Dell PowerEdge Rack Servers

Quick Reference Guide

DELLTechnologies

Dell PowerEdge rack servers help you build a modern infrastructure that minimizes IT challenges and drives business success.Our Quick Reference Guide (QRG) includes a condensed view of our entire rack server portfolio.

Rack Server	R760	R660	R7625	R6625	R7615	R6615
Key attributes	Provides performance and versatility for demanding applications	Provides performance and versatility for demanding applications	Breakthrough performance	Breakthrough performance	Powerful performance and scalability	Peak performance and excellent TCO
Target workloads	Mixed Workload Standardization Database and Analytics Virtual Desktop Infrastructure	High Density Virtualization, Dense Database Analytics, Mixed Workload Standardization	High Performance Computing (HPC), Virtual Desktop Infrastructure (VDI), Virtualization	High Performance Computing (HPC), Virtual Desktop Infrastructure (VDI), Virtualization	Software-Defined Storage (SDS), Virtualization, Data Analytics	Virtualization, Hyper-Converged Infrastructure (HCI), Network Functions Virtualization (NFV)
Type of processor	2 x 4th Generation Intel® Xeon® Scalable processors; up to 56 cores per processor		2 x AMD EPYC™ 4th Generation 9004 Series Processor, up to 96 cores per processor		1 x AMD EPYC™ 4th Generation 9004 series processor; up to 96 cores	
Memory (DDR5 DIMM slots & max)	32 (8 TB)		24 (1.5 TB)*		12 (768 GB)*	
Disk drives up to:	12 x 3.5" 8 x 2.5" 16 x 2.5" 24 x 2.5" 2 x 2.5" or 4 x 2.5" (rear)	8 x 2.5" 10 x 2.5" 2 x 2.5" (rear)	8 x 3.5" 12 x 3.5" 8 x 2.5" 16 x 2.5" 24 x 2.5" 2 x 2.5" or 4 x 2.5"(rear)	4 x 3.5" 8 x 2.5" 10 x 2.5" 2 x 2.5" (rear)	8 x 3.5" 12 x 3.5" 8 x 2.5" 16 x 2.5" 24 x 2.5" 2 x 2.5" or 4 x 2.5"(rear)	4 x 3.5" 8 x 2.5" 10 x 2.5" 2 x 2.5" (rear)
NVMe drives up to:	24	10	24	10	24	10
Gen5 PCIe slots up to:	4	2	4	2	4	2
Gen4 PCIe slots up to:	8	3	8	3	4	3
Accelerator support up to:	2 x 350 W DW or 6 x 75 W SW	2* x 75 W SW	2 x 300 W DW or 6 x 75 W SW	3 x 75 W SW	3 x 300 W DW or 6 x 75 W SW	3 x 75 W SW
Rack height (U)	2	1	2	1	2	1
Integrated security	TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ, Cryptographically Signed Firmware, Chassis Intrusion Alert, Secure Boot being standard security, Silicon Root of Trust, System Lockdown (requires iDRAC9 Enterprise or Datacenter), Data at Rest Encryption (SEDs with local or external key mgmt) Secured Component Verification (Hardware integrity check) and System Erase on all racks.		TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ, Cryptographically Signed Firmware, Secure Boot, Secure Erase, Silicon Root of Trust, System Lockdown (requires iDRAC9 Enterprise or Datacenter), AMD Secure Memory Encryption (SME) and AMD Secure Encrypted Virtualization (SEV)			

* Future releases will include additional DIMM capacity in R7625, R6625, R7615, and R6615.

* Future releases will include additional GPU slots in R660.

