



SuperStack II Switches

Flexible, affordable 10/100/1000 Mbps stackable switches for boosting performance at the desktop, workgroup, and backbone

The SuperStack II family of switches makes high-performance, low-cost switching a reality at the desktop, workgroup, and backbone.



Key Benefits

Switching solutions that protect your investment. 3Com's SuperStack II switching family protects your investment by delivering low cost of ownership, end-to-end compatible solutions, and smooth migration from lower to higher bandwidth technologies.

Switching solutions that deliver the capabilities you need. Autosensing 10/100 Mbps, advanced stackability, multimedia, VLAN support, RMON, and Layer 3 switching help you to build the most efficient and responsive network for your company.

Year 2000 compliance. All SuperStack II switches are Year 2000 compliant.

+5 lifetime limited warranty. Available on SuperStack II Switch 1100, 3300, 3300 FX, 610, and 630.

Free telephone technical support for 90 days. 3Com offers assistance with installation, configuration, and troubleshooting, in addition to the 3Com Knowledgebase Web service.



The only certainty in networks today is that bandwidth demands will continue to increase. As more complex and time-sensitive applications such as voice and video feeds are created for the desktop, a higher volume of traffic is generated throughout the network. This results in network bottlenecks that can cause performance problems within workgroups, to and from servers, and across the backbone. Switching technology has proven to be the most cost-effective, flexible, and least disruptive way to add and manage bandwidth at every level of your network.

3Com has the broadest array of switching solutions to match your particular requirements. To safeguard your investment, we offer a family of stackable switches that delivers Ethernet, Fast Ethernet, Gigabit Ethernet, Layer 3 switching, and ATM technologies to solve any performance problem. No matter

which product you start with today in one area of your network, you can be assured of a complete migration path and compatible solutions to take you to the next step tomorrow. And that covers everything from the desktop to the backbone.

You can make any of the SuperStack® II switches part of a 3Com SuperStack system. SuperStack II is a complete product family with scalable multitechnology connections, integrated management with a common look and feel, and optional uninterruptible and redundant power systems.

For those users who require the high quality, reliability, and robustness of the 3Com SuperStack II family, but without management capabilities, the SuperStack II family of Baseline switches provides a cost-effective range of products in a variety of port densities.



LAN Switches

Technology Supported for SuperStack II Switches

	Autosensing 10/100 Mbps Ethernet/ Fast Ethernet ports	Gigabit Ethernet	ATM	10 Mbps Ethernet ports	100 Mbps Fast Ethernet only	FDDI	Layer 3 Switching
SuperStack II Switch 1100	●	●	●	●			●
SuperStack II Switch 3300	●	●	●				●
SuperStack II Switch 3300 FX		●	●		●		●
SuperStack II Switch 3800	●	●					●
SuperStack II Switch 3900	●	●					
SuperStack II Switch 9000		●					●
SuperStack II Switch 9300		●					
SuperStack II Switch 610	●			●			
SuperStack II Switch 630	●						
SuperStack II Switch 2200				●		●	
SuperStack II Switch 2700			●				
SuperStack II Switch 1000 ATM Kit			●	●	●		
SuperStack II Switch 3000 10/100 ATM Kit	●		●	●	●		

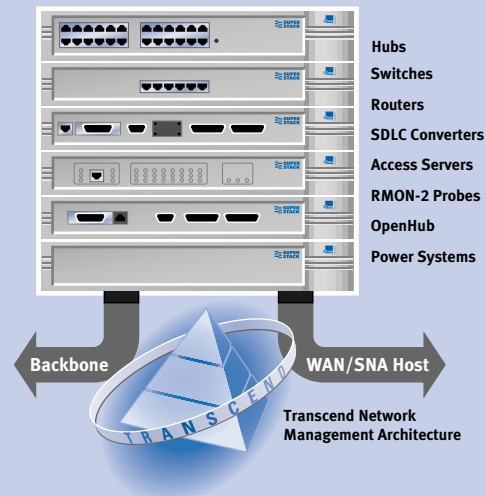
SuperStack® II Systems

The 3Com SuperStack® II system gives you a flexible, cost-effective connectivity solution for local, wide area, and SNA networks. You can combine diverse technologies and network services in one stacked system, strengthen it with uninterruptible and redundant power systems, and manage it all with Transcend® network management and control solutions.

As an important part of the 3Com Transcend Networking framework, SuperStack II systems will meet your evolving network needs—future proofing your network investment.

A single SuperStack II system provides connections for a range of network environments and protocols: Ethernet, Fast Ethernet, Layer 3 switching, Gigabit Ethernet, Token Ring, FDDI, ISDN, X.25, Frame Relay, and ATM. Depending on your needs, you can build SuperStack II systems for virtually any network environment. Capabilities include:

- Hubs for flexible workgroup connectivity that feature SNMP, RMON, and Web-based management
- Industry-leading physical layer support for Token Ring networks, including Token Ring switching
- Full SNMP, RMON, and Web-based management for Ethernet, Fast Ethernet, Gigabit Ethernet switches, as well as a dedicated RMON-1/RMON-2 probe
- Full range of switches to increase performance in high-speed client/server LANs
- Full, multiprotocol network access for telecommuters or users at other off-site locations
- Routing between central site and branch offices using innovative Boundary Routing® architecture or conventional routing software for multiple WAN choices, including ISDN



- SNA-to-LAN conversion linking local and remote offices to an SNA host system
- Choice of power systems to ensure uninterrupted network operation

For smaller offices of fewer than 20 users, our OfficeConnect® products can be used to complement SuperStack II systems.

Features Supported for SuperStack II Switches

	Stackable with matrix module & cable	Transcend network management support	Web-based management	Flow control (IEEE 802.3x)	IEEE 802.1D (incorporating 802.1p)	Dual queues	RMON support	Disconnect Unauthorized Device (Security)	Roving Analysis Port	PACE technology	Half-duplex Flow Control-IFM	Intelligent switching mode
SuperStack II Switch 1100	●	●	●	●	●	●	●	●	●	●	●	●
SuperStack II Switch 3300	●	●	●	●	●	●	●	●	●	●	●	
SuperStack II Switch 3300 FX	●	●	●	●	●	●	●	●	●	●	●	
SuperStack II Switch 3800		●		●	●	●				●	●	
SuperStack II Switch 3900		●	●	●	●	●		●				
SuperStack II Switch 9000		●		●	●	●				●	●	
SuperStack II Switch 9300		●	●	●	●	●		●				
SuperStack II Switch 610		●	●	●		●	●	●	●	●	●	●
SuperStack II Switch 630		●	●	●		●	●	●	●	●	●	
SuperStack II Switch 2200		●					●	●				
SuperStack II Switch 2700		●					●					
SuperStack II Switch 1000 ATM Kit		●		●		●	●			●	●	●
SuperStack II Switch 3000 10/1000 ATM Kit		●		●		●	●			●	●	

■ Optional—Achieved with SuperStack II Switch Layer 3 slide-in module

Features

Stackability

Four SuperStack II Switch 1100 or Switch 3300 units can be interconnected to form a stack that offers unrivaled performance and management features.

Each unit has a built-in connector at the rear of the unit called the matrix port. Two units can be connected back-to-back with a SuperStack II Switch matrix cable. To connect more than two units, a SuperStack II matrix module can be inserted into the high-speed module slot of one of the units in the stack, and a matrix cable can be used to connect to each switch in the stack.

