VIRTUAL EDGE PLATFORM 1405

Next Generation Access

Purpose-built high-value uCPE platform series to host VNFs (virtual networking functions). Ideal access platform for SD-WAN. Value optimized for smaller locations. Complements higher performance VEP4600.

The VEP1405 series is a Dell EMC networking platform purpose-built for next generation access deployments. The VEP1405 is a value designed 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 VEP1405 is designed in a fixed desktop form factor, with optional rack mount kit, using Intel® Atom® C-3000 x86-based processor which is optimized for value, lower power consumption and multiple core options. The VEP1405 complements the higher performing modular VEP4600.

High performance for hosting VNF services is incorporated into the VEP1405 using 3 design principals:

- Purpose-built,
- Future ready, and
- Validated choice.

Purpose-built uCPE platform for open and disaggregated networking

The Dell EMC Networking Virtual Edge Platform is optimized to host VNFs (Virtual Network Functions) and is ideal for SD-WAN. The fixed form factor is perfect for the service provider edge or enterprise branch, where high-value, low power, compact form factor, and configuration options are design considerations.

- High-value fixed form factor
- Compact desktop dimensions, with available kit for rack installations.
- Intel Atom C-3000 x86-based Denverton processor, designed for performance and low power consumption
- Processing from 4,8, or 16 core options offers more head-room to add VNFs
- Quick Assist Technology (QAT) to accelerate security encryption
- Data Plane Development Kit (DPDK) to accelerate packet processing
- Memory from 8,16, or 32GB options
- Storage from 120 or 240GB options
- Ports: 6X1G (standard), 2X10G SFP+
- Supports KVM and ESXi hypervisors and native Linux.

Future ready

This high value fixed form factor uCPE is future ready to add multiple VNFs without a forklift upgrade.

Validated choice

The VEP1405 brings you simplified deployment and maximum choice with validated hardware and software options.

- Multiple configurations offer choices in cores, storage, memory, and ports
- Software
  - Preloaded on VEP1405 - Versa FlexVNF, licenses to be obtained from Versa or mailing versa@dell.com
  - Available as validated build and on Dell EMC price list - ADVA Ensemble Connector, VMware vSphere
  - Partners who have validated their software on the VEP1405 - Ekinops OneAccess, RAD vCPE OS, Benu Networks
  - Also runs CentOS, Debian and other major versions of Linux
- Widely available around the world with Dell EMC's world-class supply chain
- Validation accelerates time to revenue; and reduces deployment risks.

VEP1405 models

			
Features	**VEP1425/1425N**	**VEP1445/1445N**	**VEP1485/1485N**
CPU	Denverton 4 Core C3558	Denverton 8 Core C3758	Denverton 16 Core C3958
Drive	M.2 120 SSD with 16G eMMC Flash.	M.2 240 SSD with 16G eMMC Flash	M.2 240 SSD with 16G eMMC Flash
RAM	8G	16G	32G
Ports	(6 x 1G) + (2x 10G SFP+)	(6 x 1G) + (2x 10G SFP+)	(6 x 1G) + (2x 10G SFP+)
Fan	1	2	2
WiFi & Bluetooth	802.11ac, 2x2 MIMO, max. phy rate: 866.7 Mbps (only VEP1425)	802.11ac, 2x2 MIMO, max. phy rate: 866.7 Mbps (only VEP1445)	802.11ac, 2x2 MIMO, max. phy rate: 866.7 Mbps (only VEP1485)

Rear View

VEP1405 overview

Features	Technical Specification
CPU	Intel Atom C-3000 Denverton (4,8 and 16 core)
Networking ports	4 core - 6 x 1G copper, 2 x 10G SFP+ 8 core - 6 x 1G copper, 2 x 10G SFP+ 16 core - 6 x 1G copper, 2 x 10G SFP+
Management ports	Out-of-band management using micro-USB 2.0 console port.
USB ports	2x USB 3.0 type A. One on each of the two sides.
Console ports	Dedicated management console on micro-USB port.
Storage Option	One M.2 SATA SSD with capacity of 120GB or 240G based on SKU.
Memory	Memory: DDR4 with ECC, on-board (by SKU) and on-board+SO-DIMM socket (by SKU) with size 8GB, 16GB, and 32GB. SKUs with 32GB have 16GB on-board and 16GB using SO-DIMM.
Connectors	M.2 and mini-PCIe (These are internal connectors and modules plugged into these are NOT field upgradable. M.2 is for SSD. Mini-PCIe is for WiFi module.)
TPM	2.0
QAT	Yes
Power Supply	External
Fans	One fan for VEP1425/1425N, Two fans on VEP1445/1445N, VEP1485/1485N.
Airflow	Exhaust on sides and back
Operating system	Supports Native Linux OS provided by the VNF partners. Supports KVM or ESXi hypervisors.
Mounting options	Optional wall or rack mounts available. Ships with footpads for desktop use.
Software	Pre-loaded with Versa FlexVNF during manufacture; and can be erased for installation of other software.

VEP1405 Physicals		Inches	cm
Product	Width	8.1	20.8
	Depth	7.9	20.0
	Height	2.0	5.2
Shipping Box	Width	19.4	49.5
	Depth	11.3	28.7
	Height	4.3	10.9
Product Weight		2.87 lb (1.30 Kg) to 3.11 lb (1.41 Kg), depending on SKU	

VEP1405 Power		
Power Input	AC: 100 to 240 VAC, 50/60 Hz	
Max current draw per system – AC	100VAC: 2.0A 240VAC: 1.0A	
Power Consumption	Typical	40W (16 core) 35W (8 core) 20W (4 core)
	Max	50W (16 core) 45W (8 core) 30W (4 core)

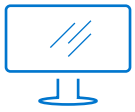
VEP1405 Regulatory	
Safety	• UL/CSA 60950-1, Second Edition • EN 60950-1, Second Edition • IEC 60950-1, Second Edition Including all National Deviations and Group Differences • IEC 62368-1 • EN 60825-1 Safety of Laser Products Part 1: Equipment Classification Requirements and User's Guide • EN 60825-2 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 EMC 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.
Other	• Safety: IEC62368-1 • AS/NZS 60950 • EN 60950-1 Safety of Information Technology Equipment • EMC compliance • ICES-003 (Canada) Class A • EN55032:2015 (Europe) Class A • CISPR32 (International) Class A • AS/NZS CISPR32 (Australia and New Zealand) Class A • taiwanKN32 (Korea) Class A • CNS13438 (Taiwan) Class A • CISPR24 • EN300 386

VEP1405 Operations	
Operating Temperature	0°C to 40°C (32°F to 104°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	Maximum operating altitude is 10,000 feet (3048m).

Learn more

Our Virtual Edge Platform team is proud to bring you the VEP1405, to meet and exceed the demanding high-performance requirements for open and disaggregated networking. The VEP1405 is designed with the value and performance, to host multiple VNFs, like SD-WAN. We've partnered with Intel using the Atom C-3000 network optimized low power processor; and leading SD-WAN vendors like Versa and Adva to provide a comprehensive solution.

For information, visit http://www.dell.com/en-us/work/shop/povw/virtual-edge-platform-1405. Contact your Dell Sales Representative for additional information and to discuss your next generation access requirements.



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