



# Dell PowerEdge M805

The Dell™ PowerEdge™ M805 blade server was designed for enhanced virtualization performance, offering large memory support and massive, fully redundant I/O throughput.

Built for virtualization and engineered to address the key challenges faced by IT personnel, Dell PowerEdge M805 full-height blade servers deliver leading enterprise-class functionality. With features including three highly available, fully redundant I/O fabrics, massive total throughput, and large RAM capacity, these PowerEdge servers are excellent for applications requiring large memory footprints.

#### **Enhanced Virtualization Performance**

The Dell PowerEdge M805 Blade Server was designed from the ground up for enhanced virtualization capabilities. With the combination of AMD Opteron™ processors and increased RAM capacity and unmatched I/O, the M805 delivers powerful performance for virtual environments. The M805 offers 16 DIMM slots, up to 128GB total RAM, an internal SD card for embedded hypervisors, and highly available, fully redundant I/O connectivity—delivering improved virtualization performance in a two-socket blade server environment.

## Simplified Virtualization

Designed to improve performance across the board for both virtualized and non-virtualized applications, the PowerEdge M805 features AMD's Rapid Virtualization Indexing, which can improve the performance of some virtualized applications by utilizing its Nested Page Table technology.

Further simplifying blade technology and virtualization in business data centers, this full-height blade server offers embedded hypervisors from industry-leading vendors: VMware®, Citrix® XenServer™, and Microsoft® Hyper-V™ technology. The PowerEdge M805 server provides the ability to begin migrating live virtual machines within minutes of installation in the chassis.

## **Expanded Network Connectivity**

The M805 delivers three highly available, fully redundant fabrics which are necessary for true enterprise-class data access. The proliferation of external storage for ease of management demands this functionality to ensure organizations can always access their data. Dell designed this server and the M1000e chassis to meet the critical needs of your data center.

## Enhanced Energy Efficiency for Increased Productivity

For businesses that require the highest levels of performance while maintaining a low energy footprint, the PowerEdge M805 features AMD PowerNow!<sup>TM</sup> technology. Utilizing dynamic frequency and voltage support to deliver performance on demand, AMD processors can greatly reduce power consumption without compromising performance.

The M805 can join other M-Series blade servers in the PowerEdge™ M1000e Modular Blade Enclosure, assisting organizations in increasing capacity and lowering operating costs

while deliver outstanding performance/watt. Built on Dell<sup>TM</sup> Energy Smart technology, the M1000e chassis is designed to be one of the most power-efficient blade solutions available. Energy Smart technologies in the M1000e include:

- Ultra-efficient power supplies that deliver high levels of efficiency (>91%) even at low utilization.
- Dynamic Power Supply Engagement that provides maximum power utilization based on system demands.
- Optimized airflow design with ultra-efficient dynamically scaling fans. Nine fans, deployed in three separate cooling zones, help ensure that only the amount of air required by the enclosure is circulated, helping to improve blade and overall data center efficiency.
- Lead-free chassis and blades, with low-lead I/O module options.

### The Dell Difference

Centralized networks can vastly improve the productivity of individuals and businesses. The PowerEdge M-Series is specifically designed to simplify deploying, managing, and maintaining networks for years to come. The M-Series offers industry-leading switch flexibility with Flex/IO and unmatched ease of use with FlexAddress<sup>TM</sup> for persistent WWN/MAC addresses.

Built for virtualization and engineered to address the key challenges faced by IT personnel, Dell PowerEdge M805 blade servers deliver leading enterprise-class functionality.

