Dell EMC PowerSwitch
N1108EP-ON Switch
Fully managed 1GbE Layer 2 switching with Open Networking capabilities

The N1108EP-ON switch offers a power-efficient Gigabit Ethernet (GbE) network-access switching solution with integrated 1GbE uplinks. The switch supports flexible power options such as PoE pass-through or an external power adapter or both to provide power redundancy to the switch. The switch comes with high-performance capabilities and wire-speed performance, utilizing a non-blocking architecture to easily handle unexpected traffic loads. Fanless operation and features such as Energy-Efficient Ethernet and short cable detection provide energy efficiency to help decrease power and cooling costs.

Modernize campus network architectures
Modernize campus network architectures with a power-efficient and resilient 1GbE switching solution with up to 8 PoE/PoE+ ports. PoE power budgets up to 137W delivering clean power to network devices such as wireless access points (APs), voice over-IP (VoIP) handsets, video conferencing systems and security cameras.

Leverage familiar tools and practices
N1108EP-ON switch includes Dell EMC Networking OS6, designed for easier deployment, greater interoperability and a lower learning curve for network administrators. One common command line interface (CLI) and graphic user interface (GUI) using a well-known command language gets skilled network administrators productive quickly. The N1108EP-ON switch also supports the Open Network Install Environment (ONIE), enabling installation of alternate network operating systems.

Deploy with confidence
N1108EP-ON switch helps create performance assurance with a data rate up to 24Gbps (full duplex) and a forwarding rate up to 18Mpps. N1108EP-ON switch provides certainty with a lifetime warranty* that covers software upgrades, hardware repair or replacement, and optics and cables purchased with the switch.

Hardware, performance and efficiency
- Up to 10 line-rate GbE RJ45 ports and two integrated 1GbE SFP ports
- Up to 8 PoE/PoE+
- PoE pass-through to power the switch as well as PoE end devices (switch draws power from an uplink PoE device without needing a dedicated power supply)
- External power adapter
- Power redundancy between PoE pass-through and external power adapter
- Energy-Efficient Ethernet and lower power PHYs reduce power to inactive ports and idle links, providing energy savings from the power cord to the port
- Fresh Air compliance for operation in environments up to 113°F (45°C) helps reduce cooling costs in temperature-constrained deployments

*Select Networking products carry a Lifetime Limited Warranty with Basic Hardware Service (repair or replacement) for life. Repair or replacement does not include troubleshooting, configuration, or other advanced service provided by Dell EMC ProSupport. For details, visit https://www.dell.com/en-us/work/shop/networkingwarranty/cp/networkingwarranty.
Deploying, configuring and managing

- USB auto-configuration rapidly deploys the switch without setting up complex TFTP configurations or sending technical staff to remote offices
- Management via an intuitive and familiar CLI, embedded web server (GUI), SNMP-based management console application (including Dell EMC OpenManage Network Manager), Telnet or serial connection
- Private VLAN extensions and Private VLAN Edge support

- AAA authorization, TACACS+ accounting and RADIUS support for comprehensive secure access support
- Authentication tiering allows network administrators to tier port authentication methods such as 802.1x, MAC Authentication Bypass and Captive Portal in priority order so that a single port can provide flexible access and security
- Remote Switch Port Analyzer (RSPAN) monitors ports across a Layer 2 domain without costly dedicated network taps

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
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<tbody>
<tr>
<td>N1108EP-ON series</td>
<td>8x 10/100/1000Mbps half/full duplex ports, 2x GbE RJ45 and 2x GbE SFP interfaces, 8xPoE/PoE+, 137W PoE power budget RJ45, FastPoE, Perpetual PoE, 1 RU half-width, fanless operation</td>
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<tr>
<td>Power cords</td>
<td>C13 to NEMA 5-15, 3M C13 to C14, 2M</td>
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<tr>
<td>Optics (optional)</td>
<td>Transceiver, SFP, 1000BASE-T Transceiver, SFP, 1000BASE-SX, 850nm wavelength, up to 550m reach Transceiver, SFP, 1000BASE-LX, 1310nm wavelength, up to 10km reach Transceiver, SFP, 1000BASE-ZX, 1550nm wavelength, up to 80km reach</td>
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Physical

- 8x 1GbE RJ-45 ports with 802.3at PoE
- 2x 1GbE RJ-45 uplink ports with PoE pass through capability
- 2x 1GbE SFP ports
- USB (Type A) port for configuration via USB flash drive
- Auto-negotiation for speed and flow control
- Auto MDI/MDIX, port mirroring
- Flow-based port mirroring
- Broadcast storm control
- Energy-Efficient Ethernet per port settings
- PoE pass through using 2x1GbE RJ-45 uplinks
- External power adapter: 280W
- PoE power budgets: 25W with one 60W PoE uplink, 75W with two 60W PoE uplink, and up to 137W with external power adapter
- Micro USB Console port (Micro USB to USB cable included)
- Dual firmware images on-board
- Switching engine model: Store and forward;

Chassis

- Size (H x W x D) in inches: 1.62 x 8.23 x 9.84
- 280W External Power Adapter: 1.69x3.94x7.87
- Approximate weight: 4lbs, 1.81kg
- 280W External Power Adapter: 2.0lbs, 0.91kg
- Rack mounting kit with 2 mounting brackets, bolts and cage nuts
- 1RU tray to accommodate two half rack width switches (kit includes L-brackets for 800mm deep rack/ cabinet)