Stacking provides the user with a plethora of benefits. These include the ability to manage in excess of 100 ports as a single logical entity. Configuration is therefore faster and simpler. Stacking also provides the user with the optional resilient IP addresses across the stack. Thus if a failure should occur, the resilient IP address can be used for management stacking using the SuperStack II Switch matrix module and cable, keeping front panel ports free and increasing the number of matrix ports in an aggregated system.

Management

Transcend network management

All SuperStack II switches are managed by 3Com's Transcend network management and control solutions. Transcend solutions give you end-to-end visibility and control over all devices in your network with two levels of management: 1) technologies, such as embedded SmartAgent® software and RMON, within 3Com devices throughout the network, and 2) centralized highly automated applications at the network center for monitoring, configuring, and troubleshooting all devices in the network.

Web-based management

Manage your switches with any Web browser, either through direct or dial-up connection or across the LAN. This delivers ease of use and accessibility to network management personnel and reduces in-service costs, but still with full security.

Security—Disconnect Unauthorized Device (DUD)

LAN security architecture with DUD automatically disconnects unauthorized devices from the LAN.

Roving Analysis Port (RAP)

RAP allows a network analyzer attached to any unit in a stack to monitor any of the switch ports or virtual LANs (VLANs) in the stack. It also minimizes the time required for problem determination and resolution and maximizes switch uptime, thereby lowering your cost of ownership.

RMON support

Transcend software's powerful combination of RMON (Remote Monitoring, a superset of SNMP MIB II) and embedded SmartAgent software reduces the processing burden on your management station, minimizes network traffic, and saves time by automatically monitoring and analyzing your network. RMON tells you at a glance how the network is performing and who is using it the most. And Transcend software gives you the added benefit of RMON features in your network without the processing and memory costs usually associated with RMON. See the At-a-Glance RMON Support table on page 22 for details on RMON groups supported by SuperStack II switches.

Class of Service (CoS)

CoS can be defined simply as a method for prioritizing various traffic types. 3Com switches can support two methods of enabling CoS on Ethernet networks. The first method is IEEE 802.1D (incorporating 802.1p), which enables eight levels of prioritization; and the second method is 3Com's innovative PACE® technology, which allows the user to specify certain applications as high priority. A hardware feature, dual queues, is used to exploit these traffic prioritization schemes; the dual queues function—required for CoS—will automatically enable a second port buffer for high-priority traffic thereby allowing the traffic to bypass lower priority data for faster processing within the switch.

	Full duplex on all ports	Broadcast traffic control	UPS backup power supplies	ARPS / Type 2 backup power supplies	Resilient links	Spanning tree	Trunking	VLAN (IEEE 802.1Q)	VLAN (VLT)	Multicast filtering using IGMP snooping	Fast IP	Layer 3 switching
	●	●	●	●	●	●	●	●	●	●	●	■
	●	●	●	●	●	●	●	●	●	●	●	■
	●	●	●	●	●	●	●	●	●	●	●	■
	●		●		●	●	●				●	
	●	●		●		●	●			●	●	
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	●	●	●	●	●							
	●					●						
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	●	●	●	●	●			●				
	●	●	●	●	●			●				

Traffic Management

Flow control

Flow control is an essential switch feature that eliminates dropped packets on congested ports. To provide switch application flexibility, 3Com switches support flow control schemes suited to both full- and half-duplex environments. **Intelligent Flow Management (IFM)** is a solution designed to work in half duplex, for example, a hub aggregation application. A solution using **IEEE 802.3x** is also supported and designed for full-duplex connections, such as desktop switching; this method of flow control is set automatically using the auto-sensing features of SuperStack II switches.

Broadcast traffic control

Traditional Ethernet switches suffer from the threat of broadcast storms that can potentially bring networks to a halt. However, all SuperStack II switches can be configured with broadcast storm protection to limit the number of broadcast packets allowed to be forwarded by each port. This allows the SuperStack II switches to offer the security of broadcast storm protection normally associated with a router while also providing the protocol independence of a switch.

Network Availability

Backup power supplies

3Com gives you all the choices you need to ensure constant power to your stackable switches. Both the ARPS and the UPS work with any SuperStack II switch. The ARPS is ideally suited as a backup for individual power supplies in the SuperStack II units. The UPS fully protects your SuperStack II system from the effects of brownouts or spikes that occur in outside power lines.

Resilient links

3Com's simple and flexible resilient links technology ensures fault tolerance via redundant connections to other network devices.

Spanning tree

Support for the industry-standard IEEE 802.1D (incorporating 802.1p) spanning tree protocol is provided as an alternative to resilient links. This protects against network loops and can be used to provide redundant network paths.

Port trunking

Port trunking establishes backbone links by treating multiple parallel links as a single network pipe. Trunking also provides link redundancy; traffic on any failed link comprising a network trunk automatically switches over to the other links in the trunk.

VLANs

VLANs allow PCs, workstations, and other resources, including printers and file servers, to be organized into logical, broadcast domains so that only devices within the same domain can communicate with each other. 3Com switches allow users to implement VLANs on their network using one of two schemes: IEEE 802.1Q, including GVRP, which enables the auto-learning of VLANs, or 3Com's VLT. Both methods allow for the configuration of VLANs based on ports and/or MAC addresses for maximum flexibility and security. For 802.1Q VLANs, a port on a switch can be assigned to a VLAN; all other switches learn about that VLAN when the switches automatically communicate that knowledge via the GVRP protocol.

Switches supporting both VLAN schemes can be used to provide seamless migration from VLT to IEEE 802.1Q environments that preserve investment in current LAN developments and equipment.

Layer 3 Support

Multicast filtering using IGMP snooping

Multicast filtering enables the automatic configuration of filters for IP multicast traffic, such as video and audio broadcasts, allowing advanced multimedia applications to be delivered easily to the workgroup.

Fast IP

Fast IP is 3Com's standards-based cut-through routing solution for all types of legacy routing network backbones. This reduces traffic flow through router bottlenecks and maximizes performance by utilizing the switched infrastructure.

Layer 3 Switching

Layer 3 switching is the implementation of routing protocols in leading-edge ASIC technology. Routing performance is dramatically and cost effectively boosted to enable the widespread deployment of intranets (IP-based networking).

SuperStack II Switch 1100 and SuperStack II Switch 3300 for 10/100 Mbps Ethernet and Fast Ethernet

If you're looking for advanced switching solutions with the unsurpassed combination of price and performance for supporting 10 Mbps and 10/100 Mbps traffic, the new SuperStack II Switch 1100 and SuperStack II Switch 3300 are the right solutions for you.

The SuperStack II Switch 1100 and SuperStack II Switch 3300 represent the latest generation of 3Com stackable switching technology. Now you can scale performance seamlessly with inter-switch communication that enables a stack of SuperStack II Switch 1100 switches or SuperStack II Switch 3300 switches (or a mix of both in the same stack) to perform and be managed as a single entity. Multiple switches can even share a single IP address.

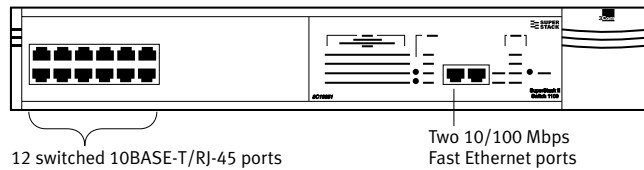
The advanced stackability of the new SuperStack II Switch 1100 and SuperStack II Switch 3300 eliminates the need to communicate through network ports.

