



# SuperStack® II Baseline Hubs and Switches

*High-quality, unmanaged products providing cost-effective network solutions for a wide range of applications*

The complete SuperStack II Baseline family



## Key Benefits

### Performance to suit your application and budget.

Whether you need the ultimate power of 10/100 Mbps switching or simply 10 Mbps Ethernet hubs, SuperStack II Baseline products give you a high-quality solution to meet both your application needs and budget requirements.

### Easy to install and use.

All SuperStack II Baseline products are shipped ready to work straight from the box. No configuration is necessary. Simply plug them in, and they will run....and run.

### Superior reliability.

Proven reliability, combined with optional SuperStack II power systems provide you with nonstop troublefree operation.

### Year 2000 Compliance.

All SuperStack II Baseline hubs and switches are year 2000 compliant.

### Lifetime limited warranty.

Get the peace-of-mind you need from the SuperStack II family.



The SuperStack® II Baseline family builds on the tremendous success of SuperStack II enterprise networking solutions by delivering powerful, unmanaged connectivity in a full range of networking technologies. From 10 Mbps Ethernet hubs to high-speed 10/100 Mbps switching, the Baseline family satisfies the need for high-quality products at an affordable price—enabling even the most budget-conscious organizations to trade up to the next level of networking power.

SuperStack II Baseline hubs and switches provide cost-effective, unmanaged solutions across a wide range of networking technologies for people who need the assurance of high quality, reliability, and robustness of 3Com's SuperStack II family.

The SuperStack II Baseline family comprises four key components: Ethernet workgroup hubs; Ethernet workgroup switches with Fast Ethernet uplinks; auto-sensing dual-speed Fast Ethernet hubs, which automatically optimize the speed of the network; and powerful 10/100 Mbps auto-sensing switches for the ultimate in dedicated high-speed connectivity.



# Hubs & Switches

## Hubs

Hubs are the most basic building blocks for connecting together your PCs, servers, and peripherals to form a network. Sometimes referred to as repeaters, hubs allow the attached network devices to communicate with each other and share information. Connections to hubs are often referred to as shared media connections, such as shared 10 or shared 100, as opposed to switched connections.

There are two types of hub in the SuperStack II Baseline family:

- The Baseline Hub, which communicates with other network devices at a speed of 10 Mbps;
- The Baseline Dual Speed Hub, which is capable of communicating with other network devices at up to 100 Mbps.

Both are available in 12- and 24-port variants.

The right choice for you will depend on the performance you need and the speed at which your network devices are capable of running. If some of your PCs, servers, and network peripherals are capable of running at 100 Mbps, you will benefit from the tremendous performance increase of the Baseline Dual Speed Hub.

According to ISO/IEEE standards, there is a limit to the number of hubs that can be connected in series. For 10 Mbps, the limit is four; for 100 Mbps, the limit is two.

## Switches

Why would you need a switch?

Although they provide the same connectivity for your network cables as hubs, switches give you far superior network performance. They do this by increasing the network's available data bandwidth (the maximum capacity of the network for moving data). Instead of sharing the total available bandwidth among all connected users, as a hub does, a switch gives each attached network device its own dedicated amount of bandwidth.

For example, any 10 Mbps hub will offer 10 Mbps of bandwidth to be shared among all devices attached to it. An equivalent switch will offer 10 Mbps of bandwidth for exclusive use by each attached device. Performance will be much faster. It is further increased if the switch supports full-duplex links like the Baseline switches.

Switches operate by learning the unique MAC address of each network device on your LAN, and by knowing which port each one is connected through.

There are two types of switches in the SuperStack II Baseline family:

- The Baseline Switch communicates with other network devices at a speed of 10 Mbps, and has two 10/100 Mbps links capable of running at 100 Mbps for fast links to servers or the network backbone;
- The Baseline 10/100 Switch, is capable of communicating with other network devices at up to 100 Mbps on all ports for the ultimate in high-speed connectivity.

Both are available in 12- and 24-port variants.

Switches are most suited to certain applications:

- Near the core of the network, they eliminate bottlenecks and improve the overall network throughput;
- They can extend the span of a network that has the maximum allowed hubs connected in series;
- When used as a desktop connectivity device, they provide the highest possible performance for connecting users to your network.

## 10/100 Mbps (Dual Speed) Operation

Today, more and more PCs, servers, and network peripherals that you buy have the capability to connect to either a 10 Mbps or 100 Mbps network link. They can operate up to 10 times the speed of traditional 10 Mbps links as long as the hubs or switches they are connected to can support 100 Mbps operation. Why waste this latent performance by connecting them to a network device running at only 10 Mbps?

Your concern might be that you have some older PCs, printers, or peripherals that have a 10 Mbps-only network connection. You will probably not want to upgrade all of these at once to connect to 100 Mbps hubs or switches. In fact, some of your legacy devices may not upgrade from 10 Mbps.

So, how can you connect some devices into your hubs and switches at 10 Mbps and some at 100 Mbps? How do you ensure that you don't connect them at the wrong speed? By using a dual-speed hub or a switch with 10/100 Mbps links on every port, they will communicate with connected equipment at either 10 Mbps or 100 Mbps as appropriate.

After installing a dual-speed hub or a 10/100 Mbps switch, you can gradually and seamlessly migrate your network to run at 10 times the speed! You can add newer, high-speed network devices or upgrade your existing equipment as the need arises (and your budget allows).

The SuperStack II Baseline family includes:

- The Baseline Dual Speed Hub; and
- The Baseline 10/100 Switch

Both are autosensing. They will link up with your network users at 100 Mbps, if possible, otherwise, they will instantly and automatically revert to running at 10 Mbps. They always ensure that your network runs as fast as your users are capable. There's no need to worry about patching a PC or a server to a hub or switch at the wrong speed—and no need to worry about whether you're wasting valuable network bandwidth.

