DELL Technologies

VEP4600 Spec Sheet

VIRTUAL EDGE PLATFORM 4600

Next Generation Access

Purpose-built open uCPE platform to host VNFs (Virtual Networking Functions). Ideal access platform for SD-WAN.

The VEP4600 is a Dell networking platform purpose-built for next-generation access deployments. The VEP4600 is a Universal CPE (uCPE) and is ideal for hosting SD-WAN and other VNFs (Virtual Network Functions) like routing, firewall or deep-packet inspection. It offers hosted virtualized network functionality, with applicability for the SP Edge and Enterprise Branch. The VEP4600 is 1 RU sized, using the latest Intel® Xeon® D-2100 x86-based processor which is optimized for networking. Dell Technologies is the first to market with Xeon-D for SD-WAN. The VEP4600 will provide high performance and the necessary headroom for hosting VNF services, using 3 design principles:

- **Purpose-built**
- **Future-ready**
- **Validated choice**

Purpose-built uCPE platform for open and disaggregated networking

The Dell Networking Virtual Edge Platform is optimized to host VNFs (Virtual Network Functions) and is ideal for SD-WAN. This single-socket, 1RU platform is perfect for the service provider edge or enterprise branch.

- First to market with networking optimized Intel® Xeon® D-2100 x86-based processor
- Accelerates packet processing with Intel® Data Plane Development Kit (DPDK)
- Accelerates security encryption with Intel® QuickAssist Technology (QAT)
- Supports KVM and ESXi hypervisors and native Linux
- IO to PSU airflow, front-facing ports, and redundant power option
- Short-depth chassis design excellent for telco use cases

Future-ready

The VEP4600 is designed to be open and ready to add more VNF services or expand capabilities

- **New!** Available expansion cards to add additional 1G or 10G interface
- Ready to add multiple VNFs, without a fork-lift upgrade
- 4 DIMM slots, 2 M.2 SSD on the baseboard and 2 expansion slots
- Two 10G SFP+ Network ports
- Out of band management ports

Validated choice

Dell is adding substantial value to the VEP4600, with a concept we call Validated Choice. Choice is value added by formally partnering with leading SD-WAN leading vendors: Versa and Adva. Validation is value-added with our joint testing or orderable SKUs directly from Dell Technologies. Moreover, validation is not just product validation but also supply chain validation. Customers will be able to take advantage of the Dell Technologies global supply chain. Validation accelerates time to revenue, and reduces deployment risks.

New! Adva Ensemble has been added to provide a hardened virtualization layer that can host a wide array of over 50 third-party VNFs, covering routing, firewall, WAN optimization, IoT, testing, monitoring, etc.

VEP4600 overview

Features	Technical Specification
CPU	Intel Xeon-D 2100 (4,8 and 16 core)
Networking ports	4 x 1GE 2 x 10GE
Management ports	2X - 10/100/1000Base-T: one for CPU and one for BMC
USB ports	2X - USB type A receptacle (female) ports supports USB 3.0 1X – Micro USB type B receptacle (female) port, available for console port
Console ports	2X – Serial: one for CPU and one for BMC
Storage Option	2x M.2 SATA (up to total 960GB in standard configuration, upgradable to 1.92TB with custom upgrade)
Out of Band Management	BMC IPMI 2.0 compliant
Memory	4 DIMM slot (up to 64GB in standard configuration, upgradable to 128GB with custom upgrade)
Software Validation	Partner driven
TPM	2.0
QAT	Yes (except for 4 core)
Expansion slots	2 X expansion slots. Expansion card options: 4X10Gb DA/SFP+, 2X10 Gb DA/SFP+ with 2X 1Gb, 4X1Gb=
BMC	IPMI 2.0 compliant
Power Supplies	Standard configuration: 16 core (2 PSU), 8 core (1 PSU), 4 core (1 PSU)
Fans	Standard configuration: 16 core (5 fans), 8 core (4 fans), 4 core (4 fans)
Airflow	Air flows from I/O side to PSU side
Operating system	Supports Linux (Ubuntu OS and Red Hat/Cent OS)
Hypervisors	ESXi, KVM

VEP4600 Physicals		Inches	cm
Product	Width	17.1	43.4
	Depth	15	38.1
	Height	1.72	4.37
Shipping Box	Width	22.64	57.5
	Depth	23.78	60.4
	Height	8.38	21.3
Rack clearance required (Front)		5	12.7
Rack clearance required (Rear)		5	12.7
Product Weight		Varies by configuration. 16.4lbs (7.43kg) (with 2 PSUs, 5 fans, 1 rNDC expansion card)	

VEP4600 Power		
Power Input	AC: 100 to 240 VAC, 50/60 Hz	
Typical current draw per platform – AC	110VAC: 1.89A (16 core) 110VAC: 1.5A (8 core) 110VAC: 1.35A (4 core)	240VAC: 0.86A (16 core) 240VAC: 0.7A (8 core) 240VAC: 0.65A (4 core)
Power Consumption	Max	5-fan 16-core processor: 311W 4-fan 8-core processor: 230W 4-fan 4-core processor: 220W
	Typical	5-fan 16-core processor: 206.5W 4-fan 8-core processor:170W 4-fan 4-core processor:160W

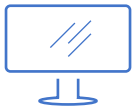
VEP4600 Regulatory	
Safety	• UL/CSA 60950-1, Second Edition • EN 60950-1, Second Edition • IEC 60950-1, Second Edition Including all National Deviations and Group Differences • IEC 62368-1 • EN 60825-1 Safety of Laser Products Part 1: Equipment Classification Requirements and User's Guide • EN 60825-2 Safety of Laser Products Part 2: Safety of Optical Fiber Communication Systems FDA Regulation • 21 CFR 1040.10 and 1040.11
Emissions	• Australia/New Zealand: AS/NZS CISPR 32, Class A • Canada: ICES-3/NMB-3, Class A • Europe: EN 55024 (CISPR 24), Class A • Japan: VCCI Class A • USA: FCC CFR 47 Part 15, Subpart B, Class A
Immunity	• EN 300 386 for Network Equipment • EN 55024 • EN 61000-3-2: Harmonic Current Emissions • EN 61000-3-3: Voltage Fluctuations and Flicker • EN 61000-4-2: ESD • EN 61000-4-3: Radiated Immunity • EN 61000-4-4: EFT • EN 61000-4-5: Surge • EN 61000-4-6: Low Frequency Conducted Immunity
RoHS	• EN 50581:2012 All S9999 components are EU RoHS compliant

VEP4600 Operations	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Operating Relative humidity	5% to 85% (RH), non-condensing Continuously 5% to 90% (RH), non-condensing Short term (< 1% of operational hour per year)
Storage Relative humidity	5% to 90% (RH)
Operating Altitude	No performance degradation to 10,000 feet (3,048 meters)

Learn more

Our Virtual Edge Platform team is proud to bring you the VEP4600, to meet and exceed the demanding high- performance requirements for open and disaggregated networking. The VEP4600 is designed from the ground up, with the headroom and performance, to host multiple VNFs, like SD-WAN. We've partnered with Intel to be first to market with the Intel Xeon-D 2100 network optimized processor; and leading software vendors like Versa or Adva to provide a comprehensive solution.

For information, visit http://www.dell.com/en-us/work/shop/povw/virtual-edge-platform-4600. Contact your Dell Sales Representative for additional information and to discuss your next generation access requirements.



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