

# Dell EMC PowerEdge R540 and R530 server comparison

The PowerEdge R540 system has the following features compared with the R530 system.

Feature	PowerEdge R540	PowerEdge R530
<b>Processor</b>	Up to two 2nd Generation Intel® Xeon® Scalable processors with up to 20 cores per processor	Up to two Intel® Xeon® processor E5-2600 v4 product family with up to 22 cores per processor
<b>Chipset</b>	Intel® C620 series chipset	Intel® C610 series chipset
<b>Memory</b>		
DIMM Speed	Up to 2666MT/s	Up to 2133MT/s
Memory Type	<ul style="list-style-type: none"> <li>RDIMM</li> <li>LRDIMM</li> </ul>	<ul style="list-style-type: none"> <li>RDIMM</li> <li>LRDIMM</li> </ul>
Memory Module Slots	16 DDR4 DIMM slots <b>NOTE: Supports registered ECC DDR4 DIMMs only.</b>	12 DDR4 DIMM slots
Maximum RAM	RDIMM 512GB	RDIMM 384GB
	LRDIMM 1TB	NA
<b>Storage</b>		
Front Bays	Up to 12 x 3.5" SAS/SATA(HDD), max 168TB	Up to 8 x 3.5" SAS/SATA (HDD)
Rear Bays	Up to 2 x 3.5" SAS/SATA (HDD), max 28TB	NA
<b>Storage Controllers</b>		
Internal Controllers	<ul style="list-style-type: none"> <li>HBA330</li> <li>H330</li> <li>H730P</li> <li>H740P</li> </ul>	<ul style="list-style-type: none"> <li>H330</li> <li>H730</li> <li>H730P</li> </ul>
External Controllers	<ul style="list-style-type: none"> <li>H840P</li> <li>12Gbps SAS HBA</li> </ul>	<ul style="list-style-type: none"> <li>H830</li> <li>12Gbps SAS HBA</li> </ul>
Software RAID	S140	S130
Internal Boot	Boot Optimized Storage Subsystem (BOSS): HW RAID 2 x M.2 SSDs 120GB or 240GB	NA
	Internal USB	Internal USB
	Internal Dual SD Module and vFlash* <b>NOTE: *ESXi (only OS supported)</b>	Internal Dual SD Module and vFlash* <b>NOTE: *ESXi (only OS supported)</b>
<b>Operating Systems</b>	<ul style="list-style-type: none"> <li>Canonical® Ubuntu® Server LTS</li> </ul>	<ul style="list-style-type: none"> <li>Canonical® Ubuntu® Server LTS</li> </ul>

Feature	PowerEdge R540	PowerEdge R530
	<ul style="list-style-type: none"> <li>· Citrix® Hypervisor®</li> <li>· Microsoft® Windows Server® with Hyper-V</li> <li>· Red Hat® Enterprise Linux</li> <li>· SUSE® Linux Enterprise Server</li> <li>· VMware® ESXi®</li> </ul>	<ul style="list-style-type: none"> <li>· Citrix® Hypervisor®</li> <li>· Microsoft® Windows Server® with Hyper-V</li> <li>· Red Hat® Enterprise Linux</li> <li>· SUSE® Linux Enterprise Server</li> <li>· VMware® ESXi®</li> </ul>
<b>Security</b>	Cryptographically signed firmware	Cryptographically signed firmware
	Secure Boot	Secure Erase
	Secure Erase	
	Silicon Root of Trust	System Lockdown (requires iDRAC Enterprise)
	System Lockdown (requires iDRAC Enterprise)	
	TPM 1.2/2.0, TCM 2.0 (optional)	TPM 1.2/2.0, TCM 2.0 (optional)
<b>Management</b>		
Embedded/At-the-Server	iDRAC9	iDRAC8 with Lifecycle controller
	iDRAC RESTful API with Redfish	iDRAC RESTful API with Redfish
	iDRAC Direct	iDRAC Direct
	Quick Sync 2 BLE/wireless module	iDRAC Quick Sync
Consoles	OpenManage Enterprise	OpenManage Enterprise
	OpenManage Enterprise Power Manager	OpenManage Enterprise Power Manager
Mobility	OpenManage Mobile	OpenManage Mobile
Tools	Dell EMC RACADM CLI	Dell EMC RACADM CLI
	Dell EMC Repository Manager	Dell EMC Repository Manager
	Dell EMC System Update	Dell EMC System Update
	Dell EMC Server Update Utility	Dell EMC Server Update Utility
	Dell EMC Update Catalogs	Dell EMC Update Catalogs
	iDRAC Service Module	iDRAC Service Module
	IPMI Tool	IPMI Tool
	OpenManage Server Administrator	OpenManage Server Administrator
OpenManage Integrations	BMC Truesight	Microsoft® System Center
	Microsoft® System Center	
	RedHat® Ansible® Modules	VMware® vCenter
	VMware® vCenter	
OpenManage Connections	IBM Tivoli® Netcool/OMNIBus	IBM Tivoli® Netcool/OMNIBus
	IBM Tivoli® Network Manager IP Edition	HP Operations Manager
	Micro Focus® Operations Manager I	Dell OpenManage Plug-in for Oracle® Database Manager
	Nagios® Core	
	Nagios® XI	
<b>Power Supply</b>	450W AC Cabled PSU Bronze	450W AC Cabled PSU Bronze
	495W AC Platinum	495W AC Platinum

<b>Feature</b>	<b>PowerEdge R540</b>	<b>PowerEdge R530</b>
	750W AC Platinum	750W AC Platinum
	750W 240V HVDC Platinum	750W 240V HVDC Platinum
	1100W AC Platinum	1100W AC Platinum
	1100W 380V HVDC Platinum	1100W 380V HVDC Platinum
	Up to 6 fans with full redundancy	Up to 6 fans with full redundancy
<b>Ports</b>		
Network Options	2 x 1GbE	4 x 1 GbE
	2 x 10GbE	
	2 x 10GbE SPF+	
Front Ports	1 x Dedicated iDRAC direct USB	1 x Dedicated iDRAC USB Type A
	1 x USB 2.0	1 x USB 2.0
	1 x VGA	1 x VGA
Rear Ports	2 x 1GbE	2 x 1GbE
	1 x Dedicated iDRAC network	1 x Dedicated iDRAC network
	1 x Serial	1 x Serial
	2 x USB 3.0	2 x USB 3.0
	1 x VGA	1 x VGA
Internal Ports	1 x USB 3.0	1 x USB 3.0
<b>Slots</b>		
PCIe	5 x Gen3 slots	3 x Gen3 slots + 2 x Gen 2 slots
Video Card	1 x VGA	1 x VGA
<b>Bezel</b>	Optional LCD bezel or security bezel	Optional LCD bezel or security bezel
<b>Form Factor</b>	2U Rack Server	2U Rack Server
<b>Dimensions and Weight</b>		
Height	86.8mm (3.41")	86.8mm (3.41")
Width	434mm (17.08")	434mm (17.08")
Depth	703.76mm (27.71")	646mm (25.4")
Weight	29.68kg (65.43lbs.)	28.2kg (62lbs.)

© 2019 Dell Inc. or its subsidiaries. All rights reserved.