		MTBF (hours)	
		Theoretical	Actualized
3C16440	<b>SuperStack II Baseline Hub</b> 12 port	103,389	1,779,785 (203 years)
3C16441	<b>SuperStack II Baseline Hub</b> 24 port	97,425	1,368,075 (156 years)
3C16592A	<b>SuperStack II Baseline Dual Speed Hub</b> 12 port	55,816	459,360 (52 years)
3C16593A	<b>SuperStack II Baseline Dual Speed Hub</b> 24 port	44,949	307,563 (35 years)
3C16460	<b>SuperStack II Baseline Switch</b> 12 port 10 Mbps switched ports plus 2 x 10/100 Mbps auto-sensing ports	76,820	507,012 (57 years)
3C16462	<b>SuperStack II Baseline Switch</b> 24 port 10 Mbps switched ports plus 2 x 10/100 Mbps auto-sensing ports	73,491	625,408 (71 years)
3C16464A	<b>SuperStack II Baseline 10/100 Switch</b> 12 port	82,963	760,096 (87 years)
3C16465A	<b>SuperStack II Baseline 10/100 Switch</b> 24 port	67,662	645,753 (74 years)

### Full-duplex autonegotiation

Most links between network devices run in half-duplex mode. This is the traditional mode of Ethernet operation allowing communication across the cabling in one direction at any particular time. Full-duplex mode allows simultaneous bidirectional traffic. It effectively doubles the throughput across UTP cable to 20 Mbps for Ethernet and 200 Mbps for Fast Ethernet.

Full-duplex communication can only be sustained between two switches, or between a switch and a network end-station (such as a PC or server). Hubs (Ethernet or Fast Ethernet) are not able to support full-duplex network links according to ISO/IEEE standards.

Full-duplex autonegotiation is the process where the network devices at either end of the cable

(for example a switch and a server) automatically decide whether they will communicate in either full- or half-duplex mode. It will happen almost instantaneously when the UTP cable is connected and the link is first made.

Full-duplex operation is especially effective for relieving bottlenecks that might exist in a network, for example, on a link between two switches or on a link from a switch to a network server.

All SuperStack II Baseline Switches support full-duplex autonegotiation on every port, so you can be sure you get the ultimate capacity from your installed equipment.

### SuperStack II Power Systems

#### 1. Advanced Redundant Power System

For the ultimate protection against network downtime, all SuperStack II Baseline products are equipped with a connector to support the SuperStack II advanced Redundant Power System (ARPS). This system gives you the means to provide SuperStack II units with a redundant power supply source for uninterrupted operation in the unlikely event of a power supply failure.

#### 2. Uninterruptible Power System

The SuperStack II Uninterruptible Power System (UPS) keeps your system up and running during power failures or disruption to the main supply. Up to four SuperStack II units can be powered from a single UPS. The system also protects you against brownouts or spikes that occur in outside power lines.

### Reliability

3Com Baseline products have been designed with reliability in mind. You can be assured they will give you troublefree operation. 3Com uses advanced HALT (Highly Accelerated Life Test) techniques at the design-phase to stress-test our products far beyond any normal operating conditions. We can identify and design-out even the most minimal contributors to unit failure.

This is reflected in the reliability figures for each of the SuperStack II Baseline products, as shown in the table. Reliability is expressed as a Mean Time Before Failure (MTBF) in hours, and calculated according to an established industry standard (MIL-HBK 217 F Notice 1). Because the theoretical calculation has proved to be extremely conservative, we also quote an actualized figure. This is derived from the in-service reliability track record of the tremendous installed-base of 3Com SuperStack II products.

The table shows that for simpler technology such as hubs, the MTBF is far greater than on more complex products such as dual-speed hubs. Even so, with a worst-case MTBF of 35 years, the SuperStack II Baseline products have built-in reliability found in no other brand.

### Warranty

For complete peace-of-mind, all 3Com SuperStack II Baseline products come with a lifetime limited warranty. As part of this we provide you with an advanced hardware exchange service for the first year from your date of purchase, in accordance with 3Com's standard terms and conditions. To qualify, you must complete and return your product registration card to 3Com. Consult your user guide for full details.

### MDI/MDIX Switch

The MDI/MDIX switch on the front panel of 3Com's SuperStack II Baseline products lets you build your entire network using standard UTP cabling. By using the MDI/MDIX switch, your hubs and switches are cascaded together without the need to use special crossover cable.

## SuperStack II Baseline Hubs

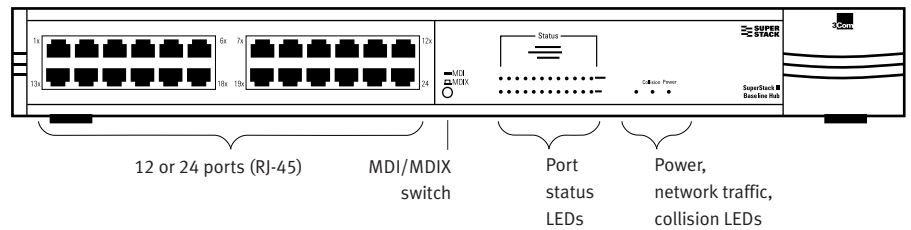
The 3Com SuperStack II Baseline hubs provide high-quality connectivity solutions at entry-level prices for shared Ethernet networks that don't require comprehensive management. These hubs are ideal for low-intensity network environments such as general office applications using small networked files. With the lowest per-port cost in the SuperStack II range, the Baseline hubs offer exceptional value for money, and provide the most cost-effective way to add new users to a network.

The SuperStack II Baseline Hubs provide 12- or 24-10BASE-T RJ-45 ports, allowing each hub to connect either 12 or 24 users. Each hub has an MDI/MDIX switch, which connects multiple hubs—expanding the network using normal UTP cabling. The Baseline hubs provide a transceiver interface slot, allowing connection to alternative network media, such as fiber or coax. Optional transceiver interface modules are available from 3Com.

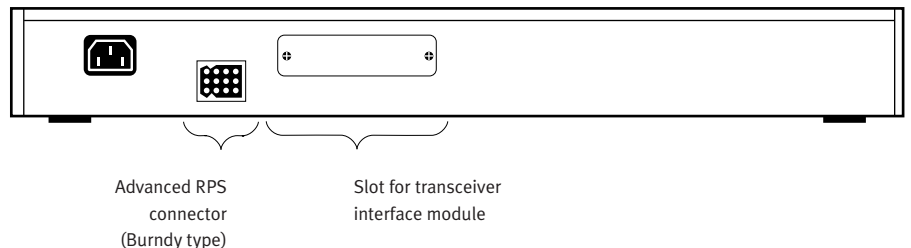
- 12 or 24 RJ-45 10BASE-T connections
- MDI/MDIX switchable port allows for simple cascading of hubs without the need for special crossover cable.
- Slot for optional transceiver interface module provides a connection to legacy networking devices or fiber.
- 19" size for easy installation in a wiring closet. A rackmounting kit is supplied. The product can also be used free-standing.
- Diagnostic LEDs indicate network traffic, port status, and collisions, making it easy to spot-check faults and check individual port status.
- 3Com lifetime limited warranty
- Connection for the SuperStack II Advanced Redundant Power System provides ultimate protection against network downtime. The SuperStack II Advanced Redundant Power System and Uninterruptible Power System are available as options from 3Com.