Each switch has a built-in connector at the rear of the unit called the matrix port. Two units can be connected back-to-back with a SuperStack II Switch matrix cable (3C16965). To connect more than two units, a SuperStack II Switch matrix module (3C16960) can be inserted into the high-speed module slot of one of the units in the stack, and a SuperStack II Switch matrix cable can be used to connect to each switch in the stack. This enables you to scale up to one larger virtual switch of up to 110 switched ports. Interswitch links are created through the high-performance SuperStack II switch module that connects the switches to deliver 4 x 1 Gbps links between switches; this ensures high-speed communication with no bottlenecks between switches. Plus, it does not consume valuable Fast Ethernet or Gigabit Ethernet ports.

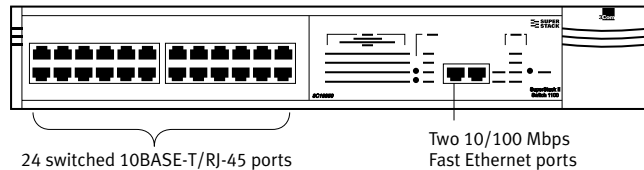
The new SuperStack II Switch 1100 and SuperStack II Switch 3300 provide support for a range of backbone connections options, including Fast Ethernet, Fast Ethernet over fiber, Gigabit Ethernet, Layer 3 switching, and ATM via an optional high-speed module.

SuperStack II Switch 1100

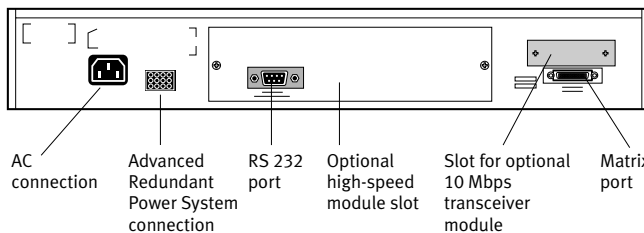
Front view of 12 port



Front view of 24 port

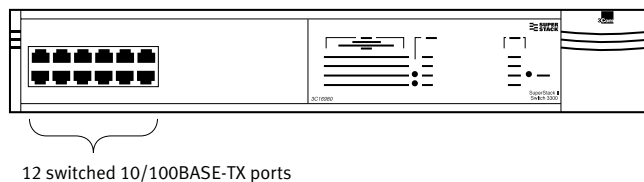


Back view

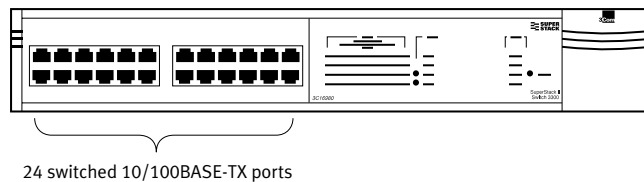


SuperStack II Switch 3300

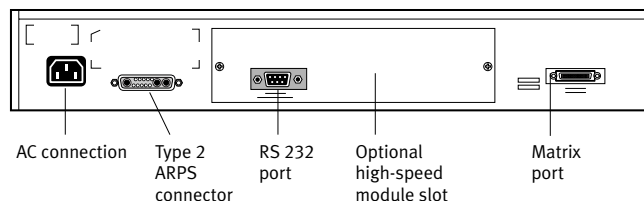
Front view of 12 port



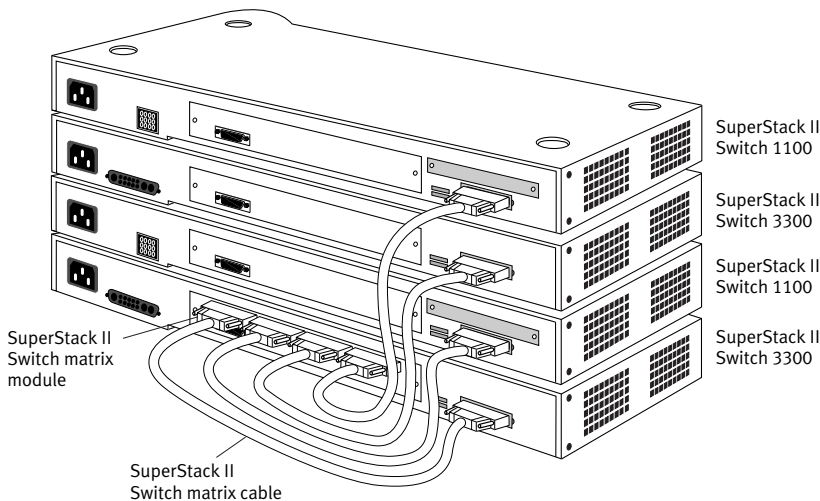
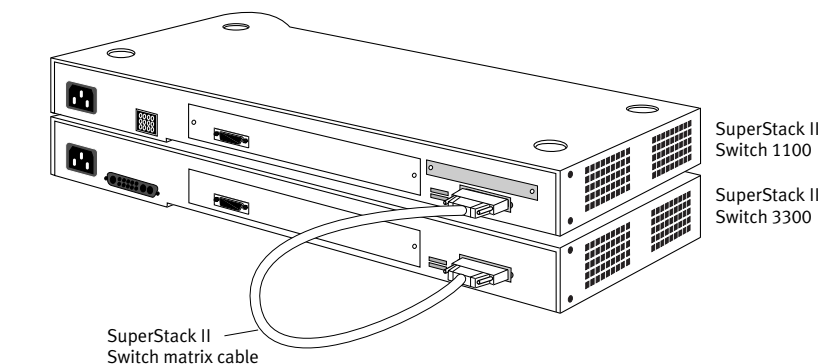
Front view of 24 port



Back view



*Multiple IP addresses can be supported to provide resilient stack management.



About the Switches

The SuperStack II Switch 1100 is perfect for desktop connectivity, and its ability to scale to larger configurations makes it equally suited for handling hub aggregation. A single device can support up to 6,000 MAC addresses. Likewise, the SuperStack II Switch 3300 is suitable for handling desktop, hub, and switch aggregation in large networks. A single device can support up to 12,000 MAC addresses.

The SuperStack II Switch 1100 is available in 12- and 24-port versions and features two built-in auto-sensing 10/100 Fast Ethernet ports; the SuperStack II Switch 3300 is available in 12- and 24-port versions. All models have a matrix port on the rear of the unit that enables high-speed connection to other SuperStack II Switch 1100 and Switch 3300 units. This eliminates the bottlenecks caused by interconnecting switches with Fast Ethernet ports. What's more, the stacked switches can be managed as a single entity and share a single IP address.

As with other SuperStack II switches, the new SuperStack II Switch 1100 and Switch 3300 feature autosensing 10/100 ports that adjust for 10BASE-T and 100BASE-TX attached devices. Both switches automatically provide full-duplex/half-duplex capability on all ports to boost bandwidth for servers and power users. Plus, they both help you implement advanced policy-based management across the network with features such as support for Fast IP, RMON, IGMP snooping, IEEE 802.1D (incorporating 802.1p prioritization), and IEEE 802.1Q standards-based and VLT VLANs.

