

## 3COM SWITCH 4800G GIGABIT FAMILY

Premium stackable Gigabit switches with enhanced IPv4/IPv6 networking, and maximum security, convergence features and intelligence



Shown above from top: 3Com Switch 4800G 24-Port, Switch 4800G 48-Port, Switch 4800G 24-Port SFP, Switch 4800G PWR 24-Port, Switch 4800G PWR 48-Port

### OVERVIEW

The 3Com® Switch 4800G Gigabit Family delivers outstanding security, reliability and multi-service support capabilities for robust switching at the edge or aggregation layer of large enterprise and campus networks, or in the core layer of medium- and small-sized enterprise networks. The family is comprised of Layer 2/3/4 Gigabit Ethernet switches that can accommodate the most demanding applications, providing resilient and secure connectivity and the latest traffic-prioritization technologies to optimize applications on converged networks.

Designed for maximum flexibility, these switches are available with 24 or 48 Gigabit ports. Power over Ethernet (PoE) and non-PoE models are offered, with optional 10-Gigabit expansion capability and SFP mini-GBIC Gigabit combo ports for fiber flexibility. The all-SFP model with dual power supplies, for highest availability applications, allows for very flexible fiber with copper Gigabit connectivity.

Multiple Switch 4800G units can be stacked together, up to nine units high, using patented 3Com eXpandable Resilient Networking (XRN®) technology. With XRN, it is easy to build fully redundant networks, with aggregated ports spread across multiple units, with all units presenting themselves with a single simplified management interface.

Each of the five 3Com Switch 4800G models comes in a convenient, stackable 1U-high enclosure:

**Switch 4800G 24-Port.** 24 10/100/1000 Mbps ports with two dual-port 10-Gigabit slots; includes four SFP Gigabit combo ports

**Switch 4800G 48-Port.** 48 10/100/1000 Mbps ports with two dual-port 10-Gigabit slots; includes four SFP Gigabit combo ports

**Switch 4800G PWR 24-Port.** 24 10/100/1000 Mbps PoE ports with two dual-port 10-Gigabit slots; includes four SFP Gigabit combo ports

**Switch 4800G PWR 48-Port.** 48 10/100/1000 Mbps PoE ports with two dual-port 10-Gigabit slots; includes four SFP Gigabit combo ports

**Switch 4800G 24-Port SFP.** 24 SFP Gigabit ports with two dual-port 10-Gigabit slots and dual removable power supplies, with up to two power-cord inputs; includes eight 10/100/1000 Mbps combo ports



## KEY BENEFITS

### High Expandability for Investment Protection

All models in the 3Com Switch 4800G Gigabit Family include auto-sensing 10-, 100- and 1000-Mbps connections, giving you the ability to gradually upgrade your edge connections to higher bandwidth while retaining full compatibility with slower desktops. Support for dual-speed SFPs facilitates connections to both 100 and 1000 MB fiber cabling, making network migration easier.

Two expansion slots, each supporting available 1- or 2-port 10-Gigabit extension modules, allow for the adoption of 10-Gigabit interfaces for high bandwidth unit-to-unit local connections and uplinks, helping you to protect your network investment.

Every Switch 4800G model has the ability to pass and route IPv4 and IPv6 data. As an IPv4/IPv6 dual-stack platform, the switches are IPv4- and IPv6-ready, supporting the major L3 routing protocols, multicast protocols and policy routing mechanisms and ensuring a seamless migration from IPv4 to IPv6.

### Premium Security

Multiple layers of security are built into each Switch 4800G. Management access can be limited to known stations and unauthorized access can be prevented by encrypting management traffic with SSH for CLI access, SSL/HTTPS for web access and SNMPv3 for SNMP management access.

Advanced processor queuing mechanisms help prevent Denial of Service (DOS) attacks while DHCP snooping ensures that devices can only receive an IP address from a legitimate DHCP server on the network. Enhanced Access Control Lists (ACLs) restrict users to certain areas of your network. Unicast Reverse Path Finding (uRPF) technology verifies the authenticity of a route from the receiving interface to the source address, deleting the data packet if the route does not exist and preventing malicious network attacks that are based on source address spoofing.

Advanced network access control features, including IEEE 802.1X and MAC-based network login, help ensure that only authorized users get access to the network.

