Dell Networking 5500 Series

Dell Networking 5500 Gigabit Ethernet switches are scalable access switches that give you the power and flexibility.

The Dell 5500 series switches are designed to offer secure, fixed-port Gigabit Ethernet switching solutions to deliver full wire-speed switching performance. With 24 or 48 built-in copper Gigabit Ethernet ports in a 1U form factor, the 5500 series has a total switching capacity of up to 176 Gbps to support demanding network environments. The switches also offer simple management and scalability via a 40Gbps high-availability stacking architecture that allows you to manage up to eight switches from a single IP address, and share the dual SFP+ across the stack for uplinks to the next layer in your network. The switches are designed for Energy Efficient Ethernet (802.3az), which will reduce per port power consumption up to 50% if the link is idle, and further reduction if ports are inactive.

Stacking and 10Gb support

Your next deployment can be greatly simplified by utilizing the built-in stacking and 10Gb capabilities of the 5500 series of switches. Up to 400 ports can be managed from a single IP address using the highly-available stacking architecture, and the entire stack can be redundantly linked back to the rest of the network at 10Gb via the dual SFP+ ports.

Robust security

Advanced security features of 5500 series switches help protect the network from accidental or malicious interference. Edge authentication using IEEE 802.1x provides a meaningful security solution which is centralized and easier to manage than standard ACLs. The 5500 series provides password management for increased network security, encrypted management traffic through SSL or SSH, and secures SNMP access by filtering hosts based on IP address. MAC-based port security is designed to prevent unauthorized MAC addresses from accessing the network. RADIUS and TACACS+ support enables centralized, remote authentication of administrative access to the switch.

Advanced switching features

The 5500 series switches feature enhanced VLAN support such as Voice VLANs and Guest VLANs. Other features include LLDP (Link Layer Discovery Protocol) which allows for troubleshooting and enhanced network management over multi-vendor environments, as well as LLDP-MED and DHCP Snooping to further expand network security. The switches also support USB auto-configuration so you can rapidly deploy the switches in minutes without setting up complex TFTP configurations or sending technical staff to remote offices.

Easy, powerful enterprise management

The 5500 series switches feature many enterprise management capabilities to help network administrators optimize network traffic including QoS to support VoIP-capable infrastructures, multicast support to help reduce unnecessary network traffic, link aggregation for expanded network bandwidth, and dynamic VLAN configuration. The 5500 series switches can be managed via a familiar and intuitive command line interface (CLI), web GUI, third party SNMP-based management console applications, Telnet, or serial connections.

Power over Ethernet (PoE) support

The 5500 series PoE switches offer PoE-per-port support for power-dependent network applications including WLAN Access Points (WAPs), Voice over IP (VoIP) handsets, video conferencing and badge reading*. The 5524P and 5548P switches can provide up to 15.4 watts of power for network-attached devices on up to 24 ports simultaneously, with the MPS-600 power module enabling up to 48 ports.

Lifetime Warranty

Select Networking switches are backed by an industry-leading, lifetime warranty which guarantees Basic Hardware Service (repair or replacement) for life. Details at Dell.com/LifetimeWarranty**