## SuperStack II Baseline Hubs

### Front View



### Back View



## Transceiver Interface Modules

The 12- and 24-port Baseline Hubs are equipped with a slot ready to accommodate one of 3Com's slide-in transceiver interface modules. Here are some ways to use them:

1. They allow you to connect to legacy equipment via 10BASE2 (coaxial) cable or AUI cable. The following transceiver interface modules can be used for this:
  - **Coaxial Module** BNC connector (3C1206-6) – Provides direct connection to a 10BASE2 (coaxial) network via a BNC connector.
  - **AUI Module** female AUI connector (3C1206-0) – Provides connection to an external transceiver via an AUI connector.
  - **Fan-Out Module** male AUI connector (3C1206-4) – Provides direct connection to a PC, server, or network device via an AUI cable.
2. They can give you a direct interface from your Baseline Hub to a 10 Mbps fiber link (for example, a campus backbone connection). The following variants are available:
  - **10BASE-FL Module** with ST fiber connector (3C1206-5)
  - **10BASE-FB Module** with ST fiber connector (3C12067)
3. They can provide you with an additional 10BASE-T port.
  - **UTP Module** with RJ45 connector (3C12063)

## SuperStack II Baseline Dual Speed Hubs

The 3Com SuperStack II Baseline Dual Speed Hubs give you the simplest way to migrate to high-speed Fast Ethernet networking while protecting your existing network investment. The Baseline Dual Speed Hubs allow you to provide high-speed connections to users while maintaining compatibility with legacy shared 10 Mbps Ethernet networks. Power users using Fast Ethernet who require faster server and network response times can coexist with Ethernet users without draining valuable network bandwidth.

Each Baseline Dual Speed Hub has 12 or 24 auto-sensing ports, which automatically detect the speed of the attached device and optimize network performance at either 10 Mbps or 100 Mbps. The SuperStack II Baseline Dual Speed Hub is unmanaged and works straight out of the box. There's no need to set network speed. At last, plug and play that is truly plug and play!

- 12 or 24 RJ-45 10BASE-T/100BASE-TX connections.
- Auto sensing on each port—automatically senses the speed of the network device at the other end of the cable and optimizes performance.
- Integrated Ethernet to Fast Ethernet switch provides seamless integration between 10 Mbps and 100 Mbps segments.

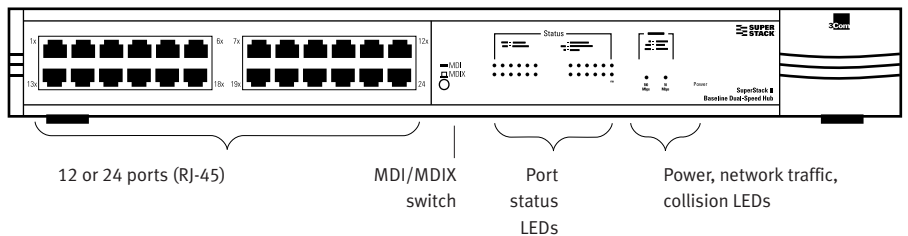
### 10/100 Autosensing

A port will automatically adjust its speed according to the equipment to which it is connected. When the UTP cable is connected and the link is first established, the hub or switch will instantly and automatically sense the maximum speed of the device at the other end of the cable. It will communicate with the other device at 100 Mbps if possible, or else it will run at 10 Mbps.

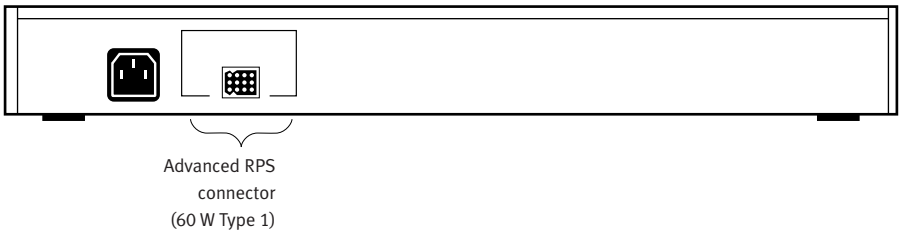
Note: Although you are able to use Category 3 grade cabling for 10 Mbps links, you must use Category 5 grade cabling for links running at 100 Mbps.

## SuperStack II Baseline Dual Speed Hubs

### Front View



### Back View



- Conforms as a Class II Fast Ethernet repeater, which means that two SuperStack II Baseline Dual Speed Hubs can be cascaded in series (the maximum allowed according to the Fast Ethernet specification).
- MDI/MDIX switchable port allows for simple cascading of hubs without the need for a special crossover cable.
- 19" size for easy installation in a wiring closet. A rackmounting kit is supplied. The product can also be used free-standing.
- Diagnostic LEDs indicate port status, network traffic, and collisions on 10 Mbps and 100 Mbps segments, making it easy to spot-check faults and check individual port status.
- 3Com lifetime limited warranty
- Connection for the SuperStack II Advanced Redundant Power System provides ultimate protection against network downtime. The SuperStack II Advanced Redundant Power System and Uninterruptible Power System are available as options from 3Com.

## SuperStack II Baseline Switch

The 3Com SuperStack II Baseline switch delivers the power of Ethernet switching at an affordable price, and includes two switched 10/100 Mbps ports as standard. Designed to meet your immediate performance demands, the Baseline switch is an ideal solution when bandwidth is constrained and users need a cost-effective solution to speed up the network.

