

EMC VPLEX FAMILY

INTRODUCTION

EMC VPLEX enables IT organizations to create a storage architecture that enables a datacenter to be:

- **Always available** even in the face of disasters
- **Agile** in responding to business requirements and enable
- **Accelerated migration** when adopting latest storage technology

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 business 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 unlimited software license for any capacity on one or multiple EMC all-flash arrays. VPLEX For All-Flash is available with VS6 or VS2 engines (models cannot be combined in a cluster). With 2X IOPS and 70% improved latency VS6 is built for flash performance. Further performance gains for VS6 are expected with future software upgrades.

SPECIFICATIONS

Table 1. MANAGEMENT

- Web-based graphical user interface (GUI) with SSL security
- 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
- Integrated with ViPR for automation of VPLEX tasks

SYSTEMS CAPACITIES

	VS2		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

	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 10Gb E or MetroFC 8Gb FC			WAN COMMUNICATION	MetroIP 10Gb E or MetroFC 16Gb FC		
INTER-ENGINE COMMUNICATION	8Gb/s FC			INTER-ENGINE COMMUNICATION	Infiniband, 40Gb/s		
INTER-ENGINE COMMUNICATION SWITCH	8-port 8Gb/s FC switch			INTER-ENGINE COMMUNICATION SWITCH	12-port 40Gb/s Infiniband switch		

POWER CABLING

CONNECTOR	VS2		
	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

CONNECTOR	VS6		
	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 60309	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
NEMA L7-30P	200-240 VAC and 50-60 Hz	30-amp, single-phase	North America, Japan

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 [EMC E-Lab™ Simplified Support Matrix](#) for details.

ENVIRONMENTAL SPECIFICATIONS

DIMENSIONS

	VS2			VS6		
	HEIGHT	WIDTH	DEPTH	HEIGHT	WIDTH	DEPTH
VPLEX CABINET	75 in (190 cm)	24 in (60 cm)	39.37 in (100 cm) overall; 41.5 in (105.4 cm) including front door	75 in (190 cm)	24 in (60 cm)	39.37 in (100 cm) overall; 41.5 in (105.4 cm) including front door
VPLEX ENGINE*				6.97 in	18.87 in	30.62 in

* 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 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.

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 US

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