Product	Dell 5524 & 5524P	Dell 5548 & 5548P
Port types	24 10/100/1000BASE-T auto-sensing Gigabit Ethernet switching ports; 2 SFP+ ports for fiber media support; 2 HDMI Stacking Ports 5524P: Up to 15.4 watts per port on all 24 ports	48 10/100/1000BASE-T auto-sensing Gigabit Ethernet switching ports; 2 SFP+ ports for fiber media support; 2 HDMI Stacking Ports 5548P: Up to 15.4 watts per port (with optional external power supply) on all 48 ports
Performance	Switch Fabric Capacity 128.0 Gb/s Forwarding Rate 65.47 Mpps Up to 16,000 MAC Addresses	Switch Fabric Capacity 176.0 Gb/s Forwarding Rate 100.2 Mpps Up to 16,000 MAC Addresses
Port configuration	Auto-negotiation for speed, duplex mode and flow control Auto MDI/MDIX Port mirroring Broadcast storm control Energy Efficient Ethernet (IEEE802.3az) per port settings Port profiles- predefined macros to help automatically configure ports. Up to 64 Static Routes Supported	
Management	Web-based management interface Industry-standard CLI accessible via Telnet or Local Serial Port SNMPv1, SNMP v2c, SNMPv3 supported USB Drive Support: Auto-Configuration, Firmware 4 RMON groups supported (history, statistics, alarms, and events) TFTP transfers of firmware and configuration files Dual firmware images on-board Multiple configuration file upload/download supported Statistics for error monitoring and performance optimization including port summary tables BootP/DHCP IP address management supported Syslog remote logging capabilities LLDP-MED SNTP iSCSI Auto Configuration	
Quality of Service	8 priority queues per port Layer 2 Trusted Mode (IEEE 802.1p tagging), Layer 3 Trusted Mode (DSCP) Adjustable Weighted-Round-Robin (WRR) and Strict Queue Scheduling IPv4 and IPv6 support	
Security	Switch access password protection, including strong password support User-definable settings for enabling or disabling Web, SSH, Telnet, SSL management access Port-based MAC Address alert and lock-down IP Address filtering for management access via Telnet, HTTP, HTTPS/SSL, SSH, and SNMP RADIUS and TACACS+ remote authentication for switch management access SSLv3 and SSHv2 encryption for switch management traffic Management access filtering via Management Access Profiles IEEE 802.1x–based edge authentication 802.1x monitor mode to aid in .1x troubleshooting MAC and IP based ACLs, Time controlled ACLs Dynamic ARP Inspection	
VLAN	IEEE 802.1Q tagging and port-based, up to 4,000 user-configurable VLANs Protocol-based VLANs Dynamic VLANs with GVRP support	
Multicast	IGMP v1/v2/v3 snooping IGMP snooping for IP multicast support IGMP Querier Static IP Multicast	
Switching features	Link Aggregation with support for up to 32 aggregated links per switch and up to 8 member ports per aggregated link (IEEE 802.3ad) LACP support (IEEE 802.3ad) Port mirroring Jumbo frame support up to 10K DHCP Server support, DHCP Snooping, DHCP Relay	
Availability	External redundant power support with RPS-720 (sold separately), MPS-600 (sold separately) Spanning Tree (IEEE 802.1D) and Rapid Spanning Tree (IEEE 802.1w) with Fast Link support Spanning Tree optional features – STP root guard, BPDU guard, BPDU filtering Dual firmware images Configuration file upload and download Switch Auditing support sFlow	
Chassis	5524, 5548: * 440 x 255 x 43.2 mm (W x D x H) * 17.32 x 10.03 x 1.7 in (W x D x H) * 1U, rack-mounting kit included * Approximate weight: 3.33 kg / 7.35 lb	5524P, 5548P: * 440 x 381 x 43.2 mm (W x D x H) * 17.32 x 15 x 1.7 in (W x D x H) * 1U, rack-mounting kit included * Approximate weight: 6.1 kg / 13.45 lb
Power	Internal Power Supply Voltage AC 110/240 V +- 10% (50/60Hz) Power Consumption Max (Watts): 5524 (29.4W); 5524P (380W, all ports as PoE); 5548 (48.8W); 5548P (542.1W, All ports as PoE)	
Peripheral products	RPS-720 Redundant Power Supply (5524, 5548), MPS-600 (5524P, 5548P) Dell SFP Transceivers (1000-SX and 1000-LX), Dell SFP+ Transceivers (SR, LR, LRM, Twin-ax)	

Models available with US Trade Agreements Act (TAA) compliance.

*PoE models fully support end-point devices running the IEEE 802.3af PoE standard but may not support pre-standard end-point devices.

**Select Dell 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. For more details see dell.com/lifetimewarranty.

See all networking products at Dell.com/Networking