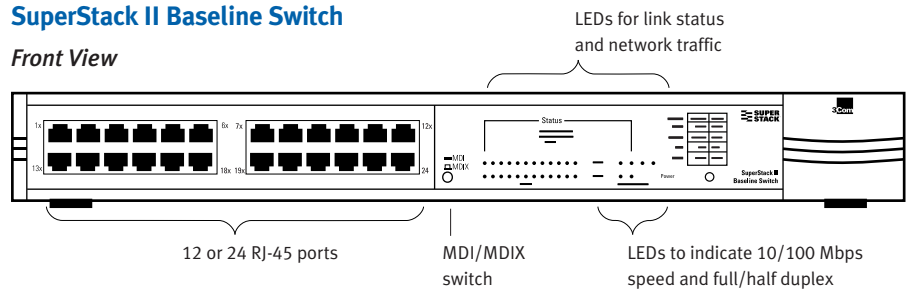
The Baseline switch has 12 or 24 10BASE-T switched ports and two 10/100BASE-TX (Ethernet or Fast Ethernet) switched ports that automatically detect the speed of connected devices, optimizing network performance to 100BASE-TX, where applicable. These are ideal for use as high-speed connections to servers or as downlink ports to the rest of the network where traffic is highest and bandwidth is at a premium. The SuperStack II Baseline switch is unmanaged and works straight out of the box.

- 12 or 24 RJ-45 10BASE-T switched connections.
- Two RJ-45 10BASE-T/100BASE-TX auto-sensing uplink ports provide high-speed connections to network servers or a backbone connection.
- Autonegotiating full-/half-duplex operation on each port doubles the speed of each network connection to 20 Mbps (for 10BASE-T ports) or up to 200 Mbps (for 100BASE-TX ports).
- MAC addresses support up to 2,000 network devices on your local area network.\*
- Two MDI/MDIX switchable ports (one 10 Mbps port and one 10/100 Mbps port) let you cascade hubs and switches and add high-speed downlink connections without using crossover cable.
- 19" size for easy installation in a wiring closet. A rackmounting kit is supplied. The product can also be used free-standing.
- Diagnostic LEDs indicate network traffic, port status, speed+ and full-/half-duplex+ operation of the 10/100 Mbps ports, making it easy to spot-check faults and check individual port status.

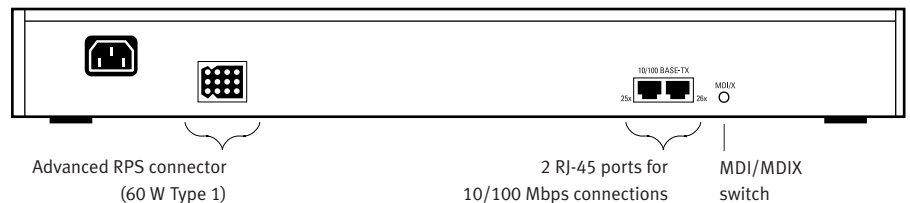
\* 750 MAC addresses supported by 12-port version  
+ Only available on 24-port version

### SuperStack II Baseline Switch

#### Front View



#### Back View



- 3Com lifetime limited warranty
- Connection for the SuperStack II Advanced Redundant Power System provides ultimate protection against network downtime. The SuperStack II Advanced Redundant Power System and Uninterruptible Power System are available as options from 3Com.

### SuperStack II

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 solutions.

As an important part of the 3Com Transcend Networking framework, SuperStack II systems will meet your evolving network needs—futureproofing 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, as well as a dedicated RMON/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 with fewer than 20 users, our OfficeConnect® products can be used to complement SuperStack II systems.

## SuperStack II Baseline 10/100 Switches

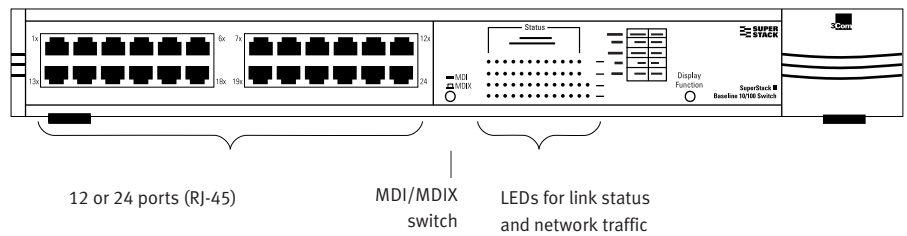
The 3Com SuperStack II Baseline 10/100 switches provide the highest performance product in the SuperStack II Baseline family. Delivering the power of switched Fast Ethernet while automatically sensing the speed of the connected devices, the SuperStack II Baseline switches are ideal for any environment where raw power and performance are needed, but management is not required. The Baseline 10/100 switches can be used as an aggregation device connecting to other switches or hubs, or to provide cost-effective, highest-performance desktop connections.

The Baseline 10/100 switches provide 12 or 24 10/100BASE-TX (Fast Ethernet) switched ports that automatically detect the speed of connected devices, optimizing network performance to 100BASE-TX, where applicable. The SuperStack II Baseline switches are unmanaged and work straight out of the box.

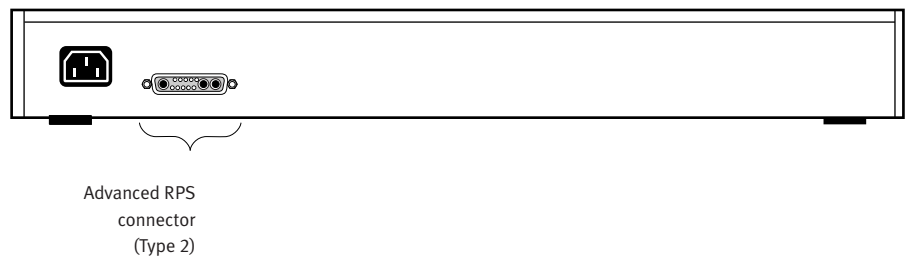
- 12 or 24 RJ-45 10BASE-T/100BASE-TX auto-sensing ports provide the ultimate in high-speed switching connectivity.
- Autonegotiating full-/half-duplex operation on each port doubles the speed of each network connection to 200 Mbps.
- MAC addresses support up to 4,000 network devices on your local area network.

## SuperStack II Baseline 10/100 Switches

### Front View



### Back View



- IEEE 802.3x Flow Control ensures network traffic is not lost during peaks in traffic rates on high-throughput, full-duplex links.
- 19" size for easy installation in a wiring closet. A rackmounting kit is supplied. The product can also be used free-standing.
- Diagnostic LEDs indicate network traffic and port status of each port, making it easy to spot-check faults and check individual port status.
- 3Com lifetime limited warranty
- Connection for the SuperStack II Advanced Redundant Power System provides ultimate protection against network downtime. The SuperStack II Advanced Redundant Power System and Uninterruptible Power System are available as options from 3Com.

