





# **Dell PowerEdge VRTX**

Converges servers, storage and networking into a single, office-optimized chassis to manage and consolidate business applications.

The Dell<sup>TM</sup> PowerEdge<sup>TM</sup> VRTX platform brings order to chaos, redefines IT operations, and allows users to deploy performance anywhere. PowerEdge VRTX is a powerful, scalable, easy-to-manage solutions platform, optimized specifically for office environments. Clear up the complexity of disparate hardware, multiple management tools, and hardware sprawl with an optimized platform that integrates up to four PowerEdge M-series server nodes, storage, networking, and management into a compact 5U chassis.

With extensive scalability available inside the chassis, additional servers and hard drives can be inserted without the need for more floor space or rack space, and without any additional cables.

VRTX's feature-rich, 2-socket, half-height Dell PowerEdge M520 and M620 server nodes are proven platforms and technologies that deliver exceptional flexibility and scalable performance. With a choice of up to twelve 3.5-inch or twenty-five 2.5-inch hot-plug hard drives delivering up to 48TB, VRTX is equipped with massive internal shared storage, keeping you ahead of the pace of data growth.

Integrate networking through the 1GbE internal switch module or an optional Ethernet pass-through module with eight 1GbE ports. Take advantage of flexible, expandable I/O with eight PCI Express® (PCIe) slots — three full-height/ full-length and five low-profile/half-length. Capitalize with redundant 1100W AC power supplies, fans, blower modules, and chassis management controllers.

# Simplified systems management, without compromise

VRTX's Chassis Management Controller (CMC) resolves the problems of systems management tool proliferation and complexity with converged management of server nodes, shared storage, networking, and power in a unified tool, all in a single console.

Access CMC through an intuitive, easy-to-use web interface that works with a variety of Dell OpenManage™ tools including iDRAC7 with Lifecycle Controller embedded within each server node. Embedded management in the VRTX platform allows IT administrators to manage this Dell hardware in physical, virtual, local, and remote environments, and gives the choice of managing the system out-of-band, completely agent-free, or in-band with or without a systems management software agent installed. CMC's unified management console for VRTX server nodes, storage, and networking can reduce complexity, enhance productivity, and help to enable maximum uptime, which in turn can reduce administration time and the cost of ownership.

For remote management, OpenManage Essentials, a free software download from Dell.com/Support, monitors and manages multiple VRTX platforms in different locations. Exclusive to VRTX systems with Enterprise-licensed CMC, the geographical mapping feature of OpenManage Essentials can be configured to show each system's location and system and component health status.

OpenManage iDRAC with Lifecycle Controller integrates and connects to leading third-party systems management solutions (such as those from Microsoft, VMware, and BMC Software), so you can maintain a single point of control and capitalize on an existing systems management investment.

## Flexibility within a stable platform

VRTX is both flexible and stable. Flexible in its extensive hardware configurability and scalability, while consistent and uniform in performing systems management operations. These characteristics give you confidence that VRTX can readily adapt to accommodate new workload requirements, while protecting existing investments in hardware, software, management tools and skills.

# PowerEdge VRTX

- Integrated IT solution, optimized for office environments
- Simplified systems management
- Up to four 2-socket, half-height PowerEdge M620 and M520 server nodes
- Up to eight PCIe slots
- Up to 48TB of storage capacity

Feature	PowerEdge VRTX Technical Specifications
Chassis enclosure	<ul> <li>Form factors:</li> <li>Tower or 5U rack enclosure</li> <li>Tower configuration:</li> <li>48.4cm (19.1in) H with system feet x 31.0cm (12.2in) W with system feet opened x 73.0cm (28.7in) D</li> <li>Weight (empty) = 31.7kg (69.7lb)</li> <li>Weight (maximum) = 74.8kg (164.9lb)</li> <li>Rack configuration:</li> <li>21.9cm (8.6in) H x 48.2cm (19.0in) W x 73.0cm (28.7in) D</li> <li>Weight (empty) = 24.7kg (54.5lb)</li> <li>Weight (maximum) = 68.7kg (151.5lb)</li> </ul>
Server node options	Dell PowerEdge M620 and M520 servers
Power supplies	<ul> <li>Redundant power supply units:</li> <li>US/Canada: 110/220V (typical)</li> <li>EU/China: 220-240V</li> <li>Japan: 100/110V</li> <li>Other: Up to 240V</li> <li>Redundant power supplies support 2+2 (AC redundancy), and 3+1, 2+1, and 1+1 (power supply redundancy) modes</li> </ul>
Cooling	<ul> <li>VRTX comes standard with 6 hot-pluggable, redundant fan modules and 4 blower modules:</li> <li>Based on Dell Energy Smart Technologies, VRTX fans and blowers are a breakthrough in power and cooling efficiency</li> <li>The fans and blowers deliver low-power consumption, but also use next-generation fan technologies to ensure the lowest possible amount of fresh air is consumed to cool the enclosure</li> </ul>
Input devices	<ul> <li>Front control panel with interactive graphical LCD:</li> <li>Supports initial configuration wizard</li> <li>Local server blade, enclosure, and module information and troubleshooting</li> <li>Two USB keyboard/mouse connections and one video connection for local front "crash cart" console connections</li> <li>Optional DVD-RW</li> </ul>
Raid controller	Shared PERC8, PERC H810
Drive bays and hard drives	Up to 12 x 3.5in NLSAS, SAS, or SAS SSD hot-plug drives or Up to 25 x 2.5in NLSAS, SAS, or SAS SSD hot-plug drives
Embedded NIC	1GbE internal switch module (standard) with 16 internal 1GbE ports and 8 external ports Ethernet pass-through module with 8 external ports (optional)
I/O slots	<ul> <li>8 flexible PCIe slots:</li> <li>3 full-height/full-length slots (150W) with double-wide card support (225W)</li> <li>5 low-profile/half-length slots (25W)</li> </ul>
Systems management	<ul> <li>Delivers comprehensive functionality yet simple and easy to use:</li> <li>Uses Chassis Management Controller to manage all resources (server nodes, storage, networking, and power) with a unified management tool, presented in a single console</li> <li>Monitors up to 9 VRTX chassis from a single, consolidated CMC console</li> <li>Offers both local and remote management</li> <li>Available with either Enterprise or Express CMC licensing</li> <li>Redundant CMC available</li> <li>Server nodes each contain proven iDRAC7 with Lifecycle Controller for agent-free systems management, fully supported in the OpenManage product portfolio</li> </ul>

#### Global services and support

Dell is dedicated to simplifying IT, and Dell Services can help you manage the complexities of growing and maintaining your scale-out environments. Dell's broad portfolio of planning, implementation and maintenance services can help accelerate your IT initiatives and grow your business. Dell services can be tailored to complement how you manage your environment. Options include, but are not limited to consulting services to help you optimize your data center, custom rack integration, and expert-level support to ensure maximum system uptime.

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