Rack Server	R750	R750xa	R650	R7525	R6525	R7515	R6515	R750xs	R650xs	R450	R550	XR11	XR12	R350	R250
Key attributes	Outstanding performance for the most demanding workloads	Highly intensive GPU workloads	High scalability, optimized workload performance	Powerful performance and flexibility	Dense virtualization	Powerful performance and scalability	High density compute	Purpose-built 2U server for growing scale-out solutions	Purpose-built, full performance 1U server for dense, fast growing scale-out solutions	Value and density-focused, built for general purpose IT	Versatile, value-optimized, virtualization-ready, built for general purpose IT	Edge-centric, short depth and rugged with reverse mounting options	Edge-centric, short depth and rugged with reverse mounting options	Powerful performance in 1U server for productivity and data intensive applications	Powerful compute for common business applications and streamlines productivity
Target workloads	Database and analytics, HPC, traditional corporate IT, VDI, AI, or ML environments	AI, ML or DL training or inferencing, HPC, and vitualization environments	Mixed workload standardization, database and analytics, HFT, traditional corporate IT, VDI, HPC, AI, or ML environments	All flash SDS, VDI, and data analytics	HPC, Dense VDI, and Virtualization	SDS, Virtualization, and Data Analytics	Virtualization, HCI and NFV	Virtualization, medium VM density or VDI, and scale-out database workloads	Virtualization, cloud, scale-out database and highperformance compute workloads	Small IT infrastructure, light VM, small business specific workloads	Small IT infrastructure, light VM density, small business specific workloads	Telco/5G (MEC, CDN, vRAN), Military, Retail (Analytics - video surveillance/POS/IOT aggregation)	Telco/5G (MEC, CDN, vRAN), Military, Retail (Analytics - video surveillance/POS/ IOT aggregation)	Small mid-sized businesses, remote office/branch office, collaboration and sharing, data analytics and virtualization workloads	Small mid-sized businesses, remote office/branch office, collaboration and sharing, mail/messaging and file/print workloads
Type of processor	2 x 3rd Generation Intel® Xeon® Scalable processors; up to 40 cores per processor			2 x 2nd or 3rd Generation AMD EPYC™ processors; up to 64 cores per processor		1 x 2nd or 3rd Generation AMD EPYC™ processor; up to 64 cores per processor		2 x 3rd Generation Intel® Xeon® Scalable processors; up to 32 cores per processor		2 x 3rd Generation Intel® Xeon® Scalable processors; up to 24 cores per processor		1 x 3rd Generation Intel® Xeon® Scalable processors; up to 36 cores per processor		1 x Intel Xeon E-2300 series processors with up to 8 cores or 1 x Intel Pentium processor with up to 2 cores	
Memory (DDR4 DIMM slots & max)	32 (8 TB)		32 (4 TB)			16 (2 TB)		16 (1 TB)				8 (1 TB)		4 (128 GB)	
Disk drives up to:	8 x 2.5" 16 x 2.5" 24 x 2.5" 12 x 3.5" 2 x 2.5" or 4 x 2.5" (rear)	6 x 2.5" 8 x 2.5"	4 x 3.5" 8 x 2.5" 10 x 2.5" 2 x 2.5" (rear)	26 x 2.5" 12 x 3.5"	12 x 2.5" 4 x 3.5"	24 x 2.5" 12 x 3.5"	8 x 2.5" 4 x 3.5"	8 x 2.5" 16 x 2.5" 24 x 2.5" 12 x 3.5" 8 x 3.5"	4 x 3.5" 8 x 2.5" 10 x 2.5" 2 x 2.5" (rear)	4 x 3.5" 8 x 2.5"	16 x 2.5" 8 x 2.5" 8 x 3.5"	4 x 2.5"	6 x 2.5"	4 x 3.5" 8 x 2.5"	4 x 3.5" 2 x 3.5" (cabled) 4 x 3.5" (cabled)
NVMe drives up to:	24	8	12	24	12	24	10	8	10	N/A		4	6	N/A	
Gen4 PCIe slots up to:	8	8	3	8	3	2	1	5	3	2	3	3	5	3	2
Gen3 PCIe slots up to:	N/A					2	1	1	N/A		1			N/A	
Accelerator support up to:	2 x 300 W DW or 4 x 150 W SW or 6 x 75 W SW	4 x 150 W SW or 4 x 300 W DW 2 x 75 W SW	3 x 75 W SW	3 x 300 W DW or 6 x 75 W SW	3 x SW	4 x SW; 1 x DW; 1 x FPGA	1 x SW	N/A				2 x 75 W SW	2 x 75 W or 150 W SW 2 x 300 W DW	N/A	
Rack height (U)	2	2	1	2	1	2	1	2	1	1	2	1	2	1	1
Integrated security	TPM 1.2/2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ, Cryptographically Signed Firmware, Chassis Intrusion Alert, and Secure Boot being standard security on all racks. Integrated security features such as Silicon Root of Trust, System Lockdown (requires iDRAC9 Enterprise or Datacenter), and System Erase on all racks														

