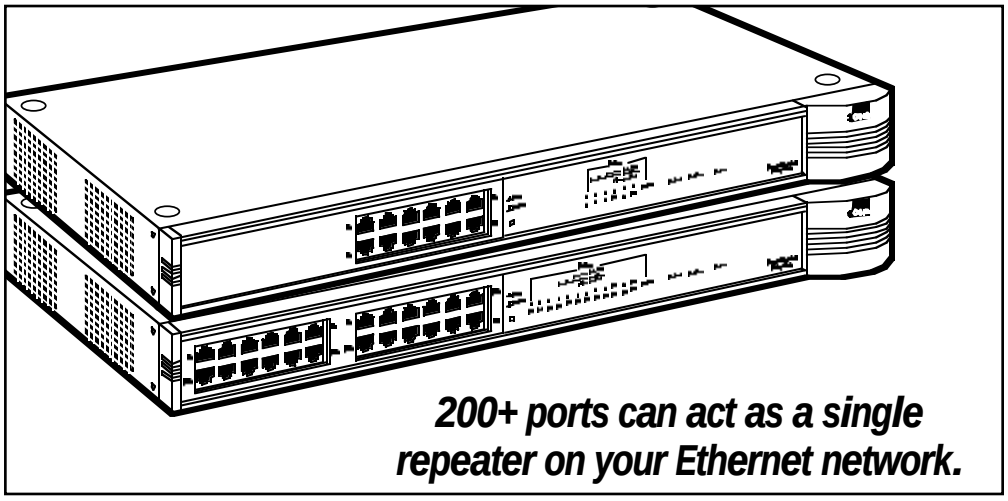
BLACK BOX®
NETWORK SERVICES

3COM SUPERSTACK II HUB 10
3COM SUPERSTACK II ENTRY HUBS 12/24



200+ ports can act as a single repeater on your Ethernet network.

Key Features

- ***Provides all the functions of an 802.3 repeater.***
- ***Connect up to 24 twisted pair segments (depending on model) to the front of the unit.***
- ***Connect any 10BASE5 transceiver to the unit via an AUI cable.***
- ***Modular Management or RMON Module helps you manage your network.***
- ***Up to 16 resilient link pairs can be configured via management software.***
- ***A Hub for every Ethernet media type: TP, fiber, or telco.***

The 3Com® SuperStack II™ Hub 10 works in conjunction with a Management Module or Advanced RMON Module and, optionally, with a stack of other SuperStack II Hubs to manage your local area network.

The Hub provides all the standard functions of an 802.3 repeater, including signal retiming, preamble regeneration, fragment extension, and automatic partition/reconnection.

The Hub has 12 or 24 dedicated twisted-pair ports on the front panel and an AUI port on the rear panel. The rear panel also has a slot for a 3Com Transceiver module or Bridge MicroModule; if fitted, the Module will operate in place of the AUI port. A variety of Transceiver Modules for different media is available. For all of the Hubs except the 12-Port, both the AUI port and the Transceiver port can be active at the same time.

Use the Hub as a standalone unit, or link it with other SuperStack II Hub 10s to form a stack of units of different media. Each stack is the equivalent of a single IEEE 802.3 repeater, so you get more ports without adding to your repeater count.

The Hub is suited for office use, where it can be wall-mounted, rack-mounted, or free-standing. Alternatively, the unit can be rack-mounted in a wiring closet or equipment room.

The Hub can be powered either from the AC mains supply or through an optional 3Com Redundant Power System.