### Multilayer Reliability

3Com 4800G switches interoperate with a number of link reliability technologies including Rapid Ring Protection Protocol (RRPP), a fast ring protection mechanism created by 3Com. If a link or node on the Ethernet ring fails, RRPP rapidly moves traffic to a backup link, ensuring normal operations without impacting network convergence time. Other network resiliency features include Spanning Tree, Rapid Spanning Tree and Multiple Spanning Tree protocol support.

Hardware resiliency, delivered with available redundant power system support, allows for the continued operation of the switch in the event of a power supply failure, and supplements power for full PoE operation across all ports. For high-availability fiber connections, the Switch 4800G 24-Port SFP comes with dual 1+1 redundant power supplies with dual power inputs. All switches in this family include fault detection and alarms, power supply and fan monitoring, and remote management.

### Convergence-Ready Support

Built-in PoE enables certain models of the Switch 4800G to power network-attached equipment, significantly reducing costs associated with terminal equipment cabling and management. Industry-standard IEEE 802.3af Power over Ethernet speeds deployment of VoIP, wireless access points and network-attached video surveillance camera systems.

The voice VLAN technology embedded in this family ensures the highest level of security and performance by placing voice traffic on a virtual voice network. By identifying voice streams at their ports and adding corresponding access ports to voice VLANs, the switches provide dedicated channels for voice traffic. Priority rules are then issued to ensure that voice streams are transmitted before data or video streams and conversation quality is optimal.

### Unparalleled Quality of Service

The 3Com Switch 4800G offers L2-L4 packet filtering and delivers flow classification based on source IP and MAC addresses, destination IP and MAC addresses, ports, protocols or VLANs. The switches also offer flexible queue scheduling algorithms that support settings based on ports and queues and include three scheduling modes: Strict Priority (SP), Weighted Round Robin (WRR) and SP+WRR. Committed Access Rate (CAR) provides minimum granularity of 64 kbps. Outbound and inbound port mirroring monitors and duplicates data packets for network detection and troubleshooting.

## KEY BENEFITS (continued)

### Powerful, Integrated Management Capabilities

The Switch 4800G supports Simple Network Management Protocol (SNMP) versions 1/2c/3 and open network management platforms such as OpenView and the QuidView Network Management System (NMS).

For additional convenience, the switches may also be managed via Command Line Interface (CLI), Web network management, TELNET and Huawei Group Management Protocol (HGMP) cluster (stacking) management.

Encryption modes such as SSH2.0, SNMPv3 and HTTPS are embedded in the switch, ensuring that management traffic is highly secure.

MAC-and protocol-based VLANs, combined with ACL policies in the global or VLAN mode, minimize hardware resources and simplify configuration. Inbound and outbound packets are randomly sampled and collected according to a set ratio with the sFlow function. LLDP and LLDP-MED are supported for standards-based neighbor discovery.

### Redundant Power System Support

Four 3Com Switch 4800G models support a redundant power system (RPS) connection.

RPS units provide these benefits:

- › For PWR switches, an RPS can deliver more power budget for IEEE 802.3af Power over Ethernet than what the switches alone can provide.

- › They deliver redundant power to switches so there is continued operation should the switch unit power supply fail. This allows for continuous operation of advanced Enterprise networks, particularly important for converged networks running IP phones on the network.

### 3Com H3C RPS Systems

3Com switches are compatible with 3Com H3C® RPS solutions. These are enterprise-class power redundancy systems that work with many 3Com fixed-configuration switches. 3Com Corporation manufactures networking equipment under the H3C brand for sale into many markets.

These H3C RPS models are used with the Switch 4800G:

- › the H3C RPS 1000 is 1U high and provides multiple power output connections to support multiple switch units at the same time. Two power rectifiers can be installed for 1+1 load sharing and power redundancy. It supports switches with -54V RPS connections, and delivers sufficient power to fully provision all PoE ports of a switch with full power redundancy.
- › the RPS 800 provides selective DC outputs of +12V and -54V. This is a fixed-configuration 1U high unit with a single power rectifier and a single power connection. Sufficient redundant power is available for provisioning a single Switch 4800G 48- or 24-port non-PoE unit.
- › the RPS 500 provides selective DC outputs of +12V and -54V. This is a fixed-configuration 1U high unit with a single power rectifier and a single power connection. Sufficient redundant power is available for provisioning a single Switch 4800G 24-port non-PoE unit.

