

# Dell PowerSwitch E3248P-ON and E3248PXE-ON Network Edge Switches

## Frequently Asked Questions



Date: October 2022

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## 1. What are the important details of this networking announcement?

**We want to Win the Edge.** This means shifting our focus, resources and moving from campus to edge networking and services. The move to the edge means leaving complexity and network congestion at network edge behind and it embraces an agile, open ecosystem approach to networking. We maximize customer choice, flexibility and innovation from the edge to the core to the cloud.

To build new growth businesses, we are introducing new Dell PowerSwitch E-series models for edge, replacing N3248P-ON and N3248PXE-ON, and supporting Enterprise SONiC Distribution by Dell Technologies. We extend open, standard-based switching technology to network edge, helping customers enhance workforce productivity with network bandwidth intensive applications and greater automation with larger number of PoE powered devices and IoT at the network edge to:

- **Improve performance at the edge.** These next-generation Dell PowerSwitch E3248 models support up to 48 ports of 10G multi-gig with 90W PoE on each port and up to 4320W of PoE budget. These switches also come with two 100Gbps uplinks in addition to four 10/25Gbps uplinks.
- **Maximize speed and power to improve your networking edge scalability for your most critical workloads.** These new PowerSwitches come with enhanced CPU power and memory to allow customers to run add-on container applications for telemetry and analytics alongside SONiC Edge bundle, enabling real time automation and management at the edge.
- **Reduce complexity at the edge.** Edge use case extends data center fabric to remote locations using the same NOS and familiar data center networking tools to monitor, manage and deploy at the edge (Ansible, Augtera, Apstra, etc.)
- **Drive efficiency and productivity through streamlined technology and innovative automation.** SONiC 4.0.3 open design with gNMI and REST APIs allows the same automation capability for the edge, previously only available for the data center.

This supports our core Networking Portfolio Strategy to leverage platforms built for Edge and Attached, and transition from Dell OS6 to OS10 and SONiC, as we grow and modernize our core business and simplify the edge experience.

## 2. What models are included in this announcement?

- E3248P-ON – 48x RJ45 10/100/1000Mb 802.3at (up to 30W) PoE auto-sensing ports, 4x 10G SFP+ ports, 2x 100G QSFP28 ports, 1x 1050W AC PSU included.
- E3248PXE-ON – 48x RJ45 10M/100M/1G/2.5G/5G/10G 802.3bt (up to 90W) PoE auto-sensing ports; 4x 25G SFP28 ports, 2x 100G QSFP28 ports, 1x 1600W AC PSU included.
- Add-on power supplies and external power shelves for redundancy and/or extending PoE budgets available.

## 3. What operating systems are supported?

- No pre-installed NOS, recommended for use with Enterprise SONiC Distribution by Dell Technologies 4.0.3 or later

#### 4. What are the key features and benefits?

Feature	Benefit
Dell PowerSwitch E3248P/PXE models support up to 48 ports of 10G multi-gig with 30W or 90W PoE on each port and up to 4320W of PoE budget.	Improve performance at the network edge.
Enhanced CPU power and memory allows customers to run add-on container applications for telemetry and analytics alongside SONiC Edge bundle, enabling real time automation and management at the edge.	Maximize speed and power to improve your networking edge scalability for your most critical workloads.
Edge use case extends data center fabric to remote locations using the same NOS and familiar data center networking tools to monitor, manage and deploy at the edge (Ansible, Augtera, Apstra, etc.)	Reduce complexity at the edge.
SONiC 4.0.3* open design with gNMI and REST APIs allows the same automation capability for the edge, previously only available for the data center.	Drive efficiency and productivity through streamlined technology and innovative automation.

