



# Dell Networking N2000 series

Dell Networking N2000 is a series of energy-efficient and cost-effective 1GbE switches designed for modernizing and scaling network infrastructure. N2000 switches utilize a comprehensive enterprise-class Layer 2+ feature set, deliver consistent, simplified management and offer high-availability device and network design.

The N2000 switch series offers a power-efficient Gigabit Ethernet (GbE) network-access switching solution with integrated 10GbE uplinks. The N2000 switch series has 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 an 84Gbps (full-duplex) high-availability stacking architecture that allows management of up to 12 switches from a single IP address.

An integrated 80PLUS-certified power supply 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 Power over Ethernet Plus (PoE+). Select N2000 models offer 24 or 48 ports of PoE+ to deliver clean power to network devices such as wireless access points (APs), Voice-over-IP (VoIP) handsets, video conferencing systems and security cameras. For greater interoperability in multivendor networks, all N-Series switches offer the latest open-standard protocols and include technology to interface with Cisco protocol RPVST+\* and devices using CDP. Achieve high availability and full bandwidth utilization with Multi-chassis Link Aggregation (MLAG). All N-Series switches support MLAG to create active/active loop-free redundancy without spanning tree.

## Leverage familiar tools and practices

All N-Series switches include Dell 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. This allows network administrators to maintain consistent configurations by running one OS release across all N-Series products. With USB auto-configuration, network administrators can rapidly deploy mirrored configurations to numerous devices by simply inserting a USB key.

## Deploy with confidence at any scale

N2000 series switches help create performance assurance with a data rate up to 220Gbps (full duplex) and a forwarding rate up to 164Mpps. Scale easily with built-in rear stacking ports. Switch stacks of up to 600 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](http://Dell.com/LifetimeWarranty).\*\*

## Hardware, performance and efficiency

- Up to 48 line-rate GbE RJ-45 ports and two integrated 10GbE SFP+ ports.
- Support for 24 ports of PoE+ in 1RU or up to 48 ports of PoE+ with an optional external power supply.
- Up to 600 1GbE ports in a 12-unit stack for high-density, high-availability in IDFs, MDFs and wiring closets.
- Non-stop forwarding and fast failover in stack configurations.
- 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.
- Dell Fresh Air compliance for operation in environments up to 122°F (50°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.
- 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.
- Achieve high availability and full bandwidth utilization with MLAG and support firmware upgrades without taking the network offline.
- Interfaces with RPVST+\* protocol for greater flexibility and interoperability in Cisco networks.
- Advanced Layer 2+ IPv4 and IPv6 functionality including static routing and Routing Information Protocol support.
- Policy based forwarding provides access control for all packets that are bridged within a VLAN or that are routed into or out of a VLAN.
- Remote Switch Port Analyzer (RSPAN) monitors ports across a Layer 2 domain without costly dedicated network taps.

\*Available starting with OS 6.1 release

\*\*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 ProSupport.