Key new features in the SuperStack II Switch 1100 and Switch 3300 include the following:

- Matrix port for high-speed connections between switches
- Ability to mix and match switches in a single stack
- Management of a switch stack as an entity; single IP address per stack
- Layer 3 capabilities, including Fast IP and IGMP snooping

The SuperStack II Switch 1100 and Switch 3300 can be stacked up to two units high with just the SuperStack II Switch matrix cable.

- With a low-cost cable, users can double the port density with a 1 Gbps link between switches.
- Mix and match SuperStack II Switch 1100 and Switch 3300 to meet customer needs.
- Stack up to two units high—supporting up to 56 switched ports.

The SuperStack II Switch 1100 and Switch 3300 can be stacked up to four units high by using the SuperStack II Switch matrix module and SuperStack II Switch matrix cables.

- Mix and match Switch 1100 and Switch 3300 within the stack to meet customer needs.
- Stack up to four units high—supporting up to 110 switched ports.
- SuperStack II Switch matrix module supports 4 x 1 Gbps links between switches to create high-density switches without wasting Fast Ethernet or Gigabit Ethernet ports.

- Web browser interface to locate management and configuration functions
- Full support for resilient links and spanning tree
- Optional SuperStack II redundant power supplies
- Dual queues to facilitate traffic prioritization
- Multicast filtering using IGMP snooping/GMRP
- Elastic port buffering enables on-the-fly allocation of memory for port buffers for automatic performance optimization based on network traffic
- Flow control improves performance and minimizes packet loss under heavy network loading
- VLT VLAN tagging protects investment infrastructure
- 802.1Q standard-based VLANs with GVRP support to facilitate dynamic VLAN membership

SuperStack II Switch 1100 and SuperStack II Switch 3300 Optional High-Speed Accessories

SuperStack II Switch Matrix Module and Matrix Cable

The SuperStack II Switch matrix module and matrix cable let you mix and match SuperStack II Switch 1100s and 3300s to improve throughput, share downlinks, and ease management. Use the matrix cable to connect two Switch 1100s or Switch 3300s and the matrix module to connect up to four switches* while conserving Fast Ethernet ports. The matrix module's 4 x 1 Gbps backplane provides a 1 Gbps link between switches. Ultralow latency (maximum 300 ns) and hardware flow control ensure top performance at low cost. The entire stack can be managed as a single entity.

- Any switch port can be configured to support roving analysis across the stack for greater visibility into traffic flows and RMON data; the module supports IEEE 802.1D and 802.1Q standards for VLANs and Ethernet Class of Service (CoS).

*Each unit in a stack requires a matrix cable, including the unit that holds the matrix module.

SuperStack II Switch 100BASE-FX Modules

The SuperStack II Switch 100BASE-FX module adds a fiber Fast Ethernet backbone link to your switched workgroup. The easy-to-install dual module is an excellent choice for resilient connections in mission-critical networks or when

multiple fiber backbone connections are needed to and from the stack. A single high-speed backbone link can be shared by multiple units in a stack.

- Full-duplex Fast Ethernet provides 200 Mbps throughput and 2 kilometers distance on fiber.

SuperStack II Switch 1000BASE-SX Module

The SuperStack II Switch 1000BASE-SX module supports high-performance, fault-tolerant interworkgroup and workgroup-to-backbone connection. The easy-to-install module provides a full-duplex 1000BASE-SX multimode fiber interface to another Fast Ethernet or Gigabit Ethernet switch over distances up to 275 meters.

- Full-duplex Gigabit Ethernet provides up to 2 Gbps throughput, eliminating network bottlenecks.
- The module supports both 802.1D spanning tree and resilient links.

SuperStack II Switch Layer 3 Module

The SuperStack II Switch Layer 3 module lets you cost effectively add routing capabilities to your switched 10/100/1000 Mbps workgroups to boost intranet performance and off-load legacy routers of LAN traffic. SuperStack II Switch 1100, 3300, and 3300 FX



SuperStack II Switch matrix module and SuperStack II Switch matrix cable

switches with the easy-to-install Layer 3 module seamlessly route IP traffic between subnets in addition to switching IPX, AppleTalk, and other legacy protocols. One SuperStack II Layer 3 module can manage routing for the entire stack.

- Extensive standards-based routing protocol support (including RIP and OSPF) enables the switches to operate in any networking environment.
- Distance Vector Multicast Routing Protocol (DVMRP) optimizes multimedia traffic delivery.

Optional High-Speed Modules for Your Existing SuperStack II Switches

SuperStack II Desktop Switch, SuperStack II Switch 1000, and SuperStack II Switch 3000 Family

SuperStack II Switch Gigabit Ethernet SX Module

These modules provide a cost-effective seamless migration to higher speed networking. By adding the SuperStack II Switch Gigabit Ethernet SX module to your existing SuperStack II Switch 3000, Switch 1000, or Desktop Switch, you can integrate existing SuperStack II switches with high-speed backbones. Supporting high-bandwidth, high-performance interworkgroup, and workgroup-to-backbone Gigabit Ethernet connectivity, you can interconnect multiple switches without creating traffic bottlenecks. Plus, you get 2 Gbps (full-duplex) bandwidth—10 times the bandwidth of Fast Ethernet—without changing your existing switching platforms. The SuperStack II Switch Gigabit Ethernet SX module complements the 3Com SuperStack II Switch 9000 so you can implement an end-to-end Gigabit Ethernet network solution—from the desktop to the backbone.

SuperStack II Switch ATM OC-3c Module

The ATM OC-3c module provides support for the ATM Forum standards for LAN Emulation (LANE 1.0) allowing existing Fast Ethernet and Ethernet LAN users to communicate transparently over a high-speed ATM backbone. Full-duplex operation gives wire speeds of 310 Mbps, virtually eliminating network bottlenecks. Low latency of 68 microseconds from Ethernet to ATM provides increased network performance. The ATM OC-3c module absorbs traffic peaks to prevent packet loss due to the deep 40,000 cells (2 MB) buffer.

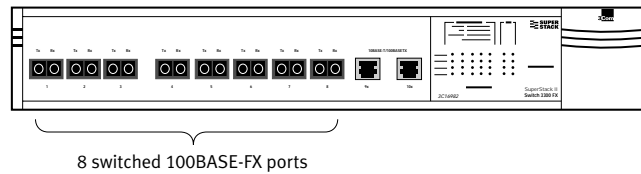
Support for the ATM Forum LANE standard allows existing LAN users to communicate over the high-speed ATM network and provides investment protection for existing Ethernet NICs, hubs, switches, and routers.

SuperStack II Switch 3300 FX

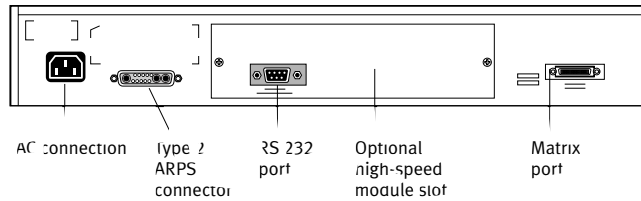
Expanding the award-winning SuperStack II 1100/3300 switch platform, the SuperStack II Switch 3300 FX meets the needs of government and financial institutions that require the security and redundancy of fiber cabling support. The switch features eight multimode fiber switched Fast Ethernet ports and two auto-sensing 10/100BASE-TX Fast Ethernet ports. A truly stackable solution, up to four SuperStack II Switch 3300 FX and SuperStack Switch 1100 or 3300 units can be stacked together using the SuperStack II matrix module and matrix cable to create a single, manageable, high-density fiber aggregation or desktop solution. Managing the entire stack as one system alleviates network management complexity and reduces overhead administrative costs. Built-in fault tolerant features for mission-critical environments include resilient links, spanning tree support, and the SuperStack II advanced redundant and uninterruptible power systems; while support for up to 12,000 MAC addresses makes this an ideal switch for large, demanding LAN environments.

