



SuperStack II Dual Speed Hub

Autosensing 10/100 Hub

A flexible, easy-to-use 10BASE/100BASE hub for simple, economical migration from shared 10 Mbps to 100 Mbps performance

The 12- or 24-port 10/100 Mbps SuperStack II Dual Speed hub includes a rear Media Independent Interface (MII) port to connect to 100BASE-TX, 100BASE-T4, or 100BASE-FX downlink modules. Connecting the hub to a SuperStack II Advanced Redundant Power System (RPS) or Uninterruptible Power System (UPS) supplies back-up power for resilient, mission-critical operation.



Introduction

The SuperStack II Dual Speed Hub, built on proven Ethernet technology, delivers the power and flexibility of two hubs and a switch in one economical, space-saving unit. The 10/100 Mbps Ethernet hub is ideal for customers who want an easy, cost-effective migration solution to 100 Mbps network performance, while still maintaining compatibility with their legacy 10 Mbps LANs.

Now 100 Mbps power users who require fast server response times can coexist with 10 Mbps users without draining valuable workgroup bandwidth. Autosensing ports automatically detect the speed of the attached NIC connection and channel the data to the appropriate backplane segment. The plug-and-play hub provides a flexible way to introduce high-speed connectivity while preserving existing network equipment investments.

Key Benefits

■ **Affordable enhanced performance.** Full 100 Mbps connectivity significantly boosts network workgroup performance. Dual-speed architecture provides flexibility at low cost.

■ **Easy migration to high-speed performance.** All 10- and 100-Mbps users can exist on one workgroup, utilizing existing network equipment, while providing an incremental migration path to Fast Ethernet.

■ **Automatic network speed detection.** Unique auto-sensing 10/100 Mbps ports automatically detect the speed of the attached device.

■ **Easy installation and operation.** The self-configuring, unmanaged hub ensures reliable, trouble-free installation.

■ **Cost-saving, space-saving “all-in-one” solution.** One hub provides 10 Mbps hub, 100 Mbps hub and 10/100 switch functionality.



Effortless Fast Ethernet Migration in One Integrated Unit

The SuperStack II Dual Speed Hub brings relief from the overhead and equipment costs traditionally associated with migrating legacy 10 Mbps LANs to Fast Ethernet performance. Now you don't have to face major equipment investment, or costly, time-consuming NIC and cabling upgrades to achieve the benefits of high-speed networking. One hub is all you need to migrate users to high-speed performance at your own pace.

It's the perfect solution for small- and medium-sized companies that want a "one-box" solution to different client-server bandwidth needs, for mobile power users that need to connect their 10/100 laptops without bringing down the network; or for larger companies that want to evaluate Fast Ethernet technology but keep work flow disruption and entry costs to a minimum.

Dual Speed Hub Choices

You have lots of choices with the SuperStack II Dual Speed Hub. Have a small workgroup or just want to try out Fast Ethernet technology in a limited setting? The 12-port hub offers the advantages of mixed 10/100 Mbps speed networking at a

very low cost of entry, while the 24-port hub provides higher port density, but still at an attractively low price.

The hub's MII port supports 100BASE-TX, 100BASE-T4, or 100BASE-FX media transceivers dynamically to meet a range of server backbone and downlink connections. The hub's autonegotiation feature automatically detects and responds to changes in the transceiver downlink connection. Port 12 or 24 can also be configured as a cross-over port to connect to another SuperStack II Dual Speed Hub or a SuperStack II Hub 100.

The SuperStack II Dual Speed Hub is designed to fit into any size network environment. The hub can be wall mounted or left free standing in an office or workgroup space, or rack mounted in a wiring closet or equipment room.

Powerful Dual Speed Architecture

Based on proven Ethernet technology, the SuperStack II Dual Speed Hub features independent 10 Mbps and 100 Mbps repeater segments connected by a two-port internal switch. Dual-speed, autosensing hub ports automatically sense the speed of attached devices. Traffic between devices running at the same speed is isolated within the appropriate repeater segment, while

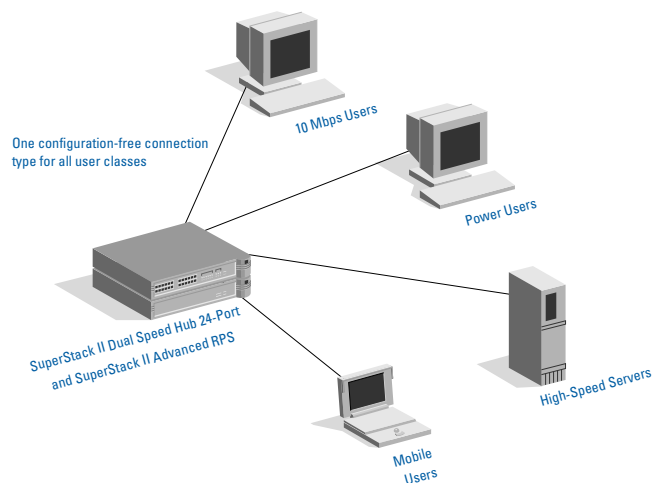
Power Supplies for Fail-Safe Operation

3Com gives you all the choices you need to ensure constant power to your SuperStack II Dual Speed Hubs. Depending on your requirements, you can select the Advanced Redundant Power System (3C16070) or the Uninterruptible Power System (3C16010 [U.S.], 3C16011 [International], 3C16012 [Japan]). All work with any product in the SuperStack II family.

