** by visiting the Solution Builder on [Vertiv.com](https://www.vertiv.com) or by contacting a Vertiv Sales Representative.