The N1100 switch series offers a power-efficient Gigabit Ethernet (GbE) network-access switching solution with integrated 1GbE and 10GbE uplinks. With high-performance capabilities and wire-speed performance, utilizing a non-blocking architecture to easily handle unexpected traffic loads, the switches offer simple management and scalability via a 1Gbps (full-duplex) high availability stacking architecture that allows management of up to four switches from a single IP address. Fanless operation on select models, 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 1/10GbE switching solution with up to 24 PoE/PoE+ ports. PoE power budgets up to 375W deliver clean power to network devices such as wireless access points (APs), Voiceover-IP (VoIP) handsets, video conferencing systems and security cameras.

Leverage familiar tools and practices

All N-Series switches include Dell EMC Networking OS 6, 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 N1100 switch series also supports the Open Network Install Environment (ONIE), enabling installation of alternate network operating systems.

Deploy with confidence at any scale

N1100 series switches help create performance assurance with a data rate up to 176Gbps (full duplex) and a forwarding rate up to 164Mpps. Scale easily by stacking with 10GbE ports. Switch stacks of up to 192 1GbE ports can be managed from a single screen using the highly available stacking architecture for high-density aggregation with seamless redundant availability. N-Series switches help provide certainty with a lifetime warranty that covers software upgrades, hardware repair or replacement, and optics and cables purchased with the switch. Details at Dell.com/LifetimeWarranty.*

Hardware, performance and efficiency

- Up to 48 line-rate GbE RJ45 ports and four integrated 10GbE SFP+ ports.
- Up to 12 PoE/PoE+ ports without an optional external power supply.
- Up to 192 1GbE ports in a 4-unit stack for high-density, high-availability in IDF's, MDFs and wiring closets.
- Non-stop forwarding and fast failover in stack configurations (24- and 48-port models only).
- 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.

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 OpenManage Network Manager), Telnet or serial connection.
- Deploy, monitor and troubleshoot via integration with HiveManager cloud or on-premise management
- 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.

*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.
### Technical specifications

#### Physical

- **4x integrated front 10GbE SFP+ dedicated ports.**
- **2x 10GbE can be used as stacking ports (24 and 48-port models).**
- **2x 1GbE SFP links (8-port models).**
- **USB (Type A) port for configuration via USB flash drive.**
- **Auto-negotiation for speed and flow control.**
- **Mini USB Console port (Micro USB to USB cable included).**
- **AC (N1148T-ON); 500W AC (N1148P-ON); 250W AC (N1124P-ON); 60W (N1108P-ON); 24W and 80W AC (N1108T-ON).**
- **Air flow: I/O to power supply.**
- **Redundant variable speed fans.**
- **Energy-Efficient Ethernet per port settings.**
- **Broadcast storm control.**
- **Flow-based port mirroring.**
- **Auto MDI/MDIX, port mirroring.**
- **Auto-negotiation for speed and flow control.**
- **Drive.**
- **USB (Type A) port for configuration via USB flash models.)**
- **2x 1GbE SFP links (8-port 2x 10GbE can be used as stacking ports (24 24 member ports per LAG).**
- **802.1Q 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.**
- **Dell Voice VLAN.**
- **Dell ISDP (inter-operates with devices running CDP)**
- **IEEE 802.1D Bridging, Spanning Tree**
- **IEEE 802.1p Ethernet Priority (User Provisioning and Mapping)**
- **IEEE 802.1X Network Access Control, Auto VLAN**
- **IEEE 802.3 10BASE-T**
- **IEEE 802.2 Logical Link Control**
- **IEEE 802.1Q VLAN Tagging, Double VLAN Tagging, GVRP**
- **IEEE 802.1ab LLDP**
- **IEEE 802.1D Bridging, Spanning Tree**
- **IEEE 802.1S Multiple Spanning Tree (MSTP)**
- **IEEE 802.1v Protocol-based VLANs**
- **IEEE 802.1w Rapid Spanning Tree (RSTP)**
- **IEEE 802.1X Network Access Control, Auto VLAN**
- **IEEE 802.3 Logical Link Control**
- **IEEE 802.3 IEEE 802.3ab Gigabit Ethernet (1000BASE-T)**
- **IEEE 802.3ad Link Aggregation with LACP**
- **IEEE 802.3ac Frame Extensions for VLAN Tagging**
- **IEEE 802.3ad Link Aggregation with LACP**
- **IEEE 802.3ae 10 Gigabit Ethernet (10GBASE-X)**
- **IEEE 802.1Q VLAN Tagging, Double VLAN Tagging, GVRP**
- **IEEE 802.1ab LLDP**
- **IEEE 802.1D Bridging, Spanning Tree**
- **IEEE 802.1p Ethernet Priority (User Provisioning and Mapping)**
- **IEEE 802.1X Network Access Control, Auto VLAN**
- **IEEE 802.3 10BASE-T**
- **IEEE 802.2 Logical Link Control**
- **IEEE 802.1Q VLAN Tagging, Double VLAN Tagging, GVRP**
- **IEEE 802.1ab LLDP**
- **IEEE 802.1D Bridging, Spanning Tree**
- **IEEE 802.1S Multiple Spanning Tree (MSTP)**
- **IEEE 802.1v Protocol-based VLANs**
- **IEEE 802.1w Rapid Spanning Tree (RSTP)**
- **IEEE 802.1X Network Access Control, Auto VLAN**
- **IEEE 802.3 Logical Link Control**
- **IEEE 802.3 IEEE 802.3ab Gigabit Ethernet (1000BASE-T)**
- **IEEE 802.3ad Link Aggregation with LACP**
- **IEEE 802.3ac Frame Extensions for VLAN Tagging**
- **IEEE 802.3ad Link Aggregation with LACP**
- **IEEE 802.3ae 10 Gigabit Ethernet (10GBASE-X)**

#### Optics (optional)

- **Transceiver, SFP+, 10GbE, LR, 1310nm wavelength, up to 10km reach**
- **Transceiver, SFP, 1000BASE-ZX, 1550nm wavelength, up to 80km reach**
- **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-SX, 850nm wavelength, up to 300m reach**

#### Power cords

- **C13 to NEMA 5-15, 3M**
- **C13 to C14, 2M**
- **C15 to NEMA 5-15, 2M (C15 for PoE N-Series only)**
- **C15 to NEMA 5-15, 3M**

#### Cables (optional)

- **Dell Networking cable, SFP+ to SFP+, 10GbE, copper twinax direct**

Learn more at Dell.com/N1100