DELL EMC VPLEX HARDWARE FAMILY

VPLEX[™] delivers continuous data availability, transparent data mobility and non-disruptive data migration for mission-critical applications

VPLEX's unique implementation of distributed cache coherency allows the exact same data to be read/write accessible across two storage systems at the same time. This ensures uptime for mission-critical applications scenarios and enables seamless data mobility across arrays without host disruption and thereby eliminating a variety of planned downtime instances like tech refresh, load balancing, and infrastructure maintenance. The storage systems connected to VPLEX can be in a single datacenter (VPLEX Local),or separated by distance (VPLEX Metro).

VPLEX engine is the core building block of a VPLEX cluster that can be configured as single, dual or quad engine in a single rack. VS6 is the latest generation of VPLEX engine. A VPLEX cluster is configured with all VS6 engines or all VS2 engines in single, dual or quad options.

VPLEX for All-Flash is an all-inclusive solution with a software license for any capacity on one or multiple Dell EMC allflash arrays. VPLEX for All-Flash is available with VS6 or VS2 engines (models cannot be combined in a cluster).

All VPLEX systems ship with Storage Monitoring and Reporting (M&R) for VPLEX.



1 VPLEX Specification Sheet © 2020 Dell Inc. or its subsidiaries.

Specifications Management

HTML5-based graphical user interface (GUI) ; REST API v2

Command line interface (CLI)

10/100/1,000 Ethernet port/LAN connectivity

VS2 Platform: In rack 1RU server external to VPLEX engine

VS6 Platform: Embedded two Management Module & Control Station (MMCS) in VS6 base engine with internal storage

All VPLEX systems ship with Storage M&R for VPLEX

Systems Capacities

| | VS | 52 | VS6 | | |
|-----------------------|-------|--------|--------|--------|--|
| | Local | Metro | Local | Metro | |
| Max. Virtual Volumes | 8,000 | 16,000 | 12,000 | 24,000 | |
| Max. Storage Elements | 8,000 | 16,000 | 12,000 | 24,000 | |
| Number of Initiators | 1,600 | 3,200 | 1,600 | 3,200 | |

VPLEX Engine Cluster Configuration

| Ŭ | | | | | | | |
|--|----------------------------------|------|--------------------------------------|---|--------------------|-------------|------|
| | VS2 | | | VS6 | | | |
| | Single | Dual | Quad | | Single | Dual | Quad |
| Number of engines per cluster | 1 | 2 | 4 | Number of engines per cluster | 1 | 2 | 4 |
| Front end 8Gb/s Fibre Channel ports | 8 | 16 | 32 | Front end 16Gb/s Fibre Channel ports | 8 | 16 | 32 |
| Back end 8Gb/s Fibre Channel ports | 8 | 16 | 32 | Back end 16Gb/s Fibre Channel ports | 8 | 16 | 32 |
| WAN communication | MetroIP 10GigE or MetroFC 8Gb FC | | WAN communication | MetroIP 10GigE or MetroFC 16Gb FC | | oFC 16Gb FC | |
| Intra-engine communication | 8Gb/s FC | | Intra-engine communication | Infiniband, 40Gb/s | | Gb/s | |
| Intra-engine communication switch | 8-port 8Gb/s FC switch | | Intra-engine communication switch | 12-р | ort 40Gb/s Infinil | oand switch | |

Power Cabling

| VS2 |
|-----|
|-----|

| Connector | Operating Voltage and Frequency | Service Type | Region | | |
|------------------------------|---|--|--|--|--|
| NEMA L6-30P | 200-240 VAC and 50-60 Hz | 30-amp, single-phase | North America, Japan | | |
| IEC 309 332P6 | 200-240 VAC and 50-60 Hz | 32-amp, single-phase | International (except Australia) | | |
| CLIPSAL P/N 56PA332 | 200-240 VAC and 50-60 Hz | 32-amp, single-phase | Australia | | |
| Russellstoll 3750DP | 200-240 VAC and 50-60 Hz | 30-amp, single-phase | North American, Japan | | |
| VS6 | | | | | |
| | | | | | |
| Connector | Operating Voltage and Frequency | Service Type | Region | | |
| Connector NEMA L6-30P | Operating Voltage and Frequency 200-240 VAC and 50-60 Hz | Service Type 30-amp, single-phase | Region North America, Japan | | |
| | | | | | |
| NEMA L6-30P | 200-240 VAC and 50-60 Hz | 30-amp, single-phase | North America, Japan | | |
| NEMA L6-30P IEC 309 332P6 | 200-240 VAC and 50-60 Hz 200-240 VAC and 50-60 Hz | 30-amp, single-phase 32-amp, single-phase | North America, Japan International (except Australia) | | |