## FEATURE HIGHLIGHTS

Provides up to 450 Gigabit ports in a stack nine units high, managed as a single-IP entity

Equipped with four dual-purpose ports providing either 10/100/1000 or SFP Fast/Gigabit Ethernet connectivity

Full IPv4/IPv6 networking support

Offers optional 2-port 10-Gigabit (XFP or SFP+), 2-port local connection, or 2-port Fast Ethernet (SFP) modules

Delivers wirespeed and line-rate performance on all ports

Offers OSPF and multicast routing, 3Com XRN stacking technology and IEEE 802.3af Power over Ethernet

Provides high resiliency and continuous availability with active load sharing and support for ultra-fast failover recovery

Implements multilayer distributed security including ACLs, DES 56/168-bit<sup>†</sup> encryption, IEEE 802.1X network login and RADA authentication

Prioritizes converged network traffic to ensure high levels of service for latency-sensitive applications

Supports advanced enterprise switching technology: Border Gateway Protocol (BGP), VLAN VPN (Q-in-Q) and others

Leverages existing infrastructure power schemes with built-in support for both AC and DC power

Consolidates administrative control and enhances core-to-edge visibility with the latest Comware V5 OS

Offers an SFP-based model with 24 SFP Gigabit ports, eight of which are dual-purpose

Backed by top-flight service, support and training from 3Com and 3Com authorized partners

<sup>†</sup> 168-bit encryption not available in all countries. Refer to [www.3com.com](http://www.3com.com) for details.

## PRODUCT WARRANTY AND OTHER SERVICES

Warranty	3Com Limited Lifetime Warranty. For as long as the original end user owns the product, or for five years after 3Com discontinues the of sale of the product, whichever occurs first.
Hardware coverage	Covers the complete unit including power supply and fan.
In-warranty hardware replacement*	Advanced Hardware Replacement of hardware for the duration of the warranty. In the US 48 contiguous states this is same-day ship with next business day delivery when call received before noon Pacific time. For Canada, Alaska and Hawaii, this is same-day ship when call received before noon Pacific time. For the rest of the world, it is next-business-day ship. Actual delivery times may vary depending on customer location. Reasonable commercial efforts apply.
Software coverage	90 days for media replacement.
Software updates*	Access to releases with incremental software features and bug fixes. For the Switch 4800G, updates are all releases within the licensed 3Com OS software level.
Online Knowledgebase support*	Access to online troubleshooting tool for the duration of the warranty.

\* These services are not included as part of the Warranty and 3Com reserves the right to modify or cancel this offering at any time, without advance notice. This offering is not available where prohibited by law. Services are effective at warranty start date, and are enabled with product registration. Customers receive a user ID with eSupport registration.

## SERVICE AND SUPPORT

3Com Global Services offers the resources and talents of a major corporation plus more than two decades of experience in resolving network challenges and delivering business benefits to enterprises around the world.

Global support with a personalized focus in the local language helps drive productivity and minimize expenses. Because 3Com understands both the technology and the business, we're the partner you need to maintain your competitive edge and remain strong.

### Additional Service, Support and Training Offerings

#### Network Health Check

An activity-auditing service focused on improving network performance and productivity

Includes traffic monitoring, utilization analysis, problem identification, and asset deployment recommendations

Extensive report provides blueprint for action

#### Network Installation and Implementation Services

Experts set-up and configure equipment and integrate technologies to maximize functionality and minimize business disruption

For large and complex sites, implementation services include personalized configuration, project management, extended testing and coaching on network administration

#### Project Management

Provides extra focus and resources that special projects demand

3Com engineers manage entire process from initial specifications to post-project review

Using structured methodology, requirements are identified, projects planned and progress of implementation activities tracked

#### 3Com Guardian<sup>SM</sup> Maintenance Service

This service provides comprehensive on-site support and includes advance hardware replacement, expedited telephone technical support and software upgrades

#### 3Com Express<sup>SM</sup> Maintenance Service

This service provides speedy access to 3Com shipment of advance hardware replacements (including a four-hour option), expedited telephone technical support and software upgrades

#### 3Com University

Self-paced and instructor-led technology and product courses, plus certification programs

For additional information, please visit

[www.3com.com/services](http://www.3com.com/services)

# SPECIFICATIONS

## CONNECTIVITY

### Switch 4800G 24-Port

24 10/100/1000 Mbps with 4 SFP combo interfaces

### Switch 4800G PWR 24-Port

24 10/100/1000 Mbps with 4 SFP combo interfaces

10/100/1000 ports with 15.4W per port maximum; 370W total PoE power budget without supplemental RPS power

