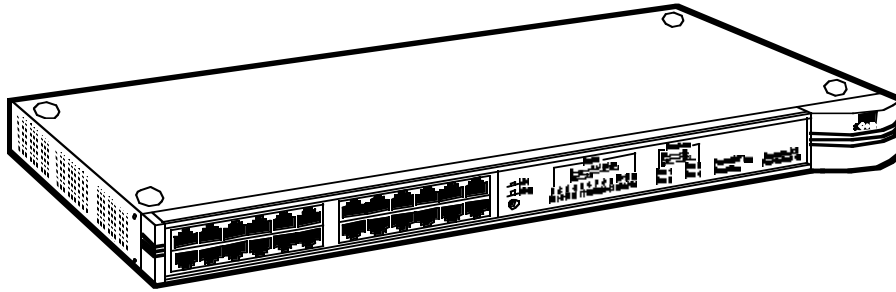


BLACK BOX[®]

NETWORK SERVICES

3Com[®] SuperStack II Port Switch Hubs



*Build a new network
or expand the one
you've got.*

Key Features

- ▶ *Affordable plug-and-play connectivity.*
- ▶ *Port Switching makes management simple and logical.*
- ▶ *Multiple segments for higher network performance.*
- ▶ *Nine groups of RMON on all segments.*
- ▶ *Stackable hubs.*
- ▶ *Built-in Transcend[®] Network Management software.*
- ▶ *Automatic advanced load balancing.*
- ▶ *Easy expansion—up to 260 users.*
- ▶ *PS Hub 50 offers all the PS Hub 40's features plus a built-in Fast Ethernet downlink and workgroup switch.*
- ▶ *3Com reliability plus our famous Black Box support.*

The Port Switch Hub is ideal for building up a new network. It has its own built-in management and comes ready to use.

Or use it to expand the network you already have. You can even use it as a step up to a higher-performance network.

With port-switching technology, you can build up workgroups within your stack. (For all the details on port switching, see the next page.) So you're not tied down by physical connections—you can group users however it seems most logical.

Here are just some of the Hub's features:

- 12 or 24 shielded twisted-pair ports for easy connection to 10BASE-T networks. A switch allows you to cross over one of these ports, for connection to other types of hubs and network equipment.
- Two transceiver-module slots, providing a choice of media. (One slot on the Model 50 Hub.)
- SuperStack II architecture—You can stack up to ten hubs, giving you a possible 240 10BASE-T ports per stack.

- LEDs for quick viewing of hub and port status.
- Port switching: Create four internal segments, and switch ports between to suit your needs. When Hubs are stacked, all four segments are carried between the Hubs by cascade cables.
- Hot-swappable technology: Add and remove Hubs from a stack without disrupting the stack.
- Complete SmartAgent[™] management built into each Hub:
 - SNMP management over the network, using the IP protocol.
 - Support for traps to alert a management station of any problems.
 - Quick Configuration software.
 - A simple built-in Command Line Interface for quick configuration in an

IP or IPX[™] based network-management application.

When Hubs are stacked, the management is distributed between all hubs in the stack.

- *(Model 50 Hub only)* Provides a Fast Ethernet downlink port, which allows high-speed access to a file server or backbone link.
 - *(Model 50 Hub only)* Features workgroup switching, which provides a built-in segment switch for maximum connectivity without the need for an external switch.
 - Mounting brackets for easy installation in a standard 19-inch rack, or on a table or wall.
- All these features come in a surprisingly economical package. The Port Switch Hub costs no more than your average unmanaged hub.

Typical Application

Start out with a small workgroup, then add more Hubs as you add users. Because they're stackable, your Port Switch Hubs will work together seamlessly.

Specifications

Number of Segments — 4 per unit, 40 per stack

Management —

- Transcend® Quick Configuration Manager (included; works with Windows® 95, Windows 3.1, or Windows NT™)
- SNMP SmartAgent® (included)
- Embedded RMON software supports all nine RMON groups

Console Port Settings —

- 8 data bits
- 1 stop bit
- No parity

Indicators —

- (1) Power status
- (4) Packet Reception—one for each segment
- (4) Collision—one for each segment
- (12) or (24) Disable/Partition—one for each port
- (12) or (24) Link Status—one for each port
- (1) Attention

Communications Protocols —

- RFC 826 ARP
- RFC 791 IP
- RFC 792 ICMP
- RFC 768 UDP
- RFC 793 TCP

Management Protocols —

- RFC 1157 SNMP
- RFC 1212 Concise
- RFC 1213 MIB II
- RFC 1215 Traps
- RFC 1515 MAU
- RFC 1516 Repeater
- RFC 1517 RMON

Standards —

- Functional:*
- ISO 8802/3
 - IEEE 802.3

EMC Emissions:

- VFG243
- FCC Part 15 Class A
- CSA 108.8
- EN55022 Level B
- EN50082-1 (IEC801 2-5)

EMC Immunity:

- EN 50082-1 (IEC 801 2-5)

Environmental:

- EN 60068 (IEC 68)

Safety:

- EN60950
- ECMA 97
- UL® 1950
- #950IEEE
- CSA 22.2

Mean Time Between Failures — 50,000 hours minimum

Connectors — Model 40 hubs:

(1) DB9 RS-232; (2) slots for optional slide-in transceiver modules;
 3C16405: (12) RJ-45 ports;
 3C16406: (24) RJ-45 ports;
 3C16450: (24) RJ-45, (1) DB9 RS-232, (1) slot for optional transceiver modules

Expansion — Stack up to 10 Hubs for up to 260 users (24 per hub plus two optional slide-in transceiver modules per hub)

Temperature Tolerance —

Operating: 0 to 50° C;
Storage: -30 to +60°

Humidity Tolerance — 5 to 95%, noncondensing

Power — 85 to 264 VAC, 50 to 60 Hz; 3C16405 consumes 26W; 3C16406 consumes 29W; 3C16405 consumes 35W

Size — 4.3 × 44 × 16.8 c)

Weight — 2 kg; 3C16406: 2.1 kg; 3C16450; 2.2 kg

Technically Speaking: All About Port Switching

Port switching allows you to build up workgroups logically. The Hