3Com® Switch 4200 Family

DATA SHEET

Overview

The 3Com Switch 4200 family offers an affordable, flexible LAN switching solution available in 26-, 28- and 50-Port models. All three are managed stackable Layer 2 10/100 LAN switches that cost-effectively deliver wirespeed performance.

Flexible Connectivity

The 26-, 28-, or 50-port 10/100 models come with two built-in copper Gigabit ports for downlinks or stacking. The 28-port model has two extra built-in SFP ports, supporting fiber Gigabit media.

Resilient Operation

The 4200 family supports Rapid Spanning Tree Protocol, Link Aggregation (for Gigabit ports).

High Performance

Forwarding rates provide high value performance: up to 6.6 million pps (26-Port model), 9.5 million pps (28-Port model), or 10.1 million pps (50-Port model).

Plug-and-Play Configuration

Automatic IP assignment and cable detection and auto-negotiation enable fast set-up and easy out-of-the-box operation.

Practical Scalability

Up to four switches can be stacked (without additional hardware) and managed as one unit with a single IP address.

Powerful Management

3Com network management software offers comprehensive support, including 3Com Network Director for an enterprise stand-alone solution or 3Com Network Supervisor for smaller networks.

Strong Warranty

Limited Lifetime Hardware Warranty and next business day advance hardware replacement is available in most countries. See www.3com.com/warranty for details.

Expert Service

3Com Global Services and authorized part-ners with demonstrated expertise provide a range of network assessment, implemen-tation, and maintenance services.

- Affordable wirespeed performance
- Stackable 10/100 Layer 2 switches
- Scalable to 192 users
- Flexible Gigabit uplink connectivity
- IEEE 802.1X network log-in security
- Plug and play operation

Features

PERFORMANCE	
Switching capacity	8.8Gbps (26-Port), 12.8Gbps (28-Port),13.6Gbps (50-Port)
Forwarding rate	6.6Mpps (26-Port), 9.5Mpps (28-Port)),10.1Mpps (50-Port)
Store and forward switching	Latency 2.7 microseconds
LAYER 2 SWITCHING	
MAC addresses	8K MAC addresses
VLAN	60 VLANs (IEEE 802.1Q)
Link aggregation	Manual and LACP Link Aggregation (IEEE 802.3ad). Gigabit ports only
Auto negotiation	Auto-negotiation of port speed, duplex, and connection (MDI/MDIX)
Traffic control	IEEE 802.3x full-duplex flow control; back pressure flow control for half-duplex; supports Broadcast Storm Suppression
Spanning Tree	IEEE 802.1D Spanning Tree Protocol (STP); IEEE 802.1w Rapid Spanning Tree Protocol (RSTP); Backward-compatible with STP; fast-start mode
Multicast snooping	Filtering for 128 multicast groups; Internet Group Management Protocol (IGMP) v1 and v2
CONVERGENCE	
Priority queues	Two hardware queues per port; weighted Round Robin queuing
Traffic prioritization	Priority based on IEEE 802.1p Class of Service (CoS) VLAN priority, DiffServ Code Point (DSCP), fault port priority, and auto classification of 3Com NBX® telephony traffic

Features (continued)

SECURITY	
Network login IEEE 802.1X user authentication	RADIUS authentication, multiple users per port by locking to the MAC address, automatic port assignment of VLANs, multiple RADIUS server realm definitions
RADIUS Authenticated Device Access (RADA)	Authenticate devices based on MAC address against RADIUS server, authenticate multiple devices per port

MANAGEMENT	
Device Management	Local management of switch passwords; web-based management; command line interface (CLI); serial connector ((9-pin D-type)); Telnet; SNMP v1; works with 3Com management applications, including 3Com Network Supervisor, 3Com Network Director, and 3Com Enterprise Management Suite
Software	TFTP agent: upload; backup and restore
RMON	Four groups: Statistics, History, Alarms, Events
IP Address allocation	DHCP, BOOTP, manual, auto IP

Specifications

Connectors
Switch 4200 26-Port:
24 auto-negotiating 10BASE-T/100BASE-TX ports configured as auto MDI/MDIX

Switch 4200 50-Port:
48 auto-negotiating 10BASE-T/100BASE-TX ports configured as auto MDI/MDIX

Switch 4200 28-Port:
24 auto-negotiating 10BASE-T/100BASE-TX ports configured as auto MDI/MDIX

Two SFP ports accommodating 1000BASE-SX, 1000BASE-LX, 1000BASE-T or 1000BASE-LH70 SFPs