The Advanced RPS is ideal as a backup for individual power supplies in SuperStack II units. It comprises two load-sharing bulk power supplies fed by two independent AC lines. Either of the two bulk supplies alone can support a pair of SuperStack II Dual Speed Hubs.

The UPS protects the hubs from the effects of brown-outs or spikes that occur in outside power lines. The UPS ensures that your hubs will keep running at all times with protection from potentially damaging events on the external power grid.

In small- to medium-sized office installations, the SuperStack II Dual Speed Hub can be used to front-end a high-speed sever farm in mixed 10/100 Mbps-user workgroup environments. The hub's low cost, plug-and-play installation and operation, space saving configuration, and future expansion options make it a perfect solution for price-conscious businesses. The SuperStack II Dual Speed Hub can also be used to accommodate mobile laptop users equipped with 10/100 Mbps NICs who need a flexible and fool-proof way to log into network resources.



traffic to or from devices running at different speeds is automatically switched to the other segment by the internal switch.

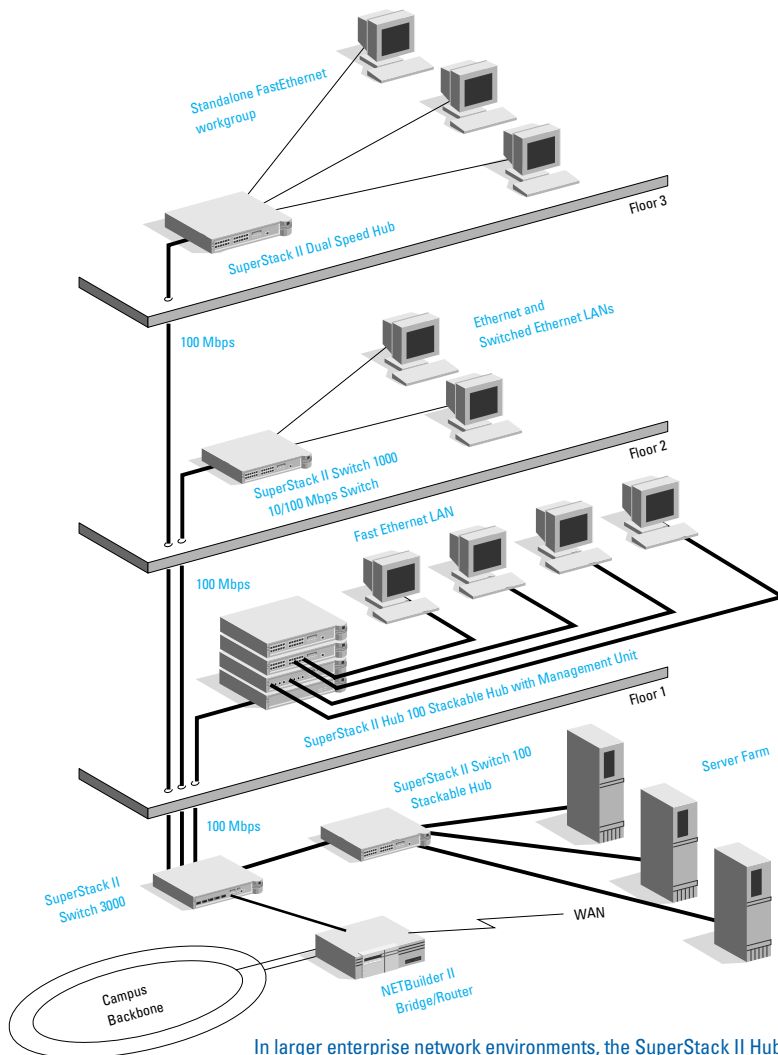
The hub allows 10/100 NIC-equipped PCs connected by standard Category 5 cabling to transmit data successfully at 10 Mbps.

Complete Fast Ethernet Solutions

The 100BASE-T Fast Ethernet offers an easy and affordable way to increase performance, delivering 10 times the bandwidth of 10BASE-T Ethernet at about twice the price. You

can apportion bandwidth where it's needed by combining 100BASE-T and 10BASE-T in the same network.