### 802.3x Flow Control

If network traffic becomes so high that a switch can no longer process all the data, one of two things may happen. The switch may drop data (not retransmit all of it). Network software protocols will need to recover lost data, and the network will be significantly slower.

Alternatively, a switch may be able to employ methods to ensure that data is not lost by controlling the flow of the traffic. IEEE 802.3x

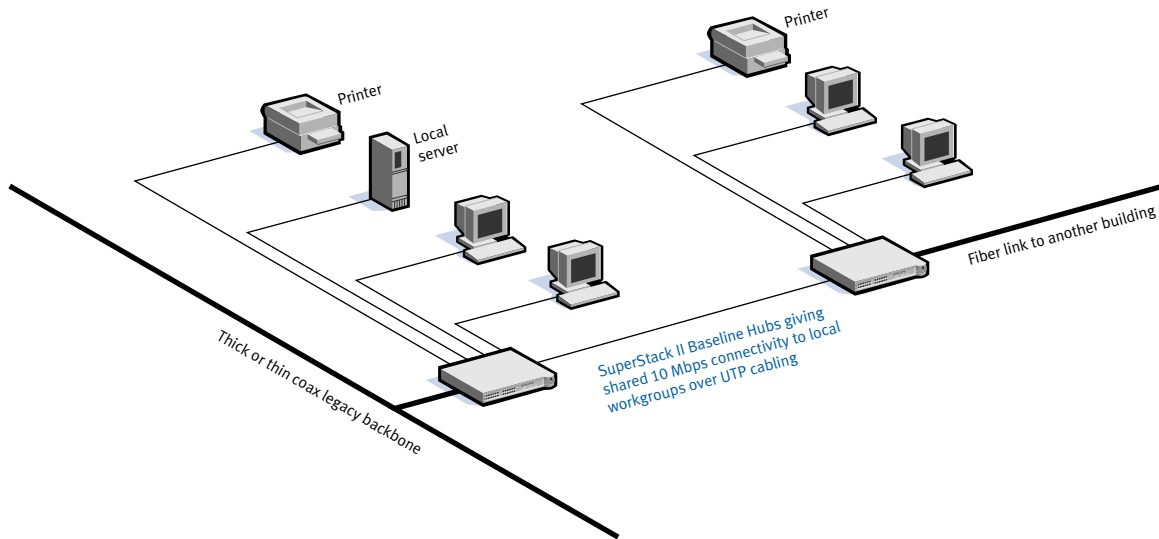
Flow Control allows a switch to do this.

The potential for very high network traffic rates is most acute on 100 Mbps links running in full-duplex mode. To ensure that network traffic is not lost, the SuperStack II Baseline 10/100 Switches employ IEEE 802.3x Flow Control to keep the network running at peak performance.

## Shared 10 Mbps Connections to a Legacy LAN

SuperStack II Baseline hubs provide the most cost-effective method of connecting workgroups to a legacy LAN.

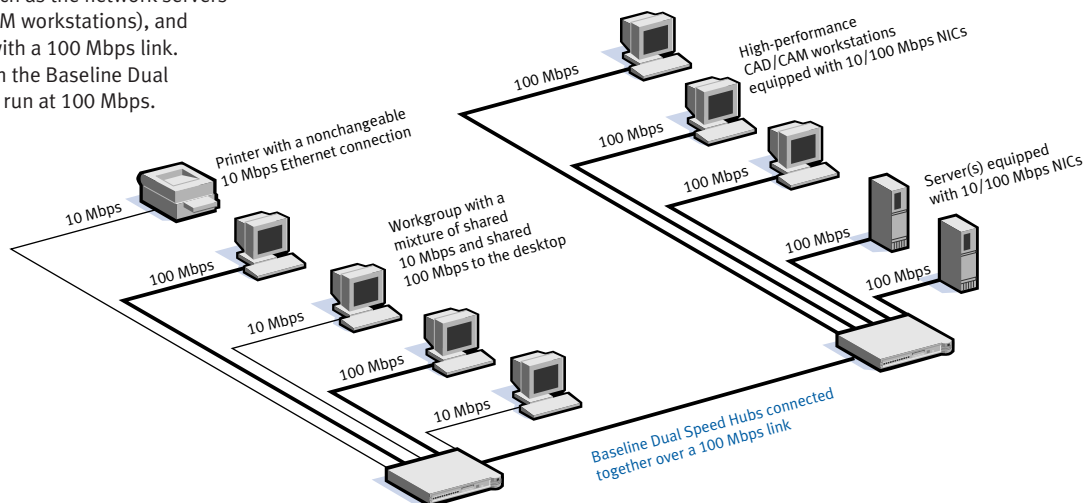
A transceiver interface module is used to connect to a thin coaxial cable or thick coaxial cable legacy backbone (via an AUI and external transceiver). Similarly, a transceiver interface module provides a fiber link to another building.



## Shared 10/100 Mbps in a Small-to-Medium Sized Office

SuperStack II Baseline Dual Speed Hubs are used here to provide a small-to-medium sized office (up to 42 network connections) with a mixture of shared 10 Mbps and shared 100 Mbps links to the desktop.

The Baseline Dual Speed Hub autosenses those network devices capable of running at 100 Mbps (such as the network servers and the CAD/CAM workstations), and provides them with a 100 Mbps link. The link between the Baseline Dual Speed Hubs will run at 100 Mbps.



\* According to configuration rules in the Fast Ethernet specification (IEEE 802.3u), no more than two Class II Fast Ethernet repeaters (such as the SuperStack II Baseline Dual Speed Hub) can be connected in a series. To expand the above network, a switch is needed.