All 4200 Family switches:
Two auto-negotiating 10BASE-T/100BASE-TX/1000BASE-T ports configured as auto MDI/MDIX

Stacking
Up to four units high; mix and match 26-, 28-, and 50-Port models. Backward compatibility with earlier Switch 4200 models (3C17300, 3C17302 and 3C17304)

Traffic Management
Two priority queues per port; IEEE 802.1p CoS; DiffServ

Performance
8.8 Gbps switching capacity, 6.6 million pps (26-Port); 12.8 Gbps switching capacity, 9.5 million pps (28-Port); 13.6 Gbps switching capacity, 10.1 million pps (50-Port)
All 4200 models offer wirespeed performance and support for 8,000 MAC addresses

Reliability
Reliability MTBF at 40ºC
26-Port: 63 years / 559,000 hours
28-Port: 51 years / 451,000 hours
50-Port: 55 years / 488,000 hours

Dimensions
Height: 43.6 mm (1.7 in or 1U)
Width: 440 mm (17.3 in)
Depth: 274 mm (10.8 in)
Weight: 2.3 Kg / 5.0 lb (26-Port), 2.4 Kg / 5.2 lb (28-Port), 2.3 Kg / 5.1 lb (50-Port)

Environmental Requirements
Operating temperature:
0° to 40°C (32° to 104°F)
Storage Temperature:
-40° to +70°C (-40° to +158°F)
Operating Humidity:
10% to 90% relative humidity noncondensing
Standards:
EN60068 (IEC68); RoHS

Safety Agency Certifications
UL90950, EN60950, CSA2.2 No. 60950, IEC 60950

Emissions
EN55022 Class A, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, AS/NZS 3548 Class A, CNS 13438 Class A
Immunity: EN55024
Heat Dissipation: *Switch 4226T*—40 W maximum (136 BTU/hr maximum)*; Switches 4250T and 4228G*—60 W maximum (205 BTU/hr maximum)

Power Supply
AC Line Frequency: 50/60 Hz
Input Voltage: 90-240 VAC
Current Rating: 2.3A maximum

Industry Standards Supported
Ethernet Protocols
IEEE 802.1D (STP), IEEE 802.1p (CoS), IEEE 802.1Q (VLANs), IEEE 802.1w (RSTP), IEEE 802.1X (Network Log-in), IEEE 802.3i (10BASE-T), IEEE 802.3ab (1000BASE-T), IEEE 802.3ad (Link Aggregation), IEEE 802.3u (Fast Ethernet), IEEE 802.3x (Flow control), IEEE 802.3z (Gigabit Ethernet)

Administration Protocols
RFC 768 (UDP), RFC 791 (IP), RFC 792 (ICMP), RFC 793 (TCP), RFC 826 (ARP), RFC 854 (Telnet), RFC1350 (TFTP), RFC1542 (BOOTP, DHCP), RFC 2616 (HTTP)

Management, including MIBs Supported
RFC 1157 (SNMP v1), RFC 1213 (MIB II), RFC 1215 (MIB II Traps), RFC 1493 (Bridge MIB), RFC 1659 (RS232 MIB), RFC 1757 (RMON I), RFC 2021 (RMON II Probe Config), RFC 2233 (Interfaces MIB), RFC 2665 (Pause control), RFC 2668 (IEEE 802.3 MAU MIB), RFC 2674 (VLAN MIB Extension)

Management
Web interface, command line interface, SNMP compatibility, works with 3Com management software

Warranty
Limited Lifetime Hardware Warranty.
For details: www.3com.com/warranty

Services
Advance hardware replacement with same day shipment for North America and Western Europe; next day shipment elsewhere (calls must be received by published cut-off times) 90 days of telephone technical support and limited software updates

Register products at http://eSupport.3com.com/

View full service portfolio at
http://www.3com.com/services

Ordering Information

PRODUCT DESCRIPTION	3COM SKU
3Com Switch 4200 26-Port *24-port 10/100 plus two 10/100/1000 ports*	3C17300A
3Com Switch 4200 50-Port *48-port 10/100 plus two 10/100/1000 ports*	3C17302A
3Com Switch 4200 28-Port *24-port 10/100 plus two 10/100/1000 ports and two SFP ports (SFPs sold separately)*	3C17304A
SFPs	
3Com 1000BASE-SX SFP Transceiver	3CSFP91
3Com 1000BASE-LX SFP Transceiver	3CSFP92
3Com 1000BASE-T SFP Transceiver	3CSFP93
3Com 1000BASE-LH SFP Transceiver	3CSFP97

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