### Switch 4800G 48-Port

48 10/100/1000 Mbps with 4 SFP combo interfaces

### Switch 4800G PWR 48-Port

48 10/100/1000 Mbps with 4 SFP combo interfaces

10/100/1000 ports with 15.4W per port maximum; 370W total PoE power budget without supplemental RPS power

### Switch 4800G 24-Port SFP

24 100/1000 Mbps SFP with 8 10/100/1000 Mbps combo interfaces

### All models

2 expansion slots each supporting up to 2 10-Gigabit interfaces

10BASE-T/100BASE-TX/1000BASE-T ports configured as auto-MDI/MDIX

## PERFORMANCE

### 24-port models

144 Gbps full duplex switching capacity

107.2 Mpps forwarding rate

### 48-port models

192 Gbps full duplex switching capacity

142.9 Mpps forwarding rate

### All models

Wirespeed performance across ports

Store-and-forward switching

Latency <10  $\mu$

## LAYER 2 SWITCHING

32K MAC addresses in address table

1K static configurable unicast MAC addresses (in addition to default addresses)

Jumbo frame support

4,094 port-based IEEE 802.1Q VLANs

GARP VLAN Registration Protocol (GVRP)

IEEE 802.1 Q-in-Q double-tagged VLANs

IEEE 802.1v protocol-based VLANs

MAC-based VLANs using RADA auto-VLAN assignment

VLAN mapping (1:1, n:1, 2:2)

IEEE 802.1ag Service Layer Operations, Administration and Maintenance (OAM)

IEEE 802.3ad Link Aggregation Control Protocol (LACP); manual and static modes

Link aggregation:

- 24-port models: 14 groups; 48-port models: 26 groups
- 128 total link aggregation groups per XRN/IRF stack
- 8 10/100/1000 ports or 4 10-Gigabit ports per group

Link aggregation load sharing

Auto-negotiation and manual configuration of port speed and duplex

IEEE 802.3x full-duplex flow control and back pressure

Half-duplex back pressure flow control

Unidirectional Link Detection (UDLD)

Broadcast, Multicast and Unicast traffic suppression

IEEE 802.1D Spanning Tree Protocol (STP)

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), 32 instances

Bridge Protocol Data Unit (BPDU) protection

Spanning Tree root guard

Internet Group Management Protocol (IGMP) v1, 2 and 3 snooping

Filtering for 1,024 L2/L3 multicast groups

IGMP querier

IGMP proxy

Dynamic Host Configuration Protocol (DHCP) Option 82

Unicast Reverse Path Forwarding (uRPF)

BFD for Route Protocol, VRRP

SmartLink

Virtual Routing and Forwarding (VRF)/MCE

## LAYER 3 ROUTING

Hardware based IPv4 and IPv6 routing

1,024 static routes, in addition to default address

12K routing table entries

Address Resolution Protocol (ARP) entries: 8K dynamic, 1K static

1,024 virtual IP interfaces

Routing Information Protocol (RIP) v1 and v2: 2K routes

Open Shortest Path First (OSPF) v1 and v2: 12K routes

Protocol Independent Multicast-Dense Mode (PIM-DM)

PIM-Sparse Mode (PIM-SM)

PIM v4, v6

IGMP v1, v2, v3

IGMP proxy

Border Gateway Protocol (BGPv4); 12K routes

Multiprotocol BGP (MBGP)

Equal Cost Multipath Protocol (ECMP); up to 3 ECMP instances

Multicast Source Discovery Protocol (MSDP)

Multicast Listener Discovery (MLD) v1 and 2, and MLD snooping v1, 2 and 3

Dynamic Host Configuration Protocol Relay (DHCP Relay)

Virtual Router Redundancy Protocol (VRRP)

Rapid Ring Protection Protocol (RRPP)

Bidirectional Forwarding Detection (BFD)

Policy-based routing

Routing Information Protocol next generation (RIPng) for IPv6; 2K routes

OSPF version 3 for IPv6; 6K routes

Border Gateway Protocol 4 (BGP4) for IPv6; 6K routes

MSDP for IPv6

Manual configuration of IPv6 over IPv4 tunnels

Compatible with 6to4 tunneling and Intra-Site Automatic Tunnel

Addressing Protocol (ISATAP)

## CONVERGENCE

8 hardware output queues at each port

IEEE 802.1p Class of Service/Quality of Service (CoS/QoS) on ingress and egress

Remarking of packet priority based on:

