Dell PowerConnect 5400 Series

Dell™ PowerConnect™ 5400 Gigabit Ethernet switches are iSCSI-optimized switches designed to deliver advanced security and enterprise management capabilities.

The PowerConnect 5400 series switches offer secure, fixed-port Gigabit Ethernet switching solutions which deliver full wire-speed switching performance. With 24 or 48 built-in copper Gigabit Ethernet ports in a 1U form factor, the PowerConnect 5400 series has a total switching capacity of up to 96 Gbps. The switches also offer flexibility with their four SFP transceiver slots which can be used in lieu of up to four copper ports to support fiber media.

iSCSI-optimized switches

iSCSI is a communication protocol used for sending data between servers and storage devices. The PowerConnect 5400 series is one of the world's first switch portfolio's which automatically optimizes for iSCSI traffic. The switches detect whether traffic flows are iSCSI-based and if so, assign that traffic flow a high-level of Quality of Service (QoS). This helps ensure that iSCSI storage traffic is prioritized in the event of resource contention. The 5400-series also automatically provides information about all active iSCSI sessions to allow for easier management and optimization.

Robust security

Advanced security features of PowerConnect 5400 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 PowerConnect 5400 series provides password management for increased network security, encrypts management traffic through SSL or SSH and secures SNMP access by filtering hosts based upon 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 PowerConnect 5400 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.

Easy, powerful enterprise management

The PowerConnect 5400 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 PowerConnect 5400 series switches can be managed via an industry-standard command line interface (CLI), embedded Web server, third party SNMP-based management console applications, Telnet, or serial connections.

Product	Dell™ PowerConnect™ 5424	Dell™ PowerConnect™ 5448
Port configuration	24 10/100/1000BASE-T auto-sensing Gigabit Ethernet switching ports 4 SFP combo slots for fiber media support (Note: SFP slots are used instead of the built-in 10/100/1000BaseT ports) Auto-negotiation for speed, duplex mode and flow control Auto MDI/MDIX Port mirroring Broadcast storm control	48 10/100/1000BASE-T auto-sensing Gigabit Ethernet switching ports 4 SFP combo slots for fiber media support (Note: SFP slots are used instead of the built-in 10/100/1000BaseT ports) Auto-negotiation for speed, duplex mode and flow control Auto MDI/MDIX Port mirroring Broadcast storm control
Performance	Switch Fabric Capacity 48.0 Gb/s Forwarding Rate 35.6 Mpps Up to 8,000 MAC Addresses	Switch Fabric Capacity 96.0 Gb/s Forwarding Rate 71.2 Mpps Up to 8,000 MAC Addresses
Management	Web-based management interface Industry-standard CLI accessible via Telnet or Local Serial Port SNMPv1, SNMP v2c, SNMPv3 supported 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 iSCSI optimization SNTP	
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	
Security	Switch access password protection 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 MAC and IP based ACLs	
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 snooping IGMP snooping for IP multicast support IGMP Queuer Static IP Multicast	
Switching features	Link Aggregation with support for up to 8 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	
Availability	External redundant power support with PowerConnect RPS-600 (sold separately) Spanning Tree (IEEE 802.1D) and Rapid Spanning Tree (IEEE 802.1w) with Fast Link support Dual firmware images Configuration file upload and download External redundant power support with PowerConnect RPS-600 (sold separately)	
Chassis	440 x 253 x 44mm (W x D x H) 1U, rack-mounting kit included Approximate weight: 3.6kg	
Peripheral products	RPS-600 Redundant Power Supply Dell SFP Transceivers (1000-SX and 1000-LX)	

Learn more at www.Dell.com/PowerConnect