# Dell PowerConnect 3500 Series

Dell™ PowerConnect™ 3500 series are stackable Fast Ethernet switches offering advanced management and security features for high-performance workgroup connectivity.

The PowerConnect 3500 series is a family of 24-and 48-port Fast Ethernet Layer 2 switches. These Layer 2 switches deliver resilient stacking, advanced security, enterprise-class management features and Power-over-Ethernet (PoE, 3524P and 3548P only), as well as deliver impressive switching capacities of up to 12.8 Gbps (3524 and 3524P) and 17.6 Gbps (3548 and 3548P). The 3500 series can be deployed in a wide number of different network deployment scenarios, including Fast Ethernet edge client connectivity and wiring closet deployments. Each rack-mountable switch is 1U high and delivers a high-performance rack-dense switching solution.

## Easy, powerful management

PowerConnect 3500 series switches support a number of industry-standard management interfaces such as web-based management, Command Line Interface (CLI), LLDP, LLDP-MED, and Simple Network Management Protocol (SNMP v1/v2c/v3). For large network environments, Dell's OpenManage™ Network Manager provides management control to help configure large numbers of deployed switches more easily. This powerful application is included at no additional charge with our managed switches and provides one-to-many configuration changes, trap/event monitoring, network discovery, and many other features to assist you in managing your network.

## Robust security

Advanced security features of PowerConnect 3500 series switches help protect the network from accidental or malicious interference. The switches' IP and MAC-based Access Control Lists (ACLs) are designed to prevent unauthorized MAC addresses from accessing the network. SNMPv3, SSL, and SSH encryption offer the added security of encrypting switch management traffic. RADIUS and TACACS+ support enables centralized, remote authentication of administrative access to the switch. Edge authentication using IEEE 802.1x provides a meaningful security solution which is centralized and easier to manage than standard ACLs. The 3500 series also supports DHCP snooping.

## Advanced switching features

The PowerConnect 3524 and 3548 switches support a variety of standards-based advanced switching features, allowing a network administrator to optimize traffic flow in the network. Up to 256 VLANs are supported, as well as the IEEE 802.1p protocol to prioritize traffic based upon Layer 2 and Layer 3 information. Other advanced features include port mirroring, dynamic link aggregation (LACP), SMTP, and dedicated voice VLAN support for voice-centric environments.

The PowerConnect 3524P and 3548P offer Power-over-Ethernet capabilities to power IEEE 802.3af compliant network-attached devices, such as wireless LAN access points, VoIP handsets, and video cameras. Both switches can provide up to 15.4W of power per port simultaneously for PoE operation (the EPS-470 extended power supply is required for the PowerConnect 3548P).

## High availability

The PowerConnect 3500 series offers high availability features to meet enterprise networking needs such as resilient stacking that can help the network survive a switch failure within the stack. Multiple Spanning Tree Protocol and Rapid Spanning Tree Protocol support help reduce network setup time and improve network availability.

| Product | Dell™ PowerConnect™ 3524 & 3524P | Dell™ PowerConnect™ 3548 & 3548P |
|---|---|---|
| Port configuration | 24 10/100BASE-T ports;<br>2 RJ-45 10/100/1000BASE-T ports (supports resilient stacking);<br>2 SFP slots for fiber media support;<br>Auto-negotiation for speed, duplex mode and flow control;<br>MDI/MDIX Port mirroring;<br>Broadcast storm control;<br>PoE feature;<br>Virtual Cable Tester™ | 48 10/100BASE-T ports;<br>2 RJ-45 10/100/1000BASE-T ports (supports resilient stacking);<br>2 SFP slots for fiber media support;<br>Auto-negotiation for speed, duplex mode and flow control;<br>Auto MDI/MDIX Port mirroring;<br>Broadcast storm control; PoE feature; Virtual Cable Tester™ |
| Performance | Switching capacity 12.8 Gbps;<br>Forwarding rate 9.5 Mpps;<br>Up to 8,000 MAC addresses | Switching capacity 17.6 Gbps;<br>Forwarding rate 13.1 Mpps;<br>Up to 8,000 MAC addresses |
| Management | Web-based management interface;<br>Industry-standard CLI accessible via Telnet or Local Serial Port;<br>SNMPv1, SNMPv2c and SNMPv3 supported; four RMON groups supported (history, statistics, alarms, and events);<br>TFTP transfers of firmware and configuration files;<br>Dual firmware images on-board;<br>Multiple configuration file upload/download supported;<br>Statistics for error monitoring and performance optimization including port summary tables;<br>BootP/DHCP IP address management supported;<br>Syslog remote logging capabilities;<br>Temperature sensors for environmental monitoring;<br>LLDP and LLDP-MED; Switch stacking up to 8 units per stacking group. | |
| Quality of Service | Layer 2 trusted mode (IEEE 802.1p tagging); Layer 3 trusted mode (DSCP); four priority queues per port; Adjustable Weighted-Round-Robin (WRR), and strict queue scheduling | |
| Security | IEEE 802.1x based edge authentication;<br>Switch access password protection;<br>User-definable settings for enabling or disabling Web, SSH, Telnet, SSL management access;<br>Port-based MAC address alert and lock-down;<br>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;<br>DHCP Snooping | |
| VLAN | VLAN support for tagging and port-based as per IEEE 802.1Q;<br>Up to 256 VLANs supported; Dynamic VLAN with GVRP support; Private VLAN Edge, Protocol VLANs, and Voice VLAN | |
| Switching features | Link aggregation with up to eight aggregated links and up to eight member ports per aggregated link (IEEE 802.3ad);<br>LACP support (IEEE 802.3ad) | |
| Availability | Spanning Tree (IEEE 802.1D) and Rapid Spanning Tree (IEEE 802.1w) with Fast Link Support; Multiple Spanning Trees (IEEE 802.1s) | |
| Layer 2 multicast | Static IP multicast;<br>IGMP snooping for IP multicast support | |
| Chassis | 17.3 x 10.1 x 1.7 inch for 3524;<br>17.3 x 15.2 x 1.7 inch for 3524P<br>1U, rack-mounting kit included;<br>11 lbs for 3524; 17.6 lbs for 3524P | 17.3 x 10.1 x 1.7 inch for 3548;<br>17.3 x 15.2 x 1.7 inch for 3548P;<br>1U, rack-mounting kit included;<br>11 lbs for 3548; 17.6 lbs for 3548P |
| Peripheral products | Dell SFP Transceivers (1000SX, 1000LX, and 1000baseT); RPS-600 Redundant Power Supply for 3524;<br>EPS-470 Extended Power Supply for 3524P | Dell SFP Transceivers (1000SX, 1000LX, and 1000baseT); RPS-600 Redundant Power Supply for 3548;<br>EPS-470 Extended Power Supply for 3548P |

## Learn more at www.Dell.com/PowerConnect