Unmanaged Hubs are also available:

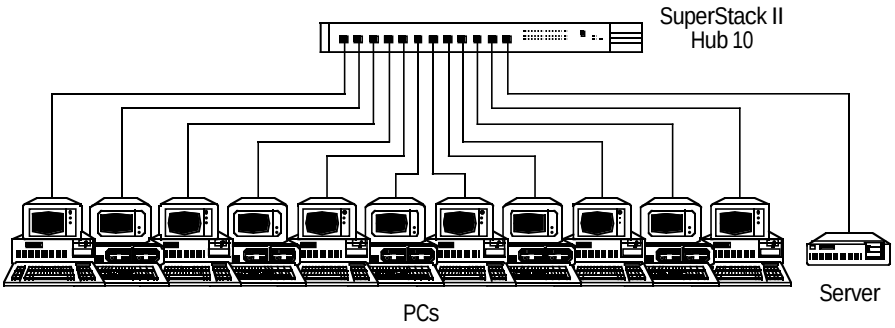
- SuperStack II Entry Hub 12 (3C16440) provides 12 10BASE-T ports.
- SuperStack II Entry Hub 24 (3C16441) provides 24 10BASE-T ports.

Typical Application

Connect 12 or 24 workstations (depending upon which model you use) to the Hub's twisted-pair ports to form a 10BASE-T workgroup.

Create a 10-Mbps network with the SuperStack II Hub 10.

Run a 10-Mbps network with the SuperStack II Hub 10.



Specifications

SuperStack II Hub 10

Standards: ISO 8802/3, IEEE 802.3

Safety: UL 1950, EN 60950, CSA 22.2 #950, ECMA 97

EMC: CSA, FCC Class A, EN44022 Class B, EN50082-1

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

Humidity: 10 to 90%, noncondensing

Twisted-Pair RJ-45 Ports:
12-Port TP Hub: 12;
24-Port TP Hub: 24

Twisted-Pair Telco Ports:
24-Port Telco Hub: 24

Fiber (ST) Ports:
6-Port ST Fiber Hub: 6 pairs

AUI Ports: 12-Port TP Hub: 1;
24-Port TP Hub: 1;
24-Port Telco Hub: 1;
6-Port ST Fiber Hub: 1

Transceiver Interface Module/ MicroModule Slots per Hub:
12-Port TP Hub: 1;
24-Port TP Hub: 1;
24-Port Telco Hub: 1;
6-Port ST Fiber Hub: 1

Total Ports per Hub:
12-Port TP Hub: 13 (The AUI port and Transceiver Module can not be used simultaneously in the 12-Port Hub);
24-Port TP Hub: 26;
24-Port Telco Hub: 26;
6-Port ST Fiber Hub: 8

Maximum Number of Ports per 8-Hub, Single-Media Stack:
12-Port TP Hub: 104;
24-Port TP Hub: 208;
24-Port Telco Hub: 208;
6-Port ST Fiber Hub: 64

Management Module

Flash EPROM: 512 KB

RAM: 512 KB

Processor: 10 MHz 68000

Advanced RMON Module

Flash EPROM: 512 KB

RAM: 4 MB

Processor: 20 MHz 68000

Hub 10 Only

Power Inlet: IEC 320

Fuse Protection: 2 Amps

Power: Consumption: 22 VA; Dissipation: 73 BTU/hr.

Hub 10 and Management Module

Power Inlet: IEC 320

Fuse Protection: 2 Amps

Power: Consumption: 30 VA; Dissipation: 100 BTU/hr.

Size:
4.3H x 44W x 22.4D cm (1.7"H x 17.3"W x 8.8"D)

Weight: 2.6 kg (5.7 lb)

.SuperStack II Entry Hubs

Standards: IEEE 802.3, ISO 8802/3

Interface: 10BASE-T

Connectors:
3C16440: 12 RJ-45 shielded twisted pair;
3C16441: 24 RJ-45 shielded twisted pair

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

Humidity: 0 to 90% noncondensing

Safety Standards: UL 1950, EN 60950, CSA 22.2 #950

Electromagnetic Compatibility Standards: EN 55022 Class B, EN 50082-1, FCC Part 15 Class A, CSA C108.8 Class A, VCCI Class 2, AS 3548 Class B, AS 4252.1

Environmental Standards:
EN 60068 (IEC 68)

MTBF: 3C16440: 103,389 hrs.; 3C16441: 97,425 hrs.