SuperStack II Switch 3300 FX

Front view



Back view



- Matrix module delivers 4 x 1 Gbps bandwidth within the switch stack, eliminating traffic bottlenecks; the entire stack can be managed as a single entity, and downlink resources can be easily shared
- Support for IEEE 802.1Q standards-based VLANs and 802.1D (incorporating 802.1p prioritization) brings enhanced multimedia support and improved data throughput
- Fast IP and IGMP snooping provide Layer 3 capabilities, increasing performance of routed networks and improving delivery of multimedia applications
- Intelligent Flow Management (IFM) and 802.3x congestion control features help avoid packet loss and performance under heavy load conditions
- Web-based management provides access to management and configuration functions from anywhere on the network simplifying management tasks and reducing in-service costs

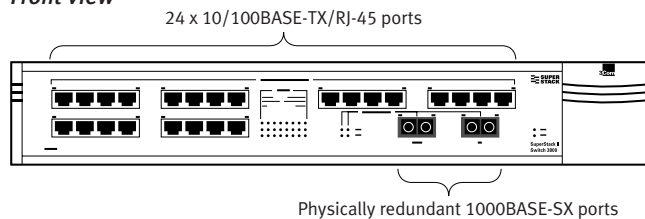
SuperStack II Switch 3800 10/100/1000 Mbps Ethernet Layer 3 Switching

The SuperStack II Switch 3800 offers affordable leading-edge Layer 3 switching technology for 10 times the performance of intranets. Wire-speed Layer 3 switching (IP routing) and Layer 2 switching are embedded in ASICs to forward at nonblocking speed any-to-any intranet traffic while broadcast/multicast traffic and fault propagation are kept under control in appropriate subnetworks.

The SuperStack II Switch 3800 not only aggregates the traffic from Ethernet and Fast Ethernet workgroups to a server farm or a corporate backbone through an optional Gigabit Ethernet high-speed link, but it removes router

SuperStack II Switch 3800

Front view



SuperStack II Switches at a Glance

Stackable, versatile switches—ideal solutions for workgroup management and performance

Product name	SuperStack II Switch 1100	SuperStack II Switch 3300	SuperStack II Switch 3300 FX	SuperStack II Switch 3800	SuperStack II Switch 3900	SuperStack II Switch 9000
Switching technology	10/100 Mbps Ethernet/ Fast Ethernet/ATM/ Gigabit Ethernet	10/100 Mbps Ethernet/ Fast Ethernet/ATM/ Gigabit Ethernet	Fast Ethernet/ ATM/Gigabit Ethernet	Ethernet/Fast Ethernet/ Gigabit Ethernet	10/100 Mbps Ethernet/ Fast Ethernet/Gigabit Ethernet	Gigabit Ethernet
Ethernet ports (RJ-45 connectors)	24 x 10BASE-T 12 x 10BASE-T	12 x 10/100BASE-TX or 24 x 10/100BASE-TX	2 x 10/100BASE-TX	24 x 10/100 BASE-TX 100BASE-TX	24 or 36 10/100BASE-TX	N/A
Optional 10 Mbps Transceiver Interface Module	Yes	No	No	No	No	No
10/100 Mbps Ethernet/ Fast Ethernet ports	2 x 10/100BASE-TX	24 x 10/100BASE-TX or 12 x 10/100BASE-TX	8 x 100BASE-FX 2 x 10/100BASE-TX	24 x 10/100 BASE-TX	24 or 36 10/100BASE-TX	N/A
FDDI connectivity	N/A	N/A	N/A	N/A	N/A	N/A
ATM connectivity	ATM OC-12c ² ATM OC-3c	ATM OC-12c ² ATM OC-3c	ATM OC-12c ² ATM OC-3c	N/A	N/A	N/A
Gigabit Ethernet	1 x 1000BASE-SX optional per unit	1 x 1000BASE-SX optional per unit	1 x 1000BASE-SX optional per unit	2 optional/redundant GBIC ports	1 x 1000BASE-SX plus 2 option slots	8 x 1000BASE-SX ports
Optional extra high-speed links	100BASE-FX 1000BASE-SX ATM OC-12c ² multimode	100BASE-FX 1000BASE-SX ATM OC-12c ² multimode	100BASE-FX 1000BASE-SX ATM OC-12c ² multimode	2 optional/redundant GBIC ports	1000BASE-SX & 1000BASE-LX for option slots	N/A
Layer 3 switching support	Optional Layer 3 module ² (RIP, OSPF, DVMRP)	Optional Layer 3 module ² (RIP, OSPF, DVMRP)	Optional Layer 3 module ² (RIP, OSPF, DVMRP)	RIP/RIP v2	N/A	RIP/RIP v2
Forwarding method ⁴	CT/S&F/Intelligent	S&F	S&F	S&F	S&F	S&F
Number of MAC addresses	6,000	12,000	12,000	12,000	16,000	12,000
RMON support	Groups 1-6, 9	Groups 1-6, 9	Groups 1-6, 9	Four groups 1-3, 9	Groups 1-3, 9	Four groups 1-3, 9
Switching engine	BRASICA 2	BRASICA 2	BRASICA 2	Shared memory	SAGE	Shared memory
Height	2 3/4 in/7.0 cm	2 3/4 in/7.0 cm	2 3/4 in/7.0 cm	3 1/2 in/8.8 cm	2 3/5 in/6.6 cm	3 1/2 in/8.8 cm
Width	17 1/4 in/44 cm	17 1/4 in/44 cm	17 1/4 in/44 cm	17 1/4 in/44 cm	17 1/4 in/44 cm	17 1/4 in/44 cm
Depth	12 in/30 cm	12 in/30 cm	12 in/30 cm	17 1/2 in/44.5 cm	12 in/30 cm	17 1/2 in/44.5 cm
Weight	9 2/3 lb/4.4 kg	9 2/3 lb/4.4 kg	9 2/3 lb/4.4 kg	22.3 lb/10 kg	12 lb/4.5 kg	22.3 lb/10 kg
Performance						
Aggregate bandwidth	Full wire speed	Full wire speed	Full wire speed	Full wire speed	Full wire speed	Full wire speed
Forwarding rate	1,200,000 pps	1,330,000 pps	1,330,000 pps	5,059,000 pps	9,800,000 pps for 36 port 8,014,400 for 24 port	11,904,000 pps
Ethernet latency	7 μs (S&F) 35 μs (CT)	N/A	N/A	N/A	N/A	N/A
High-speed port latency	8 μs (S&F)	8 μs (S&F)	8 μs (S&F)	3 μs (S&F) estimated	8 μs (S&F)	3 μs (S&F) estimated
Packet buffering	8 K static RX per 10 Mbps port 32 K static RX per 10/100 Mbps port 12 port: 800 K dynamic TX shared 24 port: 1216 K dynamic TX shared	32 K static RX per 10/100 Mbps port 12 port: 1600 K dynamic TX shared 24 port: 2752 K dynamic TX shared	32 K static RX per port 1152 K dynamic TX shared across ports	2 MB shared + 64 KB/port std. priority + 64 KB/ port priority port high priority	FE: 256 KB/port std. priority, 64 KB/port high priority; GE: 512 KB/ port std. priority, 128 KB/ port priority	4 MB shared + 64 KB/port std. priority + 64 KB/ port priority
Part number	3C16950-24 port 3C16951-12 port	3C16980-24 port 3C16981-12 port	3C16982	3C16910 3C16911 (SX interface connector)	3C39024-24 port 3C39036-36 port	3C16990

¹See Ordering Information on page 26.

