# <u>Vertiv<sup>™</sup> Reference Design</u>

Knowledge to Build Optimized Infrastructure Solutions

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

## **Reference Design #9**

ERTIV

## Premier Conditioned and Controlled 42U Rack 6kVA 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.

#### **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.

### 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 •
- Server Closet •
- Enterprise Data Center
- Colocation Data Center
- Managed Hosting Facility
- Cloud Data Center



#### Integrated Solution Summary

Capacity	6kVA / 6kW	
Rack(s)	42U x 600mm x 1100mm (HxWxD)	
Power Protection	Protection Online Double Conversion	
Redundancy	ndancy N	
Power Distribution	wer Distribution Switched Outlet Level Monitored 30A, 208V vertical. 20 locking IEC C13 and locking IEC C19 receptacles and a NEMA L6-30P input plug	
Cooling	Optional Upgrade	
Containment	nt Blanking Panels	
Monitoring	Included	
Services	Included	
Warranty	3 years	
Software	Included	

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



## **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	Vertiv™ 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	Vertiv™ Liebert® GXT5 UPS 6000VA/6000W; 208VAC is an online double conversion UPS solution which offers premium power outage protection and continuous power conditioning in a compact and flexible rack/tower form factor.	
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-BASE DSV4.5-100DEV 1YRSLV-100DEV	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	Rack Based Air Cooling	VRC100-Kit-NA	Vertiv <sup>™</sup> 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 <sup>™</sup> 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 <sup>™</sup> Avocent <sup>®</sup> 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-100 ENVA-STUP-BSC ENVA-SERVER-SA ENVA-SA-100	Vertiv <sup>™</sup> Environet <sup>™</sup> 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.

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.