Feature	Technical Specifications	
Processors	Up to Six-Core AMD Opteron™ 2000 series processors	
Chipset	NVIDIA® MCP55	
Memory <sup>1</sup>	16 DIMM slots 1GB/2GB/4GB ECC DDR2 667/800MHz Options Support for up to 128GB1 using 16x8GB DIMMs	
Drive Bays	Two 2.5" Hot-Swappable SAS/Solid State Drives	
Storage <sup>1</sup>	Up to two Hot-Swappable Internal Drives: 2.5" SAS (10K rpm): 73GB, 146GB, 300GB, 600GB 2.5" SAS (15K rpm): 36GB, 73GB or 146GB 25GB2, 50GB2 Solid State Drive (SSD)  Up to two Hot-Swappable Internal Drives: Up to 600GB2 per blade via two 2.5" 300GB1 hot-swappable SAS (10k rpm) hard drives	External Storage Options:  Dell™ EqualLogic™ PS5000 Series PowerVault™ NX1950 Unified Storage Solution PowerVault™ MD3000i  Dell/EMC products:  Dell/EMC fibre channel and/or iSCSI external storage, including Dell/EMC AX150i, CX300, CX3-10c, CX3-20, CX3-40, and CX3-80
RAID Controller Options	SAS6/IR (Raid 0/1) hardware based CERC6/IR (Raid 0/1 w/ Cache) PERC 6i Modular (RAID 0/1 w/ battery-backed cache)	
I/O Mezzanine Card Options	1Gb & 10Gb Ethernet:  Dual-Port Broadcom® Gb Ethernet w/ TOE (BCM-5709S) Quad-Port Intel Gb Ethernet (BCM-82576) Quad-Port Broadcom® Gb Ethernet (BCM-5709S) Dual-Port Broadcom® Gb Ethernet (BCM-579S) Dual-Port Broadcom® 10Gb Ethernet (BCM-57711)  10Gb Enhanced Ethernet & Converged Network Adapters (CEE/DCB): Dual-Port Qlogic® Converged Network Adapter (QME8142) - Supports CEE/DCB 10GbE + FCoE Fibre Channel: Dual-Port QLogic® FC8 Fibre Channel Host Bus Adapter (HBA) (QME2572) Dual-Port Emulex® FC8 Fibre Channel Host Bus Adapter (HBA) (LPe1205-M) InfiniBand: Dual-Port Mellanox® ConnectX Quad Data Rate (QDR) InfiniBand Dual-Port Mellanox® ConnectX Dual Data Rate (DDR) InfiniBand	
Operating Systems	Microsoft® Windows® Essential Business Server 2008 Microsoft® Windows Server® 2008 SP2, x86/x64 (x64 includes Hyper-V <sup>TM</sup> ) Microsoft® Windows Server® 2008 R2, x64 (includes Hyper-V <sup>TM</sup> v2) Microsoft® Windows® HPC Server 2008 Novell® SUSE® Linux® Enterprise Server Red Hat® Enterprise Linux® Sun® Solaris™  Virtualization Options: Citrix® XenServer™ Microsoft® Hyper-V <sup>TM</sup> via Microsoft® Windows Server® 2008 VMware® vSphere™ 4.1 (including VMware ESX® 4.1 or VMware ESXi™ 4.1)  For more information on the specific versions and additions, visit www.dell.com/OSsupport.	
Featured Database	Microsoft® SQL Server® solutions (see Dell.com/SQL)	
Applications	Oracle® database solutions (see Dell.com/Oracle)	
Power Supply	Supplied by Dell™ PowerEdge™ M1000e Blade Chassis	
Video	ATI® RN50 (32MB Memory)	
Systems Management	Dell OpenManage™ Software Tools Altiris™ Deployment Solution for Dell Blade Servers Integrated Dell Remote Access Controller (iDRAC) with:	
Embedded Hypervisor	Optional Embedded SD Media	

For more information about the Dell blade solution, see the PowerEdge M1000e Technical Guide or the M1000e Blade Chassis Specification Sheet.

<sup>1</sup> GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

#### **Dell Services**

Dell Services can help reduce IT complexity, lower costs, and eliminate inefficiencies by making IT and business solutions work harder for you. The Dell Services team takes a holistic view of your needs and designs solutions for your environment and business objectives while leveraging proven delivery methods, local talent, and in-depth domain knowledge for the lowest TCO.