Environmental

- Power supply efficiency: 80% or better in all operating modes
- Max. thermal output (BTU/hr): 66.53
- Power consumption max (watts): 19.51

IEEE compliance

- 802.1AB LLDP
- Dell Voice VLAN
- Dell ISDP (inter-operates with devices running CDP)

- 802.1D Bridging, Spanning Tree

- 802.1p Ethernet Priority (User Provisioning and Mapping)
- Dell Adjustable WRR and Strict Queue Scheduling
- 802.1Q VLAN Tagging, Double VLAN Tagging, GVRP
- 802.1S Multiple Spanning Tree (MSTP)
- 802.1v Protocol-based VLANs
- 802.1W Rapid Spanning Tree (RSTP)
- Dell RSTP-Per VLAN (compatible with Cisco’s RPVST+)
- Dell Spanning tree optional features: STP root guard, BPDU guard, BPDU filtering
- 802.1X Network Access Control, Auto VLAN
- 802.2 Logical Link Control
- 802.3 10BASE-T
- 802.3ab Gigabit Ethernet (1000BASE-T)
- 802.3ac Frame Extensions for VLAN Tagging
- 802.3ad Link Aggregation with LACP
- 802.3ae 10 Gigabit Ethernet (10GBase-X)
- 802.3af PoE
- 802.3at PoE+
- 802.3AX LAG Load Balancing
- 802.3az Energy Efficient Ethernet (EEE)
- 802.3u Fast Ethernet (100BASE-TX) on Management Ports
- 802.3x Flow Control
- 802.3z Gigabit Ethernet (1000BASE-X)
- ANSI LLDP-MED (TIA-1057)

MTU 9,216 bytes

RFC compliance and additional features

General Internet protocols

General Internet protocols are supported. For a detailed list, please contact your Dell Technologies representative.

General IPv4 protocols

General IPv4 protocols are supported. For a detailed list, please contact your Dell Technologies representative.
Technical specifications

General IPv6 protocols
General IPv6 protocols are supported. For a detailed list, please contact your Dell Technologies representative.

Multicast
- 2932 IPv4 MIB
- 4541 IGMP v1/v2/v3 Snooping and Querier Management
- IEEE 802.1ag draft 8.1–Connectivity Fault Management

Quality of service
- 2474 DiffServ Field
- 2475 DiffServ Architecture
- 2597 Assured Fwd PHB
- 2674 Extended Bridge MIB
- 2675 ENTITY MIB
- 2676 RADIUS Accounting
- 2677 RADIUS Attributes for Tunnel Prot.

Network Management and Security
- 1115 SMIv1
- 1117 SNMPv1
- 1212 Concise MIB Definitions
- 1213 MIB-II
- 1215 SNMP Traps
- 1286 Bridge MIB
- 1442 SMv2
- 1451 Manager-to-Manager MIB
- 1492 TACACS+
- 1493 Managed Objects for Bridges MIB
- 1573 Evolution of Interfaces
- 1612 DNS Resolver MIB Extensions
- 1643 Ethernet-like MIB
- 1757 RMON MIB
- 1867 HTML/2.0 Forms with File Upload Extensions
- 1901 Community-based SNMPv2
- 1902 SNMPv2 MIB
- 1904 Coexistence Between SNMPv1/v2
- 1905 2011 IP MIB
- 2012 TCP MIB
- 2013 UDPI MIB
- 2068 HTTP/1.1
- 2096 IP Forwarding Table MIB
- 2233 Interfaces Group using SMv2
- 2246 TLS v1

Safeguards and environment and other compliance

Safety and emissions
- Australia/New Zealand: ACMA RCM Class A
- Canada: ICES Class A; cUL
- China: CCC Class A; NAL
- Europe: CE Class A
- Japan: VCCI Class A
- USA: FCC Class A; NRTL UL; FDA 21 CFR 1040.10 and 1040.11
- Eurasia Customs Union: EAC
- Germany: GS mark

Immunity
- EN 61000-4-5: Surge

RoHS
Product meets RoHS compliance standards in many countries inclusive of USA, EU, China, and India. For more country-specific RoHS compliance information, please see your Dell Technologies representative.

Energy
- Japan: JEL

Certifications (available or coming soon)
Available with US Trade Agreements Act (TAA) compliance.

N-Series products have the necessary features to support a PCI-compliant network topology.
IT Lifecycle Services for Networking

Experts, insights and ease
Our highly trained experts, with innovative tools and proven processes, help you transform your IT investments into strategic advantages.

Plan & Design
Let us analyze your multivendor environment and deliver a comprehensive report and action plan to build upon the existing network and improve performance.

Deploy & Integrate
Get new wired or wireless network technology installed and configured with ProDeploy. Reduce costs, save time, and get up and running fast.

Educate
Ensure your staff builds the right skills for long-term success. Get certified on Dell EMC Networking technology and learn how to increase performance and optimize infrastructure.

Manage & Support
Gain access to technical experts and quickly resolve multivendor networking challenges with ProSupport. Spend less time resolving network issues and more time innovating.

Optimize
Maximize performance for dynamic IT environments with Dell EMC Optimize. Benefit from in-depth predictive analysis, remote monitoring and a dedicated systems analyst for your network.

Retire
We can help you resell or retire excess hardware while meeting local regulatory guidelines and acting in an environmentally responsible way.

Learn more at DellTechnologies.com/Services