Note: Each AC circuit requires a source connection that can support a minimum of 4800 VA of single-phase, 200-240 VAC input power. For high availability, the left and right sides of the cabinet must receive power from separate branch feed circuits.

Interoperability

Please see the Dell EMC E-Lab Simplified Support Matrix for details or download the E-Lab Navigator App for iPhone or Android.

Environmental Specifications

Dimensions

| VS2 | | | | VS6 | | |
|---------------|---------------|-------------|---|-----------------|-------------------|---|
| | Height | Width | Depth | Height | Width | Depth |
| VPLEX Cabinet | 75 in (190cm) | 24in (60cm) | 39.37in (100 cm) overall; 41.5in (105.4 cm) including front door | 75in (190cm) | 24in (60cm) | 39.37in (100 cm) overall; 41.5in (105.4 cm) including front door |
| VPLEX Engine | | | | 6.97in (17.7cm) | 18.87in (47.92cm) | - 30.62in (77.77cm) |

* The VS6 engine requires a front and rear EIA RS310-compliant 19-in. NEMA rack with 38- in. minimum rack depth and cannot be installed in a Dell EMC provided VS2 rack. Please refer the VS6 hardware setup guide for more information.

| Weight | | |
|-----------------------|-------------------|--------------------|
| | VS2 | VS6 |
| Single Engine Cluster | 754 lb (342 kg) | 667 lb (302.5 kg) |
| Dual Engine Cluster | 1,017 lb (462 kg) | 852 lb (386.5 kg) |
| Quad Engine Cluster | 1,418 lb (644 kg) | 1086 lb (492.6 kg) |

Operating Specifications

Power and Heat

| VS2 | | | VS6 | | |
|--|-------------------------------|---------------------------|-------------------------------|---------------------------|--|
| | Total Power Consumption (kVA) | Heat Dissipation (Btu/Hr) | Total Power Consumption (kVA) | Heat Dissipation (Btu/Hr) | |
| Single Engine | 0.6 | 1,900 | 1.83 | 6,244 | |
| Dual Engine | 1.29 | 4,000 | 4.03 | 13,750 | |
| Quad Engine | 2.32 | 7,200 | 7.63 | 26,034 | |
| The power consumption and heat dissipation totals are steady-state maximum operation at 25°C for VS2 and at 35°C for VS6 | | | | | |

Non-Operating Temperature, Humidity and Altitude

| VS2 | | | VS6 | | |
|-----------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|
| Temperature | Humidity | Altitude | Temperature | Humidity | Altitude |
| -40 – 149°F (-40 – 65°C) | 10 – 90% Non-condensing | 25,000 ft (7.62 km) max. | -40 – 149°F (-40 – 65°C) | 10 – 90% Non-condensing | 25,000 ft (7.62 km) max. |

4 | VPLEX Specification Sheet

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| Operating Temperature, Humidity, and Altitude | | | | | | | |
|---|-----------------------------|--------------------------|--------------------------|-----------------------------|--------------------------|--|--|
| VS2 | | | VS6 | | | | |
| Temperature | Humidity | Altitude | Temperature | Humidity | Altitude | | |
| 50 – 90°F (10 – 32°C) | 20 – 80%, Non-condensing | 10,000 ft (3 km) max. | 50 – 95°F (10 – 35°C) | 20 – 80%, Non-condensing | 10,000 ft (3 km) max. | | |







Contact a Dell EMC Expert

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