²Available Q399.

³Nontranslational/translational

⁴CT = Cut-through, S&F = Store and Forward, ISM = intelligent switching mode

⁵Each port is also usable as a SAS connection.

⁶See page 24 for a full list of connectors.

SuperStack II Switch 9300	SuperStack II Switch 610	SuperStack II Switch 630	SuperStack II Switch 2200	SuperStack II Switch 2700	SuperStack II Switch 1000 ATM Kit	SuperStack II Switch 3000 10/100 ATM Kit
Gigabit Ethernet	10/100 Mbps Ethernet/ Fast Ethernet	10/100 Mbps Ethernet/ Fast Ethernet	Ethernet/FDDI/ Fast Ethernet	Ethernet/ATM/ ATM/Gigabit Ethernet	Ethernet/Fast Ethernet/ATM	Ethernet/Fast Ethernet/ATM
1 10 Mbps for out-of-band management	24 x 10BASE-T	24 x 10/100BASE-TX	16 x 10BASE-T	12 x 10BASE-T	24 x 10BASE-T	12 x 10/100BASE-TX
No	No	No	No	No	Yes	Yes
N/A	2 x 10/100BASE-TX	24 x 10/100BASE-TX	N/A	N/A	1 100BASE-TX plus 1 x 100BASE-TX	12 x 10/100BASE-TX 100BASE-FX/fiber
N/A	N/A	N/A	One FDDI (DAS with two fiber MICs) ³	N/A	N/A	N/A
N/A	N/A	N/A	N/A	One ATM (155 Mbps OC-3c multimode/ single-mode 11 dB SC connector) one and DS-3 45 MB	Optional ATM OC-3c 155 Mbps multimode fiber	Optional ATM OC-3c 155 Mbps multimode fiber
12 x 1000BASE-SX ports or 10 1000BASE-SX+2 1000BASE-LX	N/A	N/A	N/A	N/A	Optional 1000BASE-SX module ¹	Optional 1000BASE-SX module ²
N/A	N/A	N/A	N/A	N/A	100BASE-FX/TX 1000BASE-SX ATM OC-12c multimode	100BASE-FX/TX 1000BASE-SX ATM OC-12c multimode
N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&F	CT/S&F/Intelligent	S&F	S&F	CT/S&F ⁶	CT/S&F/ISM ⁵	CT/S&F/ISM ⁵
16,000	6,000	12,000	8,192	8,192	500 per switch	500 per switch
Groups 1-3, 9	Groups 1-6, 9	Groups 1-6, 9	Roving Analysis Port (four groups)	Six groups	Seven groups	Seven groups
SAGE	BRASICA 2	BRASICA 2	ISE	ZipChip™	BRASICA	BRASICA
2 3/5 in/6.6 cm	1.7 in/4.4 cm	1.7 in/4.4 cm	2 1/2 in/6.4 cm	1 3/4 in/4.4 cm	2 3/4 in/7.0 cm	2 3/4 in/7.0 cm
17 1/4 in/44 cm	17 1/4 in/44 cm	17 1/4 in/44 cm	17 1/4 in/44 cm	17 1/4 in/44 cm	17 1/4 in/44 cm	17 1/4 in/44 cm
12 in/30 cm	8 3/5 in/22.4 cm	8 3/5 in/22.4 cm	14 1/2 in/36.8 cm	11 in/27.5 cm	12 in/30 cm	12 in/30 cm
12 lb/4.5 kg	9 2/3 lb/4.4 kg	9 2/3 lb/4.4 kg	10 lb/4.5 kg	5 1/2 lb/2.5 kg	9 2/3 lb/4.4 kg	9 2/3 lb/4.4 kg
Full wire speed	Full wire speed	Full wire speed	Full wire speed	Full wire speed	Full wire speed	Full wire speed
17,850,000 pps	1,200,000 pps	1,330,000 pps	193,440 pps	90,000 pps	307,605 pps	153,802 pps
N/A 35 μs (S&F)	7 μs (S&F) 35 (CT)	N/A	30 μs 33 μs (S&F) 54 μs (CT)	Ethernet to ATM 8 μs (S&F)	8 μs (S&F) 40 μs (CT)	8 μs (S&F) 40 μs (CT)
8 μs (S&F) 40 μs (CT)	8 μs (S&F)	8 μs (S&F)	10/25 μs ³ (S&F)	130 μs (CT)	40 μs (CT)	40 μs (CT)
512 KB/port std. priority, 128 KB/port high priority	8 K static RX per 10 Mbps port 32 K static RX per 10/100 Mbps port 1216 K dynamic TX shared across ports	32 K static RX per 10/100 Mbps port 2752 K dynamic TX shared across ports	1 MB total per port	192 KB per port	Max 1 MB total (24 port)	Max 1 MB total (24 port)
3C93012-12 SX ports 3C93011-10 SX/ 2 LX ports 3C93010-12 LX ports	3C16954	3C16984	3C220000A	3C32700A ¹	3C16915	3C16917

Specifications

SuperStack II High-Performance Stackable Switches

At-a-Glance RMON Support

	SuperStack II Switches										
	Switch 1100/3300	Switch 3300 FX	Switch 3800	Switch 3900	Switch 9000	Switch Switch 9300	610/630	Switch 2200	Switch 2700	Switch 1000 ATM Kit	Switch 3000 10/100 ATM Kit
Statistics: Total LAN statistics	●	●	●	●	●	●	●	●	●	●	●
History: Time-based statistics for trend analysis	●	●	●	●	●	●	●	●		●	●
Alarms: Thresholding	●	●	●	●	●	●	●	●	●	●	●
Hosts: Statistics by MAC address	●	●					●		●	●	●
HostTopN: Ranked statistics by MAC address	●	●					●			●	●
Matrix: Traffic matrix showing who's talking to whom	●	●					●			●	●
Filter: Packet-selection mechanism									●		
Packet Capture: Packet capture against filter									●		
Events: Reporting mechanism	●	●	●	●	●	●	●	●	●	●	●

