# Vertiv™ Reference Design

Knowledge to Build Optimized Infrastructure Solutions



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

## Reference Design #8

## Enhanced Conditioned and Controlled 42U Rack 5kVA 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.

## **Remote Management**

 Maintain peace of mind one or more remote sites are up and running with real-time notifications.

## 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           | 4250 VA / 3825 W  |  |
|--------------------|---|--|
| Rack(s)            | 42U x 600mm x 1100mm (HxWxD)  |  |
| Power Protection   | tion Line Interactive UPS   |  |
| Redundancy         | N   |  |
| Power Distribution | Unit Level Monitored 30A, 208V 0U vertical. 36 IEC C13 and 6 IEC C19 receptacles and a NEMA L6-30P input plug |  |
| Cooling            | Optional Upgrade  |  |
| Containment        | t Blanking Panels   |  |
| Monitoring         | Included  |  |
| Services           | Optional Upgrade  |  |
| Warranty           | 3 years   |  |
| Software           | Optional Upgrade  |  |

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.

1



# **Integrated Solution Includes:**

| Qty: | Product<br>Summary                 | SKU                           | Description:   |
|------|------------------------------------|-------------------------------|--|
| 1    | Rack                               | VR3100                        | VR3100 - 42U x 600mm x 1100mm (HxWxD) Vertiv™ VR Rack  |
| 1    | Cable and<br>Airflow<br>Management | VRA1000<br>VRA1008<br>VRA2000 | Vertiv <sup>™</sup> 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                                | PSI5-5000RT208                | Vertiv™ Liebert® PSI5 UPS model PSI5-5000RT208; 4250VA/3825W; 208VAC compact, Automatic Voltage Regulation (AVR) line-interactive UPS system designed especially for IT applications such as network closets and small data centers. Supports advanced pure sine wave output on battery to safeguard critical IT equipment and electronics. Provides reliable power protection for servers, critical nodes, network workstations, large network peripherals, network routers, bridges, and others. |
| 1    | UPS COMM<br>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                           | VP8841                        | Unit Level Monitored Rack PDU VP8841 is a 30A, 208V OU vertical with input power monitoring. It has 36 IEC C13 and 6 IEC C19 receptacles and a NEMA L6-30P providing 4.9 kW of power capacity. The unit is equipped with an environmental sensor port and dual ethernet ports to simplify management of multiple rPDUs with fault-tolerant daisy chaining or IP aggregation capabilities.  |

<sup>\*</sup>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          | MPU2016DAC-001<br>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   | 1WEPSI5-5000                     | 1-year Extended Warranty - This extends standard warranty by one year. Covers electronic parts and batteries.   |
| 1    | Warranty and Service   | PEPPSI-5K5Y                      | Power Assurance Premier Package provides 5 years of coverage for electronic parts and batteries, advanced replacement, plus one preventative maintenance after year 3. Also included: Remote diagnostic and preventive monitoring with Vertiv™ LIFE™ Services.  |

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