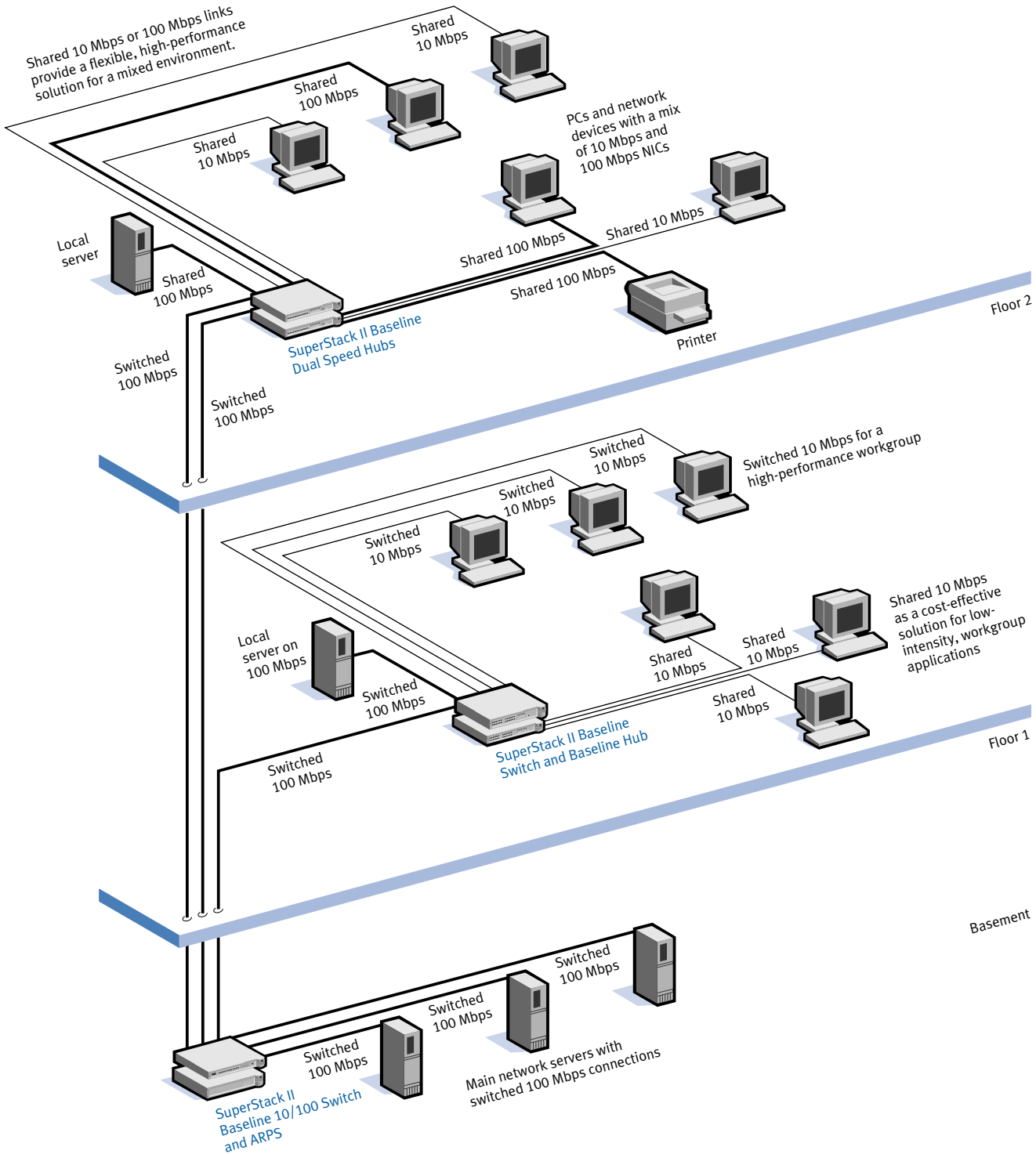
## A Complete Solution for a Medium Enterprise

This shows a medium-sized office using a combination of all SuperStack II Baseline products. A mix of switched and shared 10 Mbps and 10/100 Mbps delivers higher performance connections where they are needed, while keeping the overall system cost to a minimum.

**In the basement,** a single SuperStack II Baseline 10/100 switch provides 100 Mbps switched links to the floors and to each of the main servers.

**On floor 1,** a SuperStack II Baseline switch and a Baseline hub provide a mix of switched 10 Mbps and shared 100 Mbps network connections. Users requiring the highest possible performance from a 10 Mbps link are given switched connections to their desktops while those with less demand on network access have 10 Mbps shared links to the hub. Access to a local server is provided via the second 100 Mbps connection from the Baseline Switch.

**On floor 2,** SuperStack II Baseline Dual Speed Hubs provide 10/100 Mbps auto-sensing connections to each of the network connections to workgroups that have a mixture of 10 Mbps and 100 Mbps network devices.