Power Requirements and Environmental Ranges

	Switch 1100	Switch 3300	Switch 3300 FX	Switch 3800	Switch 3900	Switch 9000
Maximum Power Consumption	135 W	200 W	200 W	117.5 W	175 W	117.5 W
Fuse Protection	5 A Time Delay Fuse	5 A Time Delay Fuse	5 A Time Delay Fuse	4 A internal fuse	Nonreplaceable	4 A internal fuse
Heat Dissipation/Hour	425 BTU/hour max	628 BTU/hour max	628 BTU/hour max	401 BTU/hour max	547 BTU/hour max	401 BTU/hour max
Nominal Input Voltage	110 V, 230 V	110 V, 230 V	110 V, 230 V	100-120/200-240 VAC	110 V, 230 V	100-120/200-240 VAC
Input Voltage Range	80-264 V RMS	80-264 V RMS	80-264 V RMS	100-200 VAC	100-120/200-240 VAC	100-200 VAC
Input Frequency	47-63 Hz	47-63 Hz	47-63 Hz	50-60 Hz	47-63 Hz	50-60 Hz
Input Current (max)	3 A at 115 V 2 A at 240 V	3 A at 115 V 2 A at 240 V	3 A at 115 V 2 A at 240 V	3 A at 115 V 2 A at 240 V	1.9 A at 100 V 0.79 A at 200 V	3 A at 115 V 2 A at 240 V
Operating Temperature	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)	32° to 104°F relative humidity	32° to 122°F (0° to 50°C)	32° to 104°F relative humidity
Operating Humidity	10% to 95% noncondensing	10% to 95% noncondensing	10% to 95% noncondensing	10% to 95% noncondensing	10% to 90% noncondensing	10% to 95% noncondensing
Storage Temperature	14° to 158°F (-10° to 70°C)	14° to 158°F (-10° to 70°C)	14° to 158°F (-10° to 70°C)	-4° to 185°F (-20° to 85°C)	14° to 158°F (-10° to 70°C)	-4° to 185°F (-20° to 85°C)
Storage Humidity	10% to 95% noncondensing	10% to 95% noncondensing	10% to 95% noncondensing	10% to 95% noncondensing	10% to 90% noncondensing	10% to 90% noncondensing
Acoustic Performance	58 dB/W Weighted Sound Power Level to EN 27779 (ISO 9295)	58 dB/W Weighted Sound Power Level to EN 27779 (ISO 9295)	58 dB/W Weighted Sound Power Level to EN 27779 (ISO 9295)		50 dBA Sound Pressure International Standard (ISO 7779)	

Specifications

SuperStack II Switches

Indicators

SuperStack II Switch 1100 and Switch 3300

Ethernet Ports: Per-port link status, packet activity
 10/100 Fast Ethernet Ports: Per-port link status, packet activity
 Unit: Transceiver interface (1100 only) module fitted, high-speed module fitted, power, fault

SuperStack II Switch 3300 FX

Fast Ethernet Ports: Per-port link status, packet activity
 Unit: High-speed module fitted, power, fault

SuperStack II Switch 3800

Per-port LED indicators, link status, activity
 Unit: Power and management status

SuperStack II Switch 3900

Ethernet/Fast Ethernet Ports: Per-port link status, packet activity
 Back Panel Gigabit Ethernet Port: Per-port link status, packet activity
 Expansion Gigabit Ethernet Ports: Per-port link status, packet activity
 Unit: Power, fault

SuperStack II Switch 9000

Per-port LED indicators, link status, activity
 Unit: Power and management status

SuperStack II Switch 9300

Gigabit Ethernet Ports: Per-port link status, packet activity
 Unit: Power, fault

SuperStack II Switch 610 and Switch 630

Ethernet Ports: Per-port link status, packet activity
 10/100 Fast Ethernet Ports: Per-port link status, packet activity

SuperStack II Switch 2200

Ethernet Ports: Link status, error
 FDDI Port: Ring up, error

SuperStack II Switch 2700

Ethernet Ports: Per-port link status, collision, activity
 ATM Port: Link status, fail, activity
 Unit: Power, fail, activity

SuperStack II Switch 1000 ATM Kit

Ethernet Ports: Per-port link status, packet activity
 Fast Ethernet Port: Link status, packet activity
 Unit: Transceiver interface module fitted, high-speed module fitted, power, fault

SuperStack II Switch 3000 10/100 ATM Kit

Ethernet/Fast Ethernet Ports: Per-port link status, packet activity
 Unit: High-speed module fitted, power, fault

Switch 9300	Switch 610	Switch 630	Switch 2200	Switch 2700	Switch 1000 ATM Kit	Switch 3000 10/100 ATM Kit
175 W	135 W	200 W	48.5 W	30 W	30 W	55.2 W
Nonreplaceable Delay Fuse	5 A Time Delay Fuse	5 A Time Delay Fuse	T.3. 15 A	2 A	5 A	3 A
547 BTU/hour max	425 BTU/hour max	628 BTU/hour max	165 BTU/hour max	105 BTU	341 BTU	341.2 BTU/hour max
110 V, 230 V	110 V, 230 V	110 V, 230 V	85-264 VAC	100-240 VAC 200-240 VAC	100-120/ 200-240 VAC	100-120/ 200-240 VAC
100-120/ 200-240 VAC	80-264 V RMS	80-264 V RMS	85-264 VAC	100-240 VAC 200-240 VAC	100-120/ 200-240 VAC	100-200/ 200-240 VAC
47-63 Hz	47-63 Hz	47-63 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
1.9 A at 100 V 0.79 A at 200 V	3 A at 115 V 2 A at 240 V	3 A at 115 V 2 A at 240 V	3 A at 110 VAC 2 A at 240 V 1.5 A at 230 VAC Inrush Current (peak) 25 A at 115 VAC 50 A at 230 VAC	Typical: 2.5 A at 115 VAC	3 A at 100 V 2 A at 200 V	3 A at 100 V 2 A at 200 V
32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)	32° to 104°F (0° to 40°C)	32° to 104°F (0° to 40°C)	32° to 104°F relative humidity	32° to 104°F relative humidity
10% to 90% noncondensing	10% to 95% noncondensing	10% to 95% noncondensing	10% to 90% noncondensing	10% to 95% noncondensing	10% to 95% noncondensing	10% to 95% noncondensing
14° to 158°F (-10° to 70°C)	14° to 158°F (-10° to 70°C)	-22° to 140°F (-30° to 70°C)	-4° to 185°F (-20° to 85°C)	14° to 158°F (-10° to 70°C)	14° to 158°F (-10° to 70°C)	14° to 158°F (-10° to 70°C)
10% to 95% noncondensing	10% to 90% noncondensing	10% to 95% noncondensing	10% to 90% noncondensing	10% to 95% noncondensing	10% to 95% noncondensing	10% to 95% noncondensing
50 dBA Sound Pressure International Standard (ISO 7779)	58 dB/W Weighted Sound Power Level to EN 27779 (ISO 9295)	58 dB/W Weighted Sound Power Level to EN 27779 (ISO 9295)				

Specifications

SuperStack II Switches

SuperStack II Switch 1100, SuperStack II Switch 3300 and SuperStack II Switch 3300 FX

Management

All switches support SNMP and 3Com Transcend network management applications

The Switch 1100, 3300, and 3300 FX can be managed with a Command Line Interface by connecting a terminal to the serial port or via Telnet, or graphically using the resident Web interface.

MIBs supported: New MAU MIB (RFC 2239), RMON II Probe Config (RFC 2021), RMON (RFC 1757), RS 232 MIB (RFC 1659), IfStack Table (RFC 1573), Bridge MIB (RFC 1493), SNMP MIB II (RFC 1213)

Plus additional SuperStack II MIBs for stacking, security, and resilience.