- Type of Service (ToS)
- IEEE 802.1p CoS
- IP precedence
- Physical port
- Source/destination MAC address (IPv4/IPv6)
- VLAN information
- Ethertype
- Source/destination IP address
- Source/destination TCP port
- Source/destination UDP port

Packet/traffic redirection

Inbound and outbound ACL policies

VLAN-based ACL policies

Time-based Access Control Lists (ACLs)

Auto-voice VLAN for automatic vendor-independent segregation and prioritization of VoIP traffic

Multiple voice VLANs

Auto-QoS based on RADIUS settings

Weighted Round Robin (WRR) Queuing

Weighted Random Early Detection (WRED)

Weighted Fair Queuing (WFQ)

Strict Priority (SP) Queuing

Mixed mode WRR + SP Queuing

DiffServ Code Point (DSCP) priority/expedited remarking of packets

Forwarding (DSCP EF) remarking for prioritization of VoIP traffic

Application rate limiting, inbound and outbound; Committed Access Rate (CAR) with granularity of 64 kbit/sec.

Restricted packet sending and receiving rates with granularity of 64 kbits/sec.



## SPECIFICATIONS (continued)

Storm suppression based on port rate percentage and pps  
 Port-based traffic shaping on egress  
 Queue-based traffic shaping on egress  
 Wake-on-LAN support  
 IEEE 802.3af Power over Ethernet standards-compliant (PWR models)

### SECURITY

IEEE 802.1X Network login user authentication:

- Local, RADIUS, or TACACS+ server authentication
- Port-based, MAC-based and trunk port authentication
- PAP, CHAP, EAP over LAN (EAPoL), EAP-TLS/TTLS, EAP-MD5 and PEAP
- Automatic port assignment of VLANs, ACLs and QoS profile based on user
- Multiple users per port
- 1,024 max online users
- Guest VLAN option
- Multiple authentication server realm definitions

Isolate user VLANs

Centralized MAC address authentication

AAA authentication

IEEE 802.1X or TACACS+ user authentication of switch management on TELNET and console sessions

RADIUS/TACACS+ session accounting

RADIUS Authenticated Device Access (RADA): authenticate devices based on MAC address against RADIUS server or local database

Combined MAC and IEEE 802.1X authentication on same port

Black-hole MAC addresses

DHCP Tracker

DHCP snooping, including DHCP Trust

Wirespeed packet filtering in hardware

ACLs filter at Layers 2, 3 and 4:

- Source/destination MAC address
- Ethernet type
- Source/destination IP address
- Source/destination TCP port
- Source/destination UDP port

User-defined ACL filters

VLAN-based ACLs

Port-based MAC address Disconnect

Unknown Device (DUD)

ARP inspection and IP source guard

ARP spoofing prevention

Unicast Reverse Path Forwarding (URPF)

MD5 cipher-text and clear-text authentication for OSPF v2 and RIP v2 packets and SNMP v3 traffic

Hierarchical management and password protection for management interface and encrypted traffic, with SNMP v3, SSL, and SSH v2

4 local user access privilege levels

Trusted management station IP and/or MAC address

Encoded Archival Description (EAD)

Denial of service protection

### STACKING

Use optional CX4 or XFP connections for high-bandwidth stacking of multiple units

Resilient stacking; full duplex bandwidth of 96 Gbps when using CX4 cables and link aggregation (48 Gbps without aggregation); 40 Gbps when using 10-Gigabit connections

Single IP address and management interfaces for stack-wide control

Hot-swappable, closed-loop resilient stacking

Distributed Resilient Routing with router tables in all units; no master/slave arrangement

Combine any Switch 4800G models into a single stack, up to 9-high, when using XRN technology

Clustered stacking technology: single IP management for up to 255 devices from different 3Com switch families, including Switch 5500G, 5500, 4800G, 4500G, 4500, 4200G and 4210

### MANAGEMENT

Single console interface

Configuration via CLI (Command Line Interface), Console port, Simple Network Management Protocol (SNMP), embedded web interface

