

## Vertiv™ Integrated Rack Solution

## Reference Design #6

### Premier Conditioned and Controlled 42U Rack 3000VA 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 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.

- Converted Closet
- Server Closet
- Network Closet



#### Integrated Solution Summary

<b>Capacity</b>	3000 VA / 2700 W
<b>Rack(s)</b>	42U x 600mm x 1100mm (HxWxD)
<b>Power Protection</b>	Line Interactive UPS
<b>Redundancy</b>	N
<b>Power Distribution</b>	Switched Unit Level 30A, 120V 0U Vertical. 20 NEMA 5-20R receptacles and NEMA 5-30P 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
<b>Software</b>	Included

## 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	PSI5-3000RT120LI	The Liebert® PSI5 3000VA/2700W Lithium-ion line-interactive UPS is ideally suited to protect critical infrastructure in edge or distributed IT applications. The life expectancy of lithium-ion batteries is two to three times that of VRLA batteries – up to 10 years. That delivers up to 50% or more in TCO savings vs. VRLA batteries, chiefly because the PSI5 requires fewer battery replacements over its lifespan.
1	UPS	MP2-130E	Micro POD - Maintenance bypass and output distribution 5-30P input plug and 2 x 5-15/20R
1	UPS COMM Card	IS-UNITY-SNMP	The interface card delivers SNMP, Telnet and web-management capability for enhanced communications and control of Liebert® UPS. The card manages a wide range of operating parameters, alarms and notifications, transmitting data over the network. Visit Vertiv.com for a free Vertiv™ Power Assist software download to gracefully shutdown an IT device when the UPS battery backup experiences a threatening condition.
1	Rack PDU	VP8932	Vertiv™ Geist™ Switched Unit Level Monitored Rack PDU VP8932 is a 30A, 120V 0U vertical with input power monitoring and outlet level switching. It has 20 NEMA 5-20R receptacles and a NEMA L5-30P providing 2.8kW of power capacity. A Switched rPDU allows you to turn off outlets to avoid accidental overloads and remotely power cycle equipment to reboot unresponsive equipment. The unit comes equipped with an environmental sensor port and dual ethernet ports.
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	AV3108-001, ACS8008SAC-400	Vertiv™ Avocent AV3000 Rackmount KVM Over IP Switch   CAC   8 Port KVM switches   Local and Remote Access (AV3108-001). Vertiv™ Avocent ACS 8000 8-port Serial Console Server, Single AC Power (ACS8008SAC-400)
1	Warranty and Service	PEPPSI-30005Y	Power Emergency Premier Package provides 5 years of coverage for electronic parts and batteries, advanced replacement.
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	AC8008-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	Warranty and Service	PEPPSI-3000LF	Power Emergency Premier Package provides 5 years of coverage for electronic parts and batteries, advanced replacement. Also included: Remote diagnostic and preventive monitoring with Vertiv™ LIFE™ Services.
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**.