Standards Compliance

Functional: ISO 8802/3, IEEE 802.3 (Ethernet), IEEE 802.3u (Fast Ethernet), IEEE 802.3x (Flow Control), IEEE 802.1D (incorporating 802.1p), IEEE 802.1Q (Bridging) Safety: UL 1950 2nd Edition, EN 60950:1992/A3:1995 plus ZB/ZC Deviations, CSA 22.2#950, ECMA 97, TUV GS Mark will be applied for Mexican NOM and Russian GOST safety approval.

Electromagnetic: EN 55022 Class B, FCC part 15 Class A, CSA C108.8-M1983 (A), VCCI Class 2, EN 50082-1 (IEC 801 Parts 2-4), EN 61000-3-2, EN 61000-4-5, ENV 50140, ENV 50141, Russian GOST EMC approval (Will be obtained after initial release.) Environmental: Shock and Vibration: EN 60068 (IEC 68) Protocols: SNMP (RFC 1157), ARP (RFC 826), IP (RFC 791), ICMP (RFC 792), IGMP (RFC 1112), UDP (RFC 768), TCP (RFC 793), TFTP (RFC 783)

SuperStack II Switch 1000BASE-SX Module

Provides support for SuperStack II Switch 1100, SuperStack II Switch 3300, and SuperStack II Switch 3300 FX.

General

1 single 850 mm fiber optic port with SC-duplex connectors full-duplex mode

Standards Compliance

Functional: ISO 8802/3, IEEE 802.3 (Ethernet), IEEE 802.3x (Flow Control), IEEE 802.3z (Gigabit Ethernet), IEEE 802.1Q (VLAN Tagging), priority bits as per IEEE 802.1p

Electromagnetic: ICES-003 Class A, FCC part 15 Class A, EN 55022 Class B, VCCI Class 2, AS/NZS 3548 Class B, CISPR Class B, CNS 13438 Class A, Korean EMC approval; EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11, ENV 50204

Safety: UL 1950 3rd Edition, Listed, UL listed to CSA 22.2 No. 950, TUV GS to EN 60825-1 and EN 60950:1992/A3:1995 plus ZB/ZC deviations, IEC 950 Edition 2 Amendment 4 + ALL national deviations; CB Certificate & Report to be supplied; EN 60825-1: Class 1 Laser safety

SuperStack II Switch 3800 and Switch 9000

Management

MIBs supported: SNMP MIB II (RFC 1213), Remote Monitoring MIB (RFC 1571), Bridge MIB (RFC 1493), Evolution of the interface MIB (RFC 1573)

Standards Compliance

Electromagnetic: Switch 3800 EN 55022 Class A; Switch 9000 EN 55022 Class B; FCC Part 15 Class A, CSA C108.8-M1983 (A), VCCI Class 2 EN 50082-1 (IEC801 Parts 2-4), EN 61000-3-2, EN 61000-4-3, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11

Safety: UL 1950, EN 60825-1, CSA 22.2 No. 950, Russian GOST and EN 60950; 1992/A3: 1995 plus ZB/ZC Deviations.

Protocols: SNMP (RFC 1157), ARP (RFC 826), IP (RFC 791), ICMP (RFC 792), UDP (RFC 768), TCP (RFC 793), TFTP (RFC 783), Telnet (RFC 854), BootP (RFC 951).

Management Information Bases (MIBs): MIB II RFC 1213, Remote Monitoring MIB RFC 1571, Bridge MIB, RFC 1493, Evolution of the interface MIB RFC 1573

SuperStack II Switch 3900

Functional: ISO 8802/3, IEEE 802.3 (Ethernet), IEEE 802.3u (Fast Ethernet), IEEE 802.3x (Flow Control), IEEE 802.1D (Bridging)

Electromagnetic: FCC Part 15 Class A, CISPR22 Class A

Operational shock: 10G; operational sine vibration—5-500 cycles; operational random vibration—up to 2000 cycles

Safety: UL 1950; EN 60950; CSA 22.2 No. 950, CB Report, TUV GS Mark

Protocols: RFC 826 ARP, RFC 791 IP, RFC 792 ICMP, RFC 768 UDP, RFC 793 TCP, RFC 783 TFTP IPX, BootP. RFC 1157 SNMP. RFC 854-859

Telnet options, RFC 1213 MIB II. RFC 1757 RMON; RFC 1493 Bridge MIB, RFC 1516 IETF 802.3, IfStackTable RFC 1573 MIB V1.

SuperStack II Switch 9300

Functional: IEEE 802.3x (Flow Control) IEEE 802.1 (Bridging)

Electromagnetic: FCC Part 15 Class A, CISPR22 Class A

Operational shock: 10G; operational sine vibration—5-500 cycles; operational random vibration—up to 2000 cycles

Safety: UL 1950; EN 60950; CSA 22.2 No. 950, CB Report, TUV GS Mark

Protocols: RFC 826 ARP, RFC 791 IP, RFC 792 ICMP, RFC 768 UDP, RFC 793 TCP, RFC 783 TFTP IPX, BootP. FC 1157 SNMP. RFC 854-859

Telnet options, RFC 1213 MIB II. RFC 1757 RMON; RFC 1493 Bridge MIB, RFC 1516 IETF 802.3, IfStackTable RFC 1573 MIB V1.

SuperStack II Switch 610 and Switch 630

Management

The Switch 610 and 630 can be managed locally with a Command Line Interface by connecting a terminal to the serial port or via Telnet, or graphically using the resident Web interface or with Transcend network management.

MIBs supported: Bridge MIB (RFC 1493), BootP (RFC 951).

Plus additional SuperStack II MIBs for security and resilience.

Standards Compliance

Functional: ISO 8802/3, IEEE 802.3 (Ethernet), IEEE 802.3u (Fast Ethernet), IEEE 802.3x (Flow Control), IEEE 802.1D (Bridging) Safety: UL 1950 2nd Edition, EN 60950:1992/A3:1995 plus ZB/ZC Deviations, CSA 22.2#950, ECMA 97, TUV GS Mark will be applied for Mexican NOM and Russian GOST safety approval.

Electromagnetic: EN 55022 Class B, FCC part 15 Class A, CSA C108.8-M1983 (A), VCCI Class 2, EN 50082-1 (IEC 801 Parts 2-4), EN 61000-3-2, EN 61000-4-5, ENV 50140, ENV 50141, Russian GOST EMC approval (Will be obtained after initial release.) Environmental: Shock and Vibration: EN 60068 (IEC 68) Protocols: SNMP (RFC 1157), ARP (RFC 826), IP (RFC 791), ICMP (RFC 792), UDP (RFC 768), TCP (RFC 793), TFTP (RFC 783)

SuperStack Switch II Layer 3 Module

Safety: EN 60950 1992/A4: 1996 plus ZB/ZC Deviations, IEC 950 Edition 2 Amendment 4 plus all national deviations, CB Report to be upgraded, CSA 22.2 No. 950-95, UL 1950 3rd edition, NOM-019 SCFI, AS/NZS 3260

Electromagnetic: EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11, ENV 50204, IEC-003 CLASS A, FCC PART 15 CLASS A, EN 55022 CLASS A, VCCI CLASS A, AS/NZS 3548 CLASS A, EN 61000-3-2, EN 61000-3-3, CNS 13438 CLASS A, Korean EMI CLASS A

Protocols: SNMP (RFC 1157), MIB II (RFC 1213), BootP (RFC 951), Telnet (RFC 854), OSPF (RFC 1253), RIP (RFC 1053), DVMRP (RFC 1075), IGMP (RFC 1112), ICMP (RFC 972)