

DELL EMC VXRAIL™ APPLIANCE

SPECIFICATION SHEET



Dell EMC VxRail™
Appliance

The Dell EMC VxRail™ Appliance, the exclusive hyper-converged infrastructure appliance from Dell EMC and VMware, is the easiest and fastest way to extend and simplify a VMware environment. Powered by VMware vSAN™ and managed through the vCenter interface, the Dell EMC VxRail Appliance provides existing VMware customers an experience with which they are already familiar. Seamless integration with existing VMware tools, such as vRealize Operations, also lets customers leverage and extend their current IT tools and processes.

The Dell EMC VxRail Appliance architecture is a distributed system consisting of common modular building blocks that scale linearly from 3 to 64 nodes in a cluster. With the power of a whole Storage Area Network (SAN), it provides a simple, cost-effective hyper-converged solution that delivers multiple compute, memory, storage, network and graphics options to match any use case and cover a wide variety of applications and workloads.

Based on industry-leading VMware vSAN and vSphere software and built with 5th generation Intel™ Xeon™ processors, the Dell EMC VxRail Appliance allows customers to start small and grow, scaling capacity and performance easily and non-disruptively. Single-node scaling and storage capacity expansion provide a predictable, “pay-as-you-grow” approach for future growth as needed.

The Dell EMC VxRail Appliance comes stacked with mission-critical data services at no additional charge. Data protection technology including Dell EMC RecoverPoint for VMs and VMware vSphere Data Protection are incorporated into the appliance, with the option of adding Data Protection Suite for VMware and Data Domain Virtual Edition (DD VE) for larger environments that require more comprehensive data protection. Dell EMC CloudArray is also built in to seamlessly extend the Dell EMC VxRail Appliance to public and private clouds to securely expand storage capacity without limits, providing additional on-demand cloud tiering included.

The Dell EMC VxRail Appliance is also backed by Dell EMC’s world-class support with a single point of contact for both hardware and software, and includes Dell EMC ESRS for call-home and proactive two-way remote connection for remote monitoring, diagnosis, and repair to ensure maximum availability.

Detailed specifications and a comparison of the Dell EMC VxRail Appliances follows.

DELL EMC VXRAIL APPLIANCE SPECIFICATIONS

	G SERIES	E SERIES	V SERIES	P SERIES	S SERIES
Compute, storage, and memory (per node)					
Chassis	2U4N	1U1N	2U1N	2U1N	2U1N
Processor	5 th generation Intel™ Xeon™ E5-2600 Family				
CPU sockets	Single or Dual	Single or Dual	Dual	Single or Dual	Single or Dual
CPU cores	8 – 32	6 – 40	16 – 40	8 – 44	6 – 36
CPU frequency	1.7 GHz – 2.4 GHz	1.7 GHz – 2.6 GHz	2.0 GHz – 3.2 GHz	2.0 GHz – 3.5 GHz	1.7 GHz – 2.4 GHz
RAM	64 GB – 512GB	64 GB – 1536 GB	128 GB – 1024 GB	128 GB – 1536 GB	64 GB – 1536 GB
Cache SSD	200 GB – 800 GB	400 GB – 1600 GB*	400 GB – 1600 GB*	400 GB – 1600 GB*	400 GB – 1600 GB*
Hybrid storage	3.6 TB – 10 TB	1.2 TB – 16 TB	1.2 TB – 24 TB	1.2 TB – 24 TB	4 TB – 48 TB
All-flash storage	3.84 TB – 19.2 TB	1.92 TB – 30.7 TB	1.92 TB – 46 TB	1.92 – 46 TB	Hybrid only
Drive bays	6 x 2.5"	10 x 2.5"	16 x 2.5"	16 x 2.5"	12 x 3.5" and 2 x 2.5"
Max disk groups	1	2	4	4	2
Max PCIe GPUs	n/a	n/a	Up to 2x NVIDIA Tesla M10 or M60	n/a	n/a
*1600 GB cache SSD only in hybrid configurations.					
Clustering and scaling					
Max nodes* (per cluster)	64	64	64	64	64
Min nodes (per cluster)	3	3	3	3	3
Scaling increment (in nodes)	1	1	1	1	1
*8 nodes maximum per cluster in 1 GbE models.					
Networking (per node)					
Appliance connectivity	2x10 GbE RJ45 <i>or</i> 2x10 GbE SFP+ <i>or</i> 4x1 GbE RJ45*	2x10 GbE RJ45 <i>or</i> 2x10 GbE SFP+ <i>or</i> 4x1 GbE RJ45*	2x10 GbE RJ45 <i>or</i> 2x10 GbE SFP+	2x10 GbE RJ45 <i>or</i> 2x10 GbE SFP+	2x10 GbE RJ45 <i>or</i> 2x10 GbE SFP+ <i>or</i> 4x1 GbE RJ45*
Management port	1x100 Mb RJ45 BMC	1x1 GbE iDRAC8 Enterprise RJ45	1x1 GbE iDRAC8 Enterprise RJ45	1x1GbE iDRAC8 Enterprise RJ45	1x1 GbE iDRAC8 Enterprise RJ45
Optional connectivity (Max additional ports)	n/a	Up to 6x10 GbE RJ45 <i>or</i> Up to 6x10 GbE SFP+	Up to 6x10 GbE RJ45 <i>or</i> Up to 6x10 GbE SFP+	Up to 6x10 GbE RJ45 <i>or</i> Up to 12x10 GbE SFP+	Up to 6x10 GbE RJ45 <i>or</i> Up to 12x10 GbE SFP+
*4x1GbE RJ45 only on single CPU nodes.					

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Power and dimensions					
Power input	110V/220V AC Dual CPU 220V only	100V/240V AC 48V DC	100V/240V AC 48V DC	100V/240V AC 48V DC	100V/240V AC 48V DC
High-efficiency dual redundant PSU	1200W/1600W AC	1100W AC	1100W AC	1100W AC	1100W AC
Redundant cooling fans	4	7	6	6	6
Physical specifications	87.3mm/3.44in H 447mm/17.6in W 774.7mm/30.5in D 41.42kg/91.31lb	42.8mm/1.68in H 482.3mm/18.98in W 755.1mm/29.72in D 18.5kg/40.79lb	87.3mm/3.44in H 444mm/17.49in W 684mm/26.92in D 31.4kg/69.23lb	87.3mm/3.44in H 444mm/17.49in W 684mm/26.92in D 31.4kg/69.23lb	87.3mm/3.44in H 444mm/17.49in W 684mm/26.92in D 36.5kg/80.47lb

Environmental and certifications

Ambient operating temperature	5°C to 35°C (41°F to 95°F)	10°C to 35°C (50°F to 95°F)	10°C to 35°C (50°F to 95°F)	10°C to 35°C (50°F to 95°F)	10°C to 35°C (50°F to 95°F)
Storage temperature range	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)
Operating relative humidity	20% to 85% (non-condensing)	10% to 85% (non-condensing)	10% to 85% (non-condensing)	10% to 85% (non-condensing)	10% to 85% (non-condensing)
Operating altitude with no deratings	3200m (approx. 10656 ft)	950m (approx. 3117 ft)	950m (approx. 3117 ft)	950m (approx. 3117 ft)	950m (approx. 3117 ft)
Heat dissipation	5071 BTU/hr	2560 BTU/hr	3070 BTU/hr	4970 BTU/hr	3070 BUT/hr
Certifications	UL (Covers cUL and does not require CSA), CE, EMC, FCC				