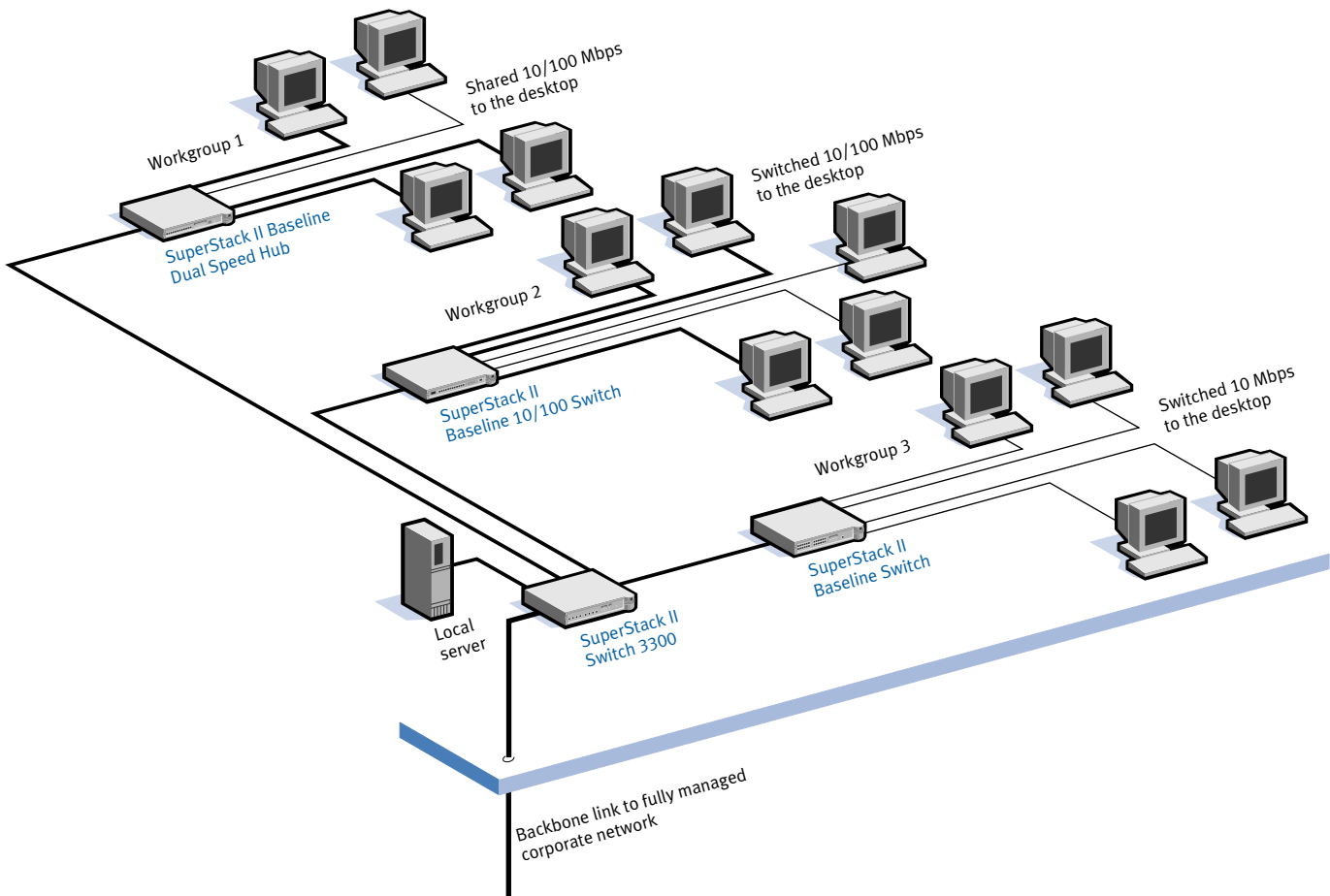
## SuperStack II Baseline Within the Managed Network Environment

As part of the SuperStack II range, the SuperStack II Baseline products can be integrated smoothly and effectively into a 3Com enterprise network solution that employs network management but that does not require it all the way to the desktop.

In this example, network management is used at the core of the network, and is provided out to the workgroup level on the floor shown below by the SuperStack II Switch 3300.

High-performance, unmanaged connections are then provided to users' desktops by the SuperStack II Baseline products, as shown.

Used in this way, reliable, high-speed network connections can be delivered to the desktop in an extremely cost-effective way, while ensuring complete compatibility and fitting in with the corporate network structure.



## Specifications

### SuperStack II Baseline Hubs and Switches

#### SuperStack II Baseline Hubs

**3C16440 (12 port)**  
**3C16441 (24 port)**

Functional: ISO 8802/3;  
IEEE 802.3 (Ethernet)

Media Interfaces: 12/24  
shielded RJ-45 TP; ARPS  
connector (60 W Type 1);  
Transceiver Interface Module  
slot

Indicators per unit: Power;  
Network Traffic; Collisions

Indicators per port: Link Status;  
Partition

MAC Addresses: N/A

Safety: IEC 950; UL 1950;  
CSA 22.2 No. 950; EN 60950

Electromagnetic: EN 55022  
Class B\* and Class A; FCC Part 15  
Subpart B Class A; ICES-003  
Class A; VCCI Class B\* and  
Class A; AS/NZS 3548 Class B\*  
and Class A; EN 50082-1

#### Environmental

EN 60068 (IEC 68)

Operating temperature: 0° to  
50°C (32° to 122°F)

Operating Humidity: 10% to  
95% (noncondensing)

Storage temperature: -10° to  
+70°C (14° to 158°F)

Storage Humidity: 10% to 95%  
(noncondensing)

#### Physical

Width: 440 mm (17.3 in)

Height: 44 mm (1.7 in), or 1U

Depth: 224 mm (8.8 in)

Weight: 2.04 kg (4.5 lb)

#### Electrical

Fuse Protection: 2 A

Power Inlet: IEC 320

Input Voltage Range: 100-240 V;  
50-60 Hz

Power Consumption (Maximum):  
12-port, 34 W; 24-port, 44 W

SuperStack II ARPS Connection:  
60 W Type 1

#### Heat Dissipation (Maximum)

12 port: 116 BTU/hr

24 port: 150 BTU/hr

#### SuperStack II Baseline Dual Speed Hubs

**3C16592A (12 port)**  
**3C16593A (24 port)**

Functional: ISO 8802/3;  
IEEE 802.3 (Ethernet);  
IEEE 802.3u (Fast Ethernet)

Media Interfaces: 12/24  
shielded RJ-45 TP; ARPS  
connector (60 W Type 1)

Indicators per unit: Power;  
Network Traffic (per segment);  
Collisions (per segment)

Indicators per port: Link Status;  
Partition

MAC Addresses: 4,000

Safety: IEC 950; UL 1950;  
CSA 22.2 No. 950; EN 60950

Electromagnetic: EN 55022  
Class B\* and Class A; FCC Part  
15 Subpart B Class A; ICES-003  
Class A; VCCI Class B\* and  
Class A; AS/NZS 3548 Class B\*  
and Class A; EN 50082-1

#### Environmental

EN 60068 (IEC 68)

Operating temperature: 0° to  
50°C (32° to 122°F)

Operating Humidity: 10% to  
95% (noncondensing)

Storage temperature: -10° to  
+70°C (14° to 158°F)

Storage Humidity: 10% to 95%  
(noncondensing)

#### Physical

Width: 440 mm (17.3 in)

Height: 44 mm (1.7 in), or 1U

Depth: 173 mm (6.8 in)

Weight: 12 port: 2.1 kg (4.7 lb)

24 port: 2.3 kg (5 lb)

#### Electrical

Fuse Protection: 5 A

Power Inlet: IEC 320

Input Voltage Range:  
100-120 V/200-240 V; 50-60 Hz

Power Consumption (Maximum):  
12-port, 84 W; 24-port: 130 W

SuperStack II ARPS Connection:  
60 W Type 1

#### Heat Dissipation (Maximum)

12 port: 86 BTU/hr

24 port: 142 BTU/hr

#### SuperStack II Baseline Switches

**3C16460 (12 port, 10 Mbps  
switched ports plus 2 x 10/100  
Mbps auto-sensing ports)**

**3C16462 (24 port, 10 Mbps  
switched ports plus 2 x 10/100  
Mbps auto-sensing ports)**

Functional: ISO 8802/3;  
IEEE 802.3 (Ethernet);  
IEEE 802.3u (Fast Ethernet)