Remote configuration via TELNET

Embedded web management interface

System configuration with SNMP v1, 2c and 3

Comprehensive statistics, including ACL/QoS and IP interface

Syslog

IPv4 management including ping, traceroute, TELNET, and remote ping

IPv6 management including pingv6, tracertv6, Telnetv6, TFTPv6, DNSv6 and ARPv6

IPv6 management interface IP address configuration

Remote Monitoring (RMON) groups statistics, history, alarm and events

DHCP server including options 60, 82 and 184

Supports multiple software images and bank swap, stored in non-volatile memory

1-to-1 port mirroring

Many-to-1 port mirroring

VLAN-to-1/flow-based port mirroring

Remote port mirroring (RSPAN)

Ability to apply ACL to mirror port and forward only certain traffic types

Detailed alarm and debug information

Front panel indicators for port and unit status information

Configuration file for backup and restore, stored in non-volatile memory; multiple configuration files available

Backup and restore of software images

Network Time Protocol (NTP)

DHCP Relay and UDP Helper

System file transfer mechanisms: Xmodem, FTP, Secure FTP (SFTP), Trivial FTP (TFTP)

Virtual Cable Test (VCT) function

Link Layer Discovery Protocol (LLDP) and LLDP-MED

sFlow

Power alarms; fan and temperature alarms

Debugging information output

Device Link Detection Protocol (DLDP)

Port loopback detection

Management applications:

- 3Com Intelligent Management Center (IMC)
- 3Com Network Supervisor (3NS)
- 3Com Network Director (3ND)
- 3Com Enterprise Management Suite (EMS)
- QuidView Network Management Systems (NMS)

### DIMENSIONS

Height: 43.6 mm (1.7 in or 1 RU)

Width: 440.0 mm (17.4 in)

Depth:

24- and 48-port non-PWR: 300.0 mm (11.8 in)

24- and 48-port PWR: 420.0 mm (16.5 in)

24-port SFP: 360.0 mm (14.2 in)

Weight:

Switch 4800G 24-Port: 4.0 kg (8.8 lbs)

Switch 4800G 48-Port: 4.5 kg (9.9 lbs)

Switch 4800G PWR 24-Port: 6.0 kg (13.2 lbs)

Switch 4800G PWR 48-Port: 6.5 kg (14.3 lbs)

Switch 4800G 24-Port SFP: 6.3 kg (13.9 lbs)

### POWER SUPPLY

#### AC

Rated voltage range: 100 V to 240, 50/60 Hz

#### DC-rated voltage range (for RPS)

Switch 4800G 24-Port: 10.8 to 13.2

Switch 4800G 48-Port: 10.8 to 13.2; -52 to -55

Switch 4800G PWR 24-Port: -52 to -55

Switch 4800G PWR 48-Port: -52 to -55; -48 to -60

Switch 4800G 24-Port SFP: -48 to -60

## SPECIFICATIONS (continued)

### Power consumption (max)

Switch 4800G 24-Port: 67 W

Switch 4800G 48-Port: 114 W

Switch 4800G PWR 24-Port: 93 W, plus up to 370 W for PoE

Switch 4800G PWR 48-Port: 147 W, plus up to 370 W for PoE

Switch 4800G 24-Port SFP: 68 W

Optional RPS available to provision additional PoE power to ports (PWR models only)

### ENVIRONMENTAL REQUIREMENTS

Operating temperature: 0° to 45°C (32° to 113°F)

Operating humidity: 10% to 90% non-condensing

### Heat dissipation (max)

Switch 4800G 24-Port: 227 BTU/hour

Switch 4800G 48-Port: 389 BTU/hour

Switch 4800G PWR 24-Port: 316 BTU/hour; excludes heat from PoE

Switch 4800G PWR 48-Port: 502 BTU/hour; excludes heat from PoE

Switch 4800G 24-Port SFP: 231 BTU/hour

### RELIABILITY

24-port: 42 years (374,000 hours)

48-port: 37 years (328,000 hours)

24-port PWR: 44 years (389,000 hours)

48-port PWR: 35 years (307,000 hours)

24-port SFP: 36 years (322,000 hours)

### EMISSIONS/AGENCY APPROVALS

CISPR 22 Class A

FCC Part 15 Class A

EN 55022 1998 Class A

EN 61000-3-2 2000, 61000-3-3

ICES-003 Class A

VCCI Class A

### IMMUNITY

EN 55024

### SAFETY AGENCY CERTIFICATIONS

UL 60950

IEC 60950-1

EN 60950-1

CAN/CSA-C22.2 No. 60950-1-03

### STANDARDS AND PROTOCOLS

#### IEEE standards

IEEE 802.1AB (LLDP)

IEEE 802.1ag Service Layer OAM

IEEE 802.1D (STP)