Power:
3C16440: Consumption: 34 VA, Dissipation: 116 BTU/hr.;
3C16441: Consumption: 44 VA, Dissipation: 150 BTU/hr.

Size:
4.4H x 44W x 22.4D cm (1.7"H x 17.3"W x 8.8"D)

Weight: 2.1 kg (4.5 lb)

Technically Speaking

The Management Module and Advanced RMON Module are SNMP-conformant, slide-in modules that can manage an entire stack of 3Com SuperStack II Hub 10s. SmartAgent® software in the Modules automatically gathers and collates information about the stack. As well as supporting in-band management via a network link, each Module has a serial port that allows out-of-band management.

When installed, the modules allow you to:

- Monitor and change the configuration of all units in the rack.
- Set up resilient links. You can protect a critical communication link against failure by ensuring that, if the main link fails, a standby link will immediately and automatically take over.
- Implement security features. For example, each user is assigned an access level that determines which management parameters the user can view or modify. Also, end-station access can be restricted to a particular port.
- Monitor network performance. The management facility maintains statistics that help you monitor the operation of the network and perform predefined actions automatically when thresholds are exceeded.
- Poll other devices on the network.

You can use one of several ways to access the management facility:

- Over the network, using an SNMP network manager, such as Transcend® WorkGroup Manager for Windows. Each network manager provides its own user interface to the management facilities. Using SNMP management, for example, you can configure traps to be sent to the management station if critical thresholds are exceeded. You can use SNMP running over the IP or IPX® protocol.
- By connecting a VT100™ terminal (or workstation with terminal-emulation software) to the serial port on the Module. The terminal can be connected directly or remotely, via a modem. The VT100 management interface, which is a menu-driven user interface built into the Modules, is used. The VT100 management interface provides a subset of the features of SNMP management.
- Over a TCP/IP network, using a workstation running VT100 terminal emulation and Telnet. The VT100 management interface is used.
- By connecting a workstation running SLIP to the serial port, which allows you to use out-of-band Telnet or SNMP management. The workstation can be connected directly or remotely, via a modem. This method provides a way of managing the stack in situations where the LAN is not providing a reliable service, or the network manager does not have direct LAN connectivity.

Optional Bridging

The SuperStack II Hub 10 and the SuperStack II Entry Hubs offer optional bridging. When you order the LinkBuilder Bridge MicroModule (part number 3C16060), you get an unmanaged local bridge that slides into a Transceiver Interface Module slot in the Hub for low-cost, simple bridging.

With this Module, you can segment the LAN and boost overall performance by keeping local traffic off the backbone.

The Bridge MicroModule features one standard AUI port for twisted-pair, fibre, or coaxial transceiver connections. And it's self-learning, requires no configuration, and has forwarding, filtering, and packet-buffering for optimum throughput.

Ordering Information

ITEM	CODE
3Com SuperStack II Entry Hub	
Twisted-Pair, 12-Port	3C16440
Twisted-Pair, 24-Port	3C16441
3Com SuperStack II Hub 10	
Twisted-Pair, 12-Port	3C16670A
Twisted-Pair, Managed, 12-Port	3C16673B
Twisted-Pair, 24-Port	3C16671A
Telco, 24-Port	3C16672A
Fibre, 6-Port	3C16665A
Management Module	3C16630A
Advanced RMON Module	3C16632
LinkBuilder Bridge MicroModule	3C16060
3Com SuperStack II Hub 10	
48-Port Solution TP System	3C16674B
48-Port TP System/24	3C16675B
Transceiver Modules	
Female AUI	3C1206-0
10BASE-T (UTP)	3C1206-3
Fan Out (Male AUI)	3C1206-4
Fibre Optic (ST)	3C1206-5
Coaxial	3C1206-6
10BASE-FB	3C1206-7
SuperStack II Power Systems	
Uninterruptible	3C16010
Redundant	3C565047A
Hub Expansion Cable	3C625
AUI Cable	LCN200
Fibreoptic Cable	EFN062
Coaxial Cable	LCN300
Twisted-Pair Cable	EVNSL81