Media Interfaces: 14 shielded  
RJ-45 TP; ARPS connector (60 W  
Type 1)

Indicators per unit: Power

Indicators per port: Network  
Traffic; Link Status; Speed  
(10/100 Mbps ports); Full  
Duplex (10/100 Mbps ports)

MAC Addresses: 12 port: 750;  
24 port: 2,000

Safety: IEC 950; UL 1950;  
CSA 22.2 No. 950; EN 60950

Electromagnetic: EN 55022  
Class B\*; FCC Part 15 Subpart B  
Class A\*; ICES-003 Class A\*;  
VCCI Class B\*; AS/NZS 3548  
Class B\*; EN 50082-1

#### Environmental

EN 60068 (IEC 68)

Operating temperature: 0° to  
50°C (32° to 122°F)

Operating Humidity: 10% to  
95% (noncondensing)

Storage temperature: -10° to  
+70°C (14° to 158°F)

Storage Humidity: 10% to 95%  
(noncondensing)

#### Physical

Width: 440 mm (17.3 in)

Height: 44 mm (1.7 in), or 1U

Depth: 173 mm (6.8 in)

Weight: 2.04 kg (4.5 lb)

#### Electrical

Fuse Protection: 2 A

Power Inlet: IEC 320

Input Voltage Range: 100-240 V;  
50-60 Hz

Power Consumption (Maximum):  
48 W

SuperStack II ARPS Connection:  
60 W Type 1

#### Heat Dissipation (Maximum)

12 port: 164 BTU/hr

24 port: 72 BTU/hr

#### SuperStack II Baseline 10/100 Switches

**3C16464A (12 port)**  
**3C16465A (24 port)**

Functional: ISO 8802/3;  
IEEE 802.3 (Ethernet);  
IEEE 802.3u (Fast Ethernet);  
IEEE 802.3x (Flow Control)

Media Interfaces: 12/24  
shielded RJ-45 TP; ARPS  
connector (Type 2)

Indicators per unit: Power

Indicators per port: Network  
Traffic; Link Status; Speed  
(10/100 Mbps ports); Full  
Duplex (10/100 Mbps ports)

MAC Addresses: 4,000

Safety: IEC 950; UL 1950;  
CSA 22.2 No. 950; EN 60950

Electromagnetic: EN 55022  
Class B\* and Class A; FCC Part  
15 Subpart B Class A; ICES-003  
Class A; VCCI Class B\* and  
Class A; AS/NZS 3548 Class B\*  
and Class A; EN 50082-1

#### Environmental

EN 60068 (IEC 68)

Operating temperature: 0° to  
50°C (32° to 122°F)

Operating Humidity: 10% to  
95% (noncondensing)

Storage temperature: -10° to  
+70°C (14° to 158°F)

Storage Humidity: 10% to 95%  
(noncondensing)

#### Physical

Width: 440 mm (17.3 in)

Height: 44 mm (1.7 in), or 1U

Depth: 235 mm (9.3 in)

Weight: 2.6 kg (5.8 lb)

#### Electrical

Fuse Protection: 1 A

Power Inlet: IEC 320

Input Voltage Range: 100-240 V;  
50-60 Hz

Power Consumption (Maximum):  
200 W

SuperStack II ARPS Connection:  
Type 2

#### Heat Dissipation (Maximum)

12 port: 165 BTU/hr

24 port: 300 BTU/hr

\*Requires the use of Category 5 screened cables to comply with the requirements of this standard.



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## Specifications

### Ordering Information

#### SuperStack II Baseline Products

SuperStack II Baseline Hub  
(12 port) 3C16440

SuperStack II Baseline Hub  
(24 port) 3C16441

SuperStack II Baseline  
Dual Speed Hub  
(12 port) 3C16592A

SuperStack II Baseline  
Dual Speed Hub  
(24 port) 3C16593A

SuperStack II Baseline Switch  
(12 port 10 Mbps switched ports  
plus 2 x 10/100 Mbps auto-  
sensing ports) 3C16460

SuperStack II Baseline Switch  
(24 port 10 Mbps switched ports  
plus 2 x 10/100 Mbps auto-  
sensing ports) 3C16462

SuperStack II Baseline  
10/100 Mbps Switch  
(12 port) 3C16464A

SuperStack II Baseline  
10/100 Mbps Switch  
(24 port) 3C16465A

#### Power Supply Systems

SuperStack II ARPS 3C16071

SuperStack II ARPS 60 W Power  
Module Burndy Type 3C16072

SuperStack II ARPS 100 W  
Power Module Burndy Type  
3C16073

SuperStack II ARPS Power  
Module Type 2 3C16074

SuperStack II ARPS  
Y-Cable Burndy Type 3C16079

SuperStack II ARPS  
Y-Cable Type 2 3C16078

SuperStack II UPS  
(U.S.) 3C16010

SuperStack II UPS  
(International) 3C16011

SuperStack II UPS  
(Japan) 3C16012

### Transceiver Interface Modules for SuperStack II Baseline Hubs

AUI Transceiver  
Interface Module  
(One female AUI) 3C1206-0

TP Transceiver  
Interface Module  
(One RJ-45) 3C12063

Fan-Out Transceiver  
Interface Module  
(One male AUI) 3C1206-4

10BASE-FL Transceiver  
Interface Module  
(One pair ST) 3C1206-5

10BASE-FB Transceiver  
Interface Module  
(One pair ST) 3C12067

Coaxial Transceiver  
Interface Module  
(BNC) 3C1206-6

### More SuperStack II Hubs and Switches Product Information

SuperStack II Baseline hubs and switches are the most cost-effective, high-quality, unmanaged hubs and switches. 3Com provides a complete range of fully featured, managed, and stackable hubs and switches with a variety of upgrade options from the award-winning SuperStack II product family. For more information, refer to the SuperStack II Dual Speed Hub 500 data sheet, stock no. 400307-005, the SuperStack II Switch data sheet, stock no. 400260-012, or the SuperStack II PS Family Hub data sheet, stock no. 400234-006.

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