Rack Server	R940	R940xa	R840	R740xd	R740	R740xd2	R640	R540	R440	R340	R240
Key attributes	Powerful performance	Extreme acceleration	Turbocharge data analytics	Scalable storage performance	Optimal application performance	Enterprise content server	Performance and density	Balanced and adaptable	Scale-out computing	Accelerate business growth	Compute made simple
Target workloads	In-memory databases	GPU database acceleration and machine learning	Data-intensive workloads, HFT, and dense virtualization	SDS, service providers, and big data servers	VDI and cloud workloads	Media streaming and SDS	Dense scale-out data center computing and storage	Mail messaging and virtualization	HPC, web tech, and scale-out infrastructure	ROBO productivity and data-intensive applications	Small business and service provider workloads
Type of processor	4 x 2nd Generation Intel® Xeon® Scalable processors			2 x 2nd Generation Intel® Xeon® Scalable processors						1 x Intel Xeon E-2200, Intel Core i3®, Intel Pentium®, or Intel Celeron® processor	
Memory (DDR4 DIMM slots & max)	48 (15.36 TB)			24 (7.68 TB)		16 (1 TB)	24 (7.68 TB)	16 (1 TB)		4 (64 GB)	
Disk drives up to:	24 x 2.5"	32 x 2.5"	26 x 2.5"	32 x 2.5" 18 x 3.5"	16 x 2.5" 8 x 3.5"	26 x 3.5" 16 x 3.5" + 10 x 2.5"[2]	12 x 2.5" 4 x 3.5"	14 x 3.5"	10 x 2.5" 4 x 3.5"	8 x 2.5" 4 x 3.5"	4 x 2.5"[2] 4 x 3.5"
NVMe drives up to:	12	4	24	N/A			10	N/A	4	N/A	
Gen4 PCIe slots up to:	N/A										
Gen3 PCIe slots up to:	13	12	6	8	5		3	5	2	2	
Accelerator support up to:	N/A	4 x DW GPUs or 4 x DW or 8 x SW FPGAs	2 x DW GPUs or 2 x SW or DW FPGAs	3 x DW or 6 x SW GPUs or 3 x DW or 4 x SW FPGAs		N/A	1 x SW GPU or 1 x SW FPGA	N/A			
Rack height (U)	3	4	2				1	2	1	1	
Integrated security	TPM 1.2/2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ, Cryptographically Signed Firmware, Chassis Intrusion Alert, and Secure Boot being standard security on all racks. Integrated security features such as Silicon Root of Trust, System Lockdown (requires iDRAC9 Enterprise or Datacenter), and System Erase on all racks										

[1] Not all features are available on all platforms.

[2] Drives use hybrid carrier to fit in 3.5" drive bay. (For the R740xd2 - a hybrid configuration is available with up to 10 2.5" SSDs)

Cyber Resilient Architecture for Zero Trust IT environment & opoperations

Security is integrated into every phase of the PowerEdge lifecycle, including protected supply chain and factory-to-site integrity assurance. Silicon-based root of trust anchors end-to-end boot resilience while Multi-Factor Authentication (MFA) and role-based access controls ensure trusted operations.

Increase efficiency and accelerate operations with an autonomous infrastructure

The Dell OpenManage™ systems management portfolio delivers a secure, efficient, and comprehensive solution for PowerEdge servers. Simplify, automate and centralize one-to-many management with the OpenManage Enterprise console and iDRAC. With OpenManage Enterprise with Power Manager, you can genuinely benefit from datacenter level cooling efficiency by monitoring power usage. When you can manage your server thermals you will reduce energy waste, reduce wear, tear on your equipment, and extend the life of your investment.

Sustainability

From recycled materials in our products and packaging, to thoughtful, innovative options for energy efficiency, the PowerEdge portfolio is designed to make, deliver, and recycle products to help reduce the carbon footprint and lower your operation costs. We even make it easy to retire legacy systems responsibly with Dell Technologies Services

Rest easier with Dell Technologies Services

Maximize your PowerEdge Servers with comprehensive services ranging from Consulting, to ProDeploy and ProSupport suites, Data Migration and more – available across 170 locations and backed by our 60K+ employees and partners.

Discover more about PowerEdge servers

Learn more about our PowerEdge servers

Learn more about our systems management solutions

Search our Resource Library

Follow PowerEdge servers on Twitter

Contact a Dell Technologies Expert for Sales or Support

Follow PowerEdge servers on Linkedin