# Vertiv™ Reference Design

Knowledge to Build Optimized Infrastructure Solutions



# **Vertiv™ Integrated Rack Solution**

Reference Design #45

## Premier Conditioned and Controlled (6) 42U Rack 36kVA 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.

#### **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	36kVA/36kW	
Rack(s)	Qty. 6 - 42U X 800 X 1200 (HxWxD)	
<b>Power Protection</b>	Double Conversion Online	
Redundancy	N 1 backup power, 2N rack power distribution, and N 1 cooling	
Power Distribution	48A Single Phase, 240V Max; 11.0kW 24A 3 Phase DELTA, 240V Max; 8.6kW 16A Three Phase WYE, 240/415V Max	
Cooling	Included	
Containment	Open	
Monitoring	Included	
Services	Included	
Warranty	3 years	
Software	Included	



# **Integrated Solution Includes**

Qty	Product Summary	SKU	Description
6	Rack	VR3350	Vertiv <sup>™</sup> VR 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 1200mm (HxWxD).
9	Cable Management	VRA3004, VRA8561, VRA8571, VRA8581	The Vertiv VR Cable Management includes 1U depth adjustable support rails and a cable trough.
6	UPS	APM0601CS100000, APMBATMODF10	Vertiv Liebert APM UPS offers excellent efficiency, up to 94% in double conversion and up to 98% in Active Eco-Mode. Include 1 60 kW capacity UPS and 5 battery modules.
12	Rack PDU	UU30009L	Vertiv™ Geist™ rPDU, Switched Outlet Level Monitoring EC, Variable Power Configuration, Vertical, (30) Locking IEC C13, (6) Locking IEC C19, Universal Inlet.
3	Row Based Air Cooling	841038, 815525, 45637	CR025RA 300mm Wide CRV Unit with outdoor condensing unit and Lee-temp kit
2	IT Management	MPU2032DAC-001, ACS8032-EU-DAC-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.
1	Software	DSV4.5-BASE, DSV4.5-500DEV, 1YRSLV-500DEV	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
1	Warranty and Service	PS-ACP-ST8X5-ITA20, ACP-WP1-8WH-8R8WH-12	Startup ITA2 10/15/20 kVA (8x5), Preferred Warranty 1YR-PM8x5-8HR RESP8x5 ITA2 10/15/20kVA
3	Power Distribution	PDB2U3001, PDB2U3002, PDB2U3003	Row power distribution box with beakers and 16' whip to UPDU; WYE input power connection

<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	Row Based Air Cooling	841038	Redundant CR025RA 300mm Wide CRV Unit with outdoor condensing unit and lee-temp kit
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.

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.