#### 5. I heard there's new silicon.

*That is correct. E3248P-ON and E3248PXE-ON come with enhanced CPU (4-core vs. 2-core), more RAM (16 GB vs. 4 GB) and SSD (32 GB vs. 8 GB) compared to N3248P-ON and N3248PXE respectively, to support latest generation features from SONiC as well as add-on container applications (such as for telemetry and analytics).*

#### 6. How should I position E3248P-ON and E3248PXE-ON compared to N3248P-ON and N3248PXE-ON?

Feature	N3248P-ON	N3248PXE-ON	E3248P-ON	E3248PXE-ON
Switching Capacity (Full Duplex)	576 Gbps	1560 Gbps	576 Gbps	1560 Gbps
Forwarding Capacity	800 Mpps	2167 Mpps	800 Mpps	2167 Mpps
Port Configurations	<ul style="list-style-type: none"> <li>• 48x RJ45 10/100/1000Mb 802.3at (up to 30W) PoE auto-sensing ports</li> <li>• 4x 10G SFP+</li> <li>• 2x 100G QSFP28</li> </ul>	<ul style="list-style-type: none"> <li>• 48x RJ45 10M/100M/1G/2.5G/5G/10G 802.3bt (up to 90W) PoE auto-sensing ports</li> <li>• 4x 25G SFP28</li> <li>• 2x 100G QSFP28</li> </ul>	<ul style="list-style-type: none"> <li>• 48x RJ45 10/100/1000Mb 802.3at (up to 30W) PoE auto-sensing ports</li> <li>• 4x 10G SFP+</li> <li>• 2x 100G QSFP28</li> </ul>	<ul style="list-style-type: none"> <li>• 48x RJ45 10M/100M/1G/2.5G/5G/10G 802.3bt (up to 90W) PoE auto-sensing ports</li> <li>• 4x 25G SFP28</li> <li>• 2x 100G QSFP28</li> </ul>
Packet Buffering	8 MB	32 MB	8 MB	32 MB
NPU	Trident3-x3	Trident3-x5	Trident3-x3	Trident3-x5
CPU memory	4 GB	4 GB	16 GB	16 GB
SSD	8 GB	8 GB	32 GB	32 GB

## 7. How do I order this solution?

a. See the table below for order configurations.

Product	Description
E3248P-ON E3248PXE-ON	<ul style="list-style-type: none"> <li>E3248P-ON: 48x RJ45 10/100/1000Mb 802.3at (up to 30W) PoE auto-sensing ports, 4x 10G SFP+ ports, 2x 100G QSFP28 ports, 1x 1050W AC PSU included</li> <li>E3248PXE-ON: 48x RJ45 10M/100M/1G/2.5G/5G/10G 802.3bt (up to 90W) PoE auto-sensing ports; 4x 25G SFP28 ports, 2x 100G QSFP28 ports, 1x 1600W AC PSU included</li> </ul>
Dell SW Configurations	<ul style="list-style-type: none"> <li>No pre-installed NOS, recommended for use with Enterprise SONiC Distribution by Dell Technologies 4.03 or later</li> </ul>
Redundant Power Supplies	<ul style="list-style-type: none"> <li>1050W AC hot swappable, adds redundancy and/or extends PoE budget for E3248P-ON</li> <li>1600W AC hot swappable, adds redundancy and/or extends PoE budget for E3248PXE-ON</li> </ul>
Power Shelves	<ul style="list-style-type: none"> <li>MPS-1S Shelf, External power shelf to hold 1 PSU (any of 1050W AC, 1600W AC, 2000W AC), Extends PoE budget for N3248P-ON and N3248PXE-ON</li> <li>MPS-3S Shelf, External power shelf to hold up to 3 PSUs (any combination of 1050W AC or 1600W AC or 2000W AC PSUs), Extends PoE budget for N3248P-ON and N3248PXE-ON</li> </ul>
Fans (spare)	<ul style="list-style-type: none"> <li>Fan module, IO to PSU Airflow</li> </ul>

## 8. Where can I learn more about E3248P and PXE?

- a. You can access the following Dell Networking resources on [Sales Portal](#) and [Sharepoint](#)
- Dell PowerSwitch E3200 Series [Spec Sheet](#)
  - Dell PowerSwitch E3248P/PXE-ON NDA Customer Presentation
  - Dell PowerSwitch E3248P/PXE-ON Battle Card
  - Dell PowerSwitch E3200 Series Sourcebook
- b. As always you are welcome to reach out to us at [ask-networking-plm@dell.com](mailto:ask-networking-plm@dell.com)