IEEE 802.1p (CoS)

IEEE 802.1 PAE (PAE MIB)

IEEE 802.1Q GVRP (GVRP)

IEEE 802.1s (MSTP)

IEEE 802.1v (Protocol-based VLANs)

IEEE 802.1w (RSTP)

IEEE 802.1X (Network Login)

IEEE 802.3 LAG (LAG MIB)

IEEE 802.3ab (1000BASE-T)

IEEE 802.3ac (VLAN Tagging Extension)

IEEE 802.3ad (Link Aggregation)

IEEE 802.3ae (10 Gigabit Ethernet)

IEEE 802.3af (Power over Ethernet)

IEEE 802.3ag Ethernet OAM

IEEE 802.3ah (Ethernet in First Mile over Point to Point Fiber - EFMF)

IEEE 802.3i (10BASE-T)

IEEE 802.3u (Fast Ethernet)

IEEE 802.3x (Flow Control)

IEEE 802.3z (Gigabit Ethernet)

### RFC standards

RFC 768 (UDP)

RFC 791 (IP)

RFC 792 (ICMP)

RFC 793 (TCP)

RFC 826 (ARP)

RFC 854 and RFC 856 (TELNET)

RFC 925 (Multi-LAN Address Resolution)

RFC 950 (IP Datagram Forwarding)

RFC 951 (BootP)

RFC 1058 (RIP v1)

RFC 1122 (IP Options)

RFC 1141 (IP Datagram Forwarding)

RFC 1157 (SNMPv1/v2)

RFC 1212 (Concise MIB Definitions)

RFC 1213 (SNMP MIB II)

RFC 1215 (SNMP Traps)

RFC 1253 (OSPFv2 MIB)

RFC 1305 (NTPv3)

RFC 1350 (TFTP)

RFC 1389 (RIP MIB)

RFC 1492 (HWTACACS)

RFC 1493 (Bridge Definitions)

RFC 1519 (CIDR)

RFC 1542 (BootP)

RFC 1587 (OSPF NS SA)

RFC 1657 (BGP-4 MIB)

RFC 1723 (RIPv2)

RFC 1724 (RIPv2 MIB Extension)

RFC 1757 (RMON I MIB)

RFC 1771 (BGP)

RFC 1812 (IPv4 Router Compliance)

RFC 1850 (OSPFv2 MIB)

RFC 1881 (IPv6 Address Allocation Management)

RFC 1886 (IPv6 DNS Extensions)

RFC 1887 (IPv6 Unicast Address Allocation Architecture)

RFC 1901 (SNMPv2)

RFC 1907 (SNMPv2c, SMIv2 and Revised MIB-II)

RFC 1918 (Private Internet Address Allocation)

RFC 1981 (IPv6 Path MTU Discovery)

RFC 2096 (IP Forwarding Table MIB)

RFC 2012 (TCP SNMPv2 MIB)

RFC 2080 (IPv6/RIPng)

RFC 2131 (DHCP Client)

RFC 2233 (MIB)

RFC 2236 (IGMP Snooping)

RFC 2284 (EAP over LAN)

RFC 2328 (OSPFv2)

RFC 2373 (IPv6 Addressing Architecture)

RFC 2375 (IPv6 Multicast Address Assignments)

RFC 2401 (IP Security Architecture)

RFC 2402 (IP Authentication Header)

RFC 2406 (IP Encapsulating Security Payload)

RFC 2409 (IKE)

RFC 2452 (TCP/IP)

RFC 2454 (UDP6)

RFC 2460 (IPv6 Specification)

RFC 2461 (IPv6/ND)

RFC 2462 (IPv6 Stateless Address Auto-configuration)

RFC 2463 (ICMPv6)

RFC 2464 (IPv6 Over Ethernet)

RFC 2465 and 2466 (IPv6 MIB)

RFC 2474 (DSCP Diffserv)

RFC 2475 (IPv6 Diffserv Architecture)

RFC 2526 (Reserved IPv6 Anycast Addresses)

RFC 2571 (SNMP Framework)

RFC 2572 - 2576 (SNMP)