3Com provides a full complement of Fast Ethernet products to give you end-to-end 100BASE-T capabilities. For workgroups, 3Com offers Fast EtherLink 10/100 NICs, the SuperStack II Hub 100, and the SuperStack II Switch 3000. In the data center, 3Com offers the LANplex 2500 and LANplex 600 high-function switches; Fast Ethernet modules for the ONcore; and LinkBuilder MSH high-function switching platforms; and the NETBuilder II bridge/router.

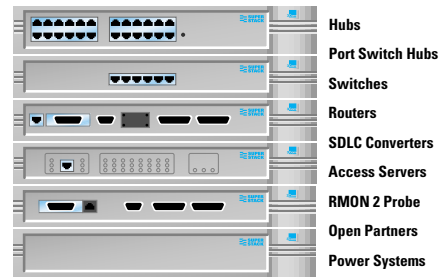


In larger enterprise network environments, the SuperStack II Hub 100 can be used as a scalable, stackable platform enabling users to increase port density, enhance system reliability and add SNMP management. The addition of Ethernet/Fast Ethernet switches and a high-performance bridge/router can provide 100Mbps performance across the network site.

The Dual Speed Hub is the ideal choice for stand-alone workgroups within larger enterprises that wish to experiment with Fast Ethernet technology or use it in an unmanaged environment.



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 system; strengthen it with uninterruptible and redundant power systems; and manage the system with Transcend® management software.

As an important part of 3Com's Transcend Networking framework, SuperStack II will meet your evolving network needs; thereby future-proofing your network investment.

A single SuperStack II system provides connections for a range of network environments and protocols: Ethernet, 100BASE-T 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:

- Shared and Port Switched hubs for flexible workgroup connectivity with SNMP management
- Industry-leading physical layer support for Token Ring networks
- Full RMON support for Ethernet, Fast Ethernet, and Token Ring networks, as well as dedicated RMON 2 probe
- Full range of switches to boost performance in high-speed client-server LANs
- Full, multiprotocol network access for teleworkers or users at offsite 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 a SNA host system
- Choice of power systems to ensure uninterrupted network operation

For smaller offices of less than 20 users, our OfficeConnect™ products can be used to complement SuperStack II.



Specifications

SuperStack II Dual Speed Hub Autosensing 10/100 Hub

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Dimensions and Weight

Height: 2.6 inches (66.3mm)
Width: 19.0 inches (483mm)
Depth: 12.2 inches (310mm)
Weight: 12 Port - 10.1 pounds (4.5 kilos)
24 Port - 11.0 pounds (4.9 kilos)

Connections and Cables

12 or 24 RJ-45 ports supporting
10 BASE-T transmission over 4 pairs of
Category 3, 4, or 5 UTP cable, or
100 BASE-TX transmission over 4 pairs
of Category 5 UTP/STP cable

Power Requirement

AC Line Frequency: 47 to 63 Hz
Input Voltage Options: 100-120/200-
240 VAC
Power Consumption: 84W (12 port),
130W (24port)
Power Inlet: IEC 320
Fuse Protection: 5A
Heat Dissipation/Hour: 286 BTU (12
port), 443 BTU (24 port)

Environmental Ranges

Operating Temperature: 0° to 122° F
(0° to 50° C)
Operating Humidity: 10% to 95%
noncondensing
Storage Temperature: 14° to 158° F
(-10° to +70° C)
Storage Humidity: 10% to 95%
noncondensing
Vibration and Shock: EN 60068 (IEC
68) to 3Com PDD schedule

Indicators

Per Unit LEDs: power status,
collision/activity
Per Port LEDs: partition, link status,
100M segment

MAC Addresses

**Number supported by internal 10/100
switch:** 8192

Standards Compliance

IEEE802.3u 100BASE-T compliant
100 Mbps baseband CSMA/CD standard
(complies with IEEE standard Class 1
repeater; ISO 8802/3)

Safety

UL 1950 Second Edition EN60950:
1992, + A1: 1992, + A2: 1993,
+ A3: 1995, including all ZB & ZC
TUV GS Mark

Mounting

Includes hardware for mounting
in a standard 19-inch rack

Ordering Information

Hub

SuperStack II Dual Speed Hub 12 Port TX	3C16590
SuperStack II Dual Speed Hub 24 Port TX	3C16591

Optional Equipment

SuperStack II Advanced RPS	3C16070
SuperStack II UPS (International version)	3C16011
SuperStack II UPS (Japanese version)	316012
SuperStack II UPS (U.S. version)	3C16010

Contact your local 3Com supplier for
information on sourcing MII Transceiver
Interfaces

One Year Warranty

Each SuperStack II Dual Speed Hub is covered by a one-year limited warranty. Power supplies and fans are warranted for one year. To qualify for the warranty, you must submit a registration card. Advance hardware exchange is available during the first year; thereafter, return the hub to 3Com for repair. The warranty is not offered where restricted or prohibited by law.

To learn more about 3Com products, visit our World Wide Web site at <http://www.3com.com>.

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