

## Xsigo VP780 I/O Director™

### SERVER INTERCONNECTS:

<b>Ports</b>	24 non-blocking InfiniBand server ports
<b>Interconnect</b>	Cx4 Copper (Ports powered for fibre optic interfaces)
<b>Speed</b>	10 Gigabits per second per port full-duplex

### EXPANSION SLOTS:

<b>Module Slots</b>	15 slots for I/O and Service modules 10 Gigabit per second full-duplex bandwidth per slot
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### 10 GIGABIT ETHERNET I/O MODULE:

<b>Physical Ports</b>	One Optical XFP or Cx4 XFP Port
<b>Virtual Interfaces</b>	Up to 128 Virtual NICs (vNICs) per module Up to 1,920 vNICs per VP780 IO Director
<b>Quality of Service (QoS)</b>	User settable QoS features include CIR – Committed information rate PIR – Peak information rate WRED – Excessive drop prevention
<b>PXE</b>	Virtual NICs can be configured for PXE boot
<b>MAC Addresses</b>	Each vNIC is assigned a unique MAC address MAC addresses can dynamically migrate with specific virtual machine
<b>Power Consumption</b>	55 Watts Maximum

### GIGABIT ETHERNET I/O MODULE:

<b>Physical Ports</b>	4 Gigabit Ethernet Ports, RJ-45 style
<b>Virtual Interfaces</b>	Up to 64 Virtual NICs (vNICs) per module* Up to 960 vNICs per VP780 IO Director
<b>Quality of Service (QoS)</b>	User settable QoS features include CIR – Committed information rate PIR – Peak information rate WRED – Excessive drop prevention
<b>PXE</b>	Virtual NICs can be configured for PXE boot
<b>MAC Addresses</b>	Each vNIC is assigned a unique MAC address MAC addresses can dynamically migrate with specific virtual machine
<b>Power Consumption</b>	45 Watts Maximum *Two vNICs reserved internal card management

### 4-GIGABIT FIBRE CHANNEL I/O MODULE:

<b>Physical Ports</b>	Two 4/2/1 Gbps auto-negotiating SFP ports
<b>Connectors</b>	Two SFP Optical Transceivers (850nm)
<b>Virtual Interfaces</b>	up to 128 Virtual HBAs (vHBAs) per IO Module* up to 1,920 vHBAs per VP780 IO Director
<b>Protocols</b>	FC-AL, FCP (SCSI-FCP)
<b>World Wide Name (WWN)</b>	Each vHBA is assigned a unique WWN WWNs can dynamically migrate with specific virtual machine
<b>Quality of Service</b>	User settable QoS features include: CIR – Committed information rate PIR – Peak information rate
<b>Power Consumption</b>	45 Watts Maximum *Two vHBAs reserved for internal card management

### SSL ENCRYPTION MODULE:

<b>SSL Transactions Per Second</b>	10,000 Transactions per second
<b>Throughput</b>	Up to 4 Gbps bulk encryption
<b>Current Sessions</b>	Up to 200,000 concurrent sessions
<b>Certificates</b>	Support for 2000 certificates
<b>SSL Service</b>	Inline / Co-processor mode
<b>Virtual Interfaces</b>	up to 32 Virtual SSL resources per SSL Module
<b>Power Consumption</b>	45 Watts Maximum

**MANAGEMENT:**

<b>Management Interfaces</b>	Java-based Management GUI, Command-line interface (CLI) through SSH ; Advanced API for integration with 3rd party software
<b>Lights Out Management Management Module I/O</b>	Supports IPMI based LOM Ethernet management network, RS232 Console, Auxiliary ports, USB

**REPLACEABLE PARTS:**

<b>Replaceable Modules</b>	I/O Modules, Management Module, Power Supplies, Fabric Board, System Controller, Fan Tray Assemblies
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**POWER:**

<b>Voltage</b>	100 – 127 / 200 – 240 VAC
<b>Max Current</b>	12A @ 100 Volts or 7.68A @ 180 Volts
<b>Frequency</b>	47 - 63 Hz
<b>Power</b>	Chassis (fully loaded): 1000 Watt Sustained Maximum 1280 Watt Temporary Maximum

**ENVIRONMENTAL:**

<b>Operating Temp</b>	0 degrees C to 40 degrees C
<b>Relative Humidity</b>	10 to 80% at 40 C, non-condensing
<b>Non-operating Temp</b>	-40 degrees C to 70 degrees C
<b>Non-operating Humidity</b>	90% at 65 degrees C, non-condensing
<b>Altitude (Operating)</b>	Up to 3000 m
<b>Altitude (Non-operating)</b>	Up to 15,000 m

**CHASSIS DIMENSIONS AND WEIGHT:**

<b>Height</b>	4U - 176 mm (6.93 inches)
<b>Width</b>	444.5 mm (17.5 inches)
<b>Depth</b>	768 mm (30.23 inches)
<b>Weight</b>	42 kg (93 lb.) with no modules - Modules are approximately 0.9 kg (2 lb.)

**REGULATIONS:**

<b>Safety</b>	UL 60950-1, CSA C22.2 No. 60950-1, EN 60950-1, IEC 60950-1
<b>RFI/EMI</b>	FCC Class A, ICES Class A, VCCI Class A, EN 55022 Class A, CNS 13438 Class A, KN22 and KN24 Class A
<b>Immunity</b>	EN55024:1998 including A1:2001 and A2:2003, EN61000-4-3
<b>RoHS</b>	RoHS Level 5

**MOUNTING SPECIFICATIONS:**

<b>Rack Mounting</b>	19" universal EIA Rack, 2-post or 4-post mounting kit
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