## 3Com* SuperStack 3 Switch 4200 Family

## DATA SHEET



## - Affordable wirespeed performance

- Stackable 10/100 Layer 2 switches
- Scalable to 192 users
- Flexible Gigabit uplink connectivity
- Plug and play operation


## Overview

The 3 Com $^{\circledR}$ SuperStack ${ }^{\oplus} 3$ Switch 4200 family offers an affordable, flexible LAN switching solution that includes the Switch 4226T, 4250T, and 4228G 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 28port model has two extra built-in GBIC ports, supporting fiber Gigabit media.

## Resilient Operation

The 4200 family supports Rapid Spanning Tree Protocol, Link Aggregation (for Gigabit ports), and optional redundant power for non-stop operation.

## High Performance

Forwarding rates provide high value performance: up to 6.6 million pps (Switch 4226 T ), 9.5 million pps (Switch 4228G), or 10.1 million pps (Switch 4250T).

## 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 standalone solution or 3Com Network Supervisor for smaller networks.

## Strong Warranty

Limited Lifetime Hardware Warranty with 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 partners with demonstrated expertise provide a range of network assessment, implementation, and maintenance services.

Features

| PERFORMANCE |  |
| :--- | :--- |
| Switching capacity | 8.8Gbps (4226T), 12.8Gbps (4228G),13.6Gbps (4250T) |
| Forwarding rate | L.6Mpps (4226T), 9.5Mpps (4228G),10.1 Mpps (4250T) |
| Store and forward switching | Latency 2.7 microseconds |
| LAYER 2 SWITCHING | 8K MAC addresses |
| MAC addresses | 60 VLANs (IEEE 802.1Q) |
| VLAN | Manual and LACP Link Aggregation (IEEE 802.3ad). Gigabit ports only |
| Link aggregation | Auto-negotiation of port speed, duplex, and connection (MDI/MDIX) |
| Auto negotiation | IEEE 802.3x full-duplex flow control; back pressure flow control for half-duplex; supports Broadcast |
| Traffic control | 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 <br> port priority, and auto classification of 3Com NBX telephony traffic |

## RESILIENCY

## Features (continued)

| MANAGEMENT | Local management of switch passwords; web-based management; command line interface (CLI); serial <br> connector ((9-pin D-type) ; Telnet; SNMP v1; and 3Com management applications, including 3Com <br> Device Management <br> 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

SuperStack 3 Switch 4226T:
24 auto-negotiating 10BASE-T/100BASE-TX ports configured as auto MDI/MDIX
SuperStack 3 Switch 4250T:
48 auto-negotiating 10BASE-T/100BASE-TX ports configured as auto MDI/MDIX
SuperStack 3 Switch 4228G:
24 auto-negotiating 10BASE-T/100BASE-TX ports configured as auto MDI/MDIX
Two GBIC ports accommodating 1000BASE-SX, 1000BASE-LX, 1000BASE-T or 1000BASE-LH70 GBICs
All 4200 Family switches:
Advanced Redundant Power System Type 2A
connector and RS232 console port
Two auto-negotiating 10BASE-T/100BASE-
TX/1000BASE-T ports configured as auto MDI/MDIX

## Stacking

Up to four units high; mix and match SuperStack 3 Switch 4226T (3C17300), Switch 4250T (3C17302), and Switch 4228G (3C17304)

## Traffic Management

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

## Performance

8.8 Gbps switching capacity, 6.6 million pps (4226T);
12.8 Gbps switching capacity, 9.5 million pps (4228G); 13.6 Gbps switching capacity, 10.1 million pps (4250T)
All 4200 models offer wirespeed performance and support for 8,000 MAC addresses

## Reliability

MTBF @ 40DC: 53 years/465,000 hours (4226T);
MTBF @ 40DC: 37 years $/ 326,000$ hours ( 4250 T )
MTBF @ 40DC: 38 years/329,000 hours (4228G)

## Dimensions

Height: 43.6 mm ( 1.7 in or 1 U )
Width: 440 mm ( 17.3 in )
Depth: 274 mm (10.8 in)
Weight: $2.4 \mathrm{~kg} / 5.3 \mathrm{lb}(4226 \mathrm{~T}) ; 2.8 \mathrm{~kg} / 6.2 \mathrm{lb}(4250 \mathrm{~T})$;
$2.4 \mathrm{~kg} / 5.3 \mathrm{lb}(4228 \mathrm{G})$

## Environmental Requirements

Operating temperature:
$0^{\circ}$ to $40^{\circ} \mathrm{C}\left(32^{\circ}\right.$ to $\left.104^{\circ} \mathrm{F}\right)$
Storage Temperature:
$-40^{\circ}$ to $+70^{\circ} \mathrm{C}\left(-40^{\circ}\right.$ to $\left.+158^{\circ} \mathrm{F}\right)$
Operating Humidity:
$10 \%$ to $90 \%$ relative humidity noncondensing
Standards: EN60068 (IEC68)
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 $4226 T-40 \mathrm{~W}$ maximum
( $136 \mathrm{BTU} / \mathrm{hr}$ maximum); Switches 4250 T and 4228 G 60 W maximum (205 BTU/hr maximum)

## Power Supply

AC Line Frequency: $50 / 60 \mathrm{~Hz}$
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 802.3i (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 vl), 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, 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/

## Ordering Information

| PRODUCT DESCRIPTION | 3COM SKU |
| :---: | :---: |
| 3Com SuperStack 3 Switch 4226T 26-port 24-port 10/100 plus two 10/100/1000 ports | 3C17300 |
| 3Com SuperStack 3 Switch 4250T 50-port 48-port 10/100 plus two 10/100/1000 ports | 3C17302 |
| 3Com SuperStack 3 Switch 4228G 28-port <br> 24-port 10/100 plus two 10/100/1000 ports and two GBIC ports (GBICs sold separately) | 3C17304 |
| GBICs |  |
| 3Com SX GBIC | 3CGBIC91 |
| 3Com LX GBIC | 3CGBIC92 |
| 3Com 1000BASE-T GBIC | 3CGBIC93A |
| 3Com LH70 (70km) GBIC | 3CGBIC97 |
| Optional Modules and Accessories |  |
| 3Com SuperStack 3 Advanced Redundant Power System | 3C16071B |
| 3Com SuperStack 3 Advanced RPS Type 2A module | 3C16074A |

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