## SPECIFICATIONS (continued)

RFC 2578 (New Traps)	RFC 3307 (IPv6 Multicast Address Allocation)
RFC 2581 (TCP6)	RFC 3410 (SNMP)
RFC 2597 (Assured Forwarding)	RFC 3414 (SNMP User-Based SM MIB)
RFC 2598 (Expedited Forwarding)	RFC 3415 (SNMP View-based ACM MIB)
RFC 2616 (HTTP Compatibility v1.1)	RFC 3416 (SNMPv2)
RFC 2618 (RADIUS Authentication Client MIB)	RFC 3417 (SNMP Transport)
RFC 2620 (RADIUS Accounting Client MIB)	RFC 3484 (IPv6 Default Address Selection)
RFC 2644 (Directed Broadcast Control)	RFC 3493 (IPv6 Basic Socket Interface)
RFC 2710 (MLD IPv6/MLD Snooping)	RFC 3513 (IPv6 Addressing Architecture)
RFC 2740 (OSPFv3)	RFC 3542 (Advanced Sockets API for IPv6)
RFC 2767 (Dual stacks IPv4 & IPv6)	RFC 3587 (IPv6 Global Unicast Address)
RFC 2819 (RMON I MIB)	RFC 3596 (IPv6/DNS6 Extensions)
RFC 2858 (BGP-4 Multi-protocol Extensions)	RFC 3623 (OSPF GR)
RFC 2865 (Remote Authentication Dial-In User RADIUS)	RFC 3768 (VRRP)
RFC 2866 (RADIUS RFC 2138/ Accounting)	RFC 3704 Unicast Reverse Path Forwarding (URPF)
RFC 2893 (IPv6 Host and Router Transition Mechanism)	RFC 3810 (MLDv2)
RFC 2925 (Ping MIB)	RFC 4113 (IPv6 MIB for UDP)
RFC 3056 (6to4 Tunneling)	RFC 4213 (IPv6 Host and Routers Transition Mechanisms)
RFC 3246 (Expedited PHB)	RFC 4443 (ICMPv6 for IPv6)
RFC 3306 (Unicast Prefix-Based IPv6 Multicast Addresses)	

## ORDERING INFORMATION

### PRODUCT DESCRIPTION

3Com Switch 4800G 24-Port	3CRS48G-24-91
3Com Switch 4800G 48-Port	3CRS48G-48-91
3Com Switch 4800G PWR 24-Port	3CRS48G-24P-91
3Com Switch 4800G PWR 48-Port	3CRS48G-48P-91
3Com Switch 4800G 24-Port SFP	3CRS48G-24S-91

### MODULES

2-Port 10-Gigabit Module (XFP)	3C17766
2-Port 10-Gigabit Local Connection Module	3C17767
1-Port 10-Gigabit Module (XFP)	3C17768
2-Port 10-Gigabit Module (SFP+)	0231A98L
2-Port Gigabit Module (SFP)	0231A833

### POWER SUPPLIES

3Com Switch 4800G 24-Port SFP AC Power Module <sup>†</sup>	0231A66A
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### 10-GIGABIT XFP TRANSCEIVERS

10GBASE-LR	0231A438
10GBASE-SR	0231A494
10GBASE-CX4	3CXFP95
10GBASE-ER	3CXFP96

### 10-GIGABIT SFP+ TRANSCEIVERS

10GBASE-LR	0231A0A8
10GBASE-SR	0231A0A6
10GBASE-LRM	0231A0A7

<sup>†</sup> For the Switch 4800G 24-Port SFP only. The switch ships with one PSU and one empty redundant PSU slot. Order this for 1+1 PSU redundancy.

### PRODUCT DESCRIPTION

GIGABIT SFP TRANSCEIVERS	3COM SKU
1000BASE-SX	3CSFP91
1000BASE-LX	3CSFP92
1000BASE-T	3CSFP93
1000BASE-LH	3CSFP97

### FAST GIGABIT SFP TRANSCEIVERS

100BASE-SX	3CSFP81
100BASE-LX10	0231A564
100BASE-BX10-D	3CSFP85
100BASE-BX10-U	3CSFP86
100BASE-FX (Dual-Mode)	3CSFP9-81
100BASE-LX (Dual-Mode)	3CSFP9-82

### CABLES

CX4 Local Connection Cable – 50 cm	3C17775
CX4 Local Connection Cable – 100 cm	3C17776
CX4 Local Connection Cable – 300 cm	3C17777

### 3COM GLOBAL SERVICES

3Com Network Health Check, Installation Services and Express Maintenance	<a href="http://www.3com.com/services_quote">www.3com.com/services_quote</a>
3Com Global Education and Training Courses	<a href="http://www.education.3com.com">www.education.3com.com</a>

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