

# EMC VPLEX METRO WITH VS2



The EMC® VPLEX™ family delivers information mobility and access within, across, and between data centers. EMC VPLEX Metro provides data access and mobility between two VPLEX clusters within synchronous distances. With a unique scale-up and scale-out architecture, the VPLEX system's advanced data caching and distributed cache coherence provide workload resiliency, automatic sharing, balancing, and failover of storage domains and enables both local and remote data access with predictable service levels.

## Specifications

### FEATURES

#### AccessAnywhere™

- Transparently share, access, and relocate data over distance

#### Distributed cache coherence

- Automatically share, balance, and fail over storage domains within and across VPLEX engines in a single cluster or two clusters joined together

#### Online data mobility

- Move production volumes between sites
- Move production volumes among heterogeneous arrays
- No host disruption or downtime

#### Volume management

- Create striped, concatenated, and sliced volumes

#### Network-based mirroring

- Mirror data synchronously across heterogeneous arrays and between sites

#### Storage pooling

- Create a heterogeneous storage pool in the network

### RELIABILITY AND AVAILABILITY

- Highly resilient and redundant cluster with no single point of failure
- Non-disruptive hardware and software upgrades
- Dual (A/B) fabric support
- Optional VPLEX Witness for enhanced availability

### SYSTEM CAPACITIES PER VPLEX METRO CLUSTER

- |                                       |                      |
|---------------------------------------|----------------------|
| • Maximum virtualized capacity        | No known limit       |
| • Maximum virtual volumes             | 16,000               |
| • Maximum storage elements            | 16,000               |
| • Minimum/maximum virtual volume size | 100 MB/32 TB         |
| • Minimum/maximum storage volume size | No VPLEX Limit/32 TB |
| • Number of initiators                | 3,200                |



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## CONNECTIVITY

- Hosts and arrays are connected to the VPLEX engine using standard Fibre Channel SANs, enabling host fan-in and array fan-out
- Inter-cluster connectivity is Fibre Channel (over dark fibre, DWDM, over IP) and UDT (UDP-based data transfer) over IP

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## READ/WRITE I/O LIMITS PER METRO CLUSTER

- IOPS Up to 2,240,000 I/O/s
- GB/s Up to 23.2 GB/s

Stated limits are per a fully configured four-engine VPLEX cluster; actual results may vary depending on I/O workload

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## MANAGEMENT

- Web-based graphical user interface (GUI) with SSL security
- Command line interface (CLI)
- 10/100/1,000 Ethernet port/LAN connectivity

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## INTEROPERABILITY

- Please see the EMC E-Lab™ Simplified Support Matrix for details

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## ENVIRONMENTAL SPECIFICATIONS

### PHYSICAL DIMENSIONS AND WEIGHT

	Height	Width	Depth	Weight
VPLEX Cabinet	75 in (190 cm)	24 in (60 cm)	37 in (100 cm) overall; 41.5 in (105.4 cm) including front door	
VPLEX Single Engine	—	—	—	754 lb (342 kg)
VPLEX Dual Engine	—	—	—	1,017 lb (462 kg)
VPLEX Quad Engine	—	—	—	1,418 lb (644 kg)

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## POWER CABLING

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 309332P6	200-240 VAC and 50-60 Hz	32-amp, single phase	International
56PA332 CLIPSAL P/n	200-240 VAC and 50-60 Hz	32-amp, single phase	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.

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## OPERATING SPECIFICATIONS

	Total Power Consumption (kVA)	Heat Dissipation
VPLEX Single Engine	.60	1,900

	<b>Total Power Consumption (kVA)</b>	<b>Heat Dissipation</b>
<b>VPLEX Dual Engine</b>	1.29	4,000
<b>VPLEX Quad Engine</b>	2.32	7,200

## OPERATING LIMITS

	<b>Temperature: Non-Operating</b>	<b>Temperature: Operating</b>	<b>Humidity: Non-Operating</b>
<b>VPLEX Single Engine</b>	-40 to 149° Fahrenheit (-40 to 65° Celsius)	50 to 90° Fahrenheit (10 to 32° Celsius)	10-90%, non-condensing
<b>VPLEX Dual Engine</b>	-40 to 149° Fahrenheit (-40 to 65° Celsius)	50 to 90° Fahrenheit (10 to 32° Celsius)	10-90%, non-condensing
<b>VPLEX Quad Engine</b>	-40 to 149° Fahrenheit (-40 to 65° Celsius)	50 to 90° Fahrenheit (10 to 32° Celsius)	10-90%, non-condensing
	<b>Humidity: Operating</b>	<b>Altitude: Non-Operating</b>	<b>Altitude: Operating</b>
<b>VPLEX Single Engine</b>	20-80%, non-condensing	25,000 ft (7.62 km) max	10,000 ft (3 km) max
<b>VPLEX Dual Engine</b>	20-80%, non-condensing	25,000 ft (7.62 km) max	10,000 ft (3 km) max
<b>VPLEX Quad Engine</b>	20-80%, non-condensing	25,000 ft (7.62 km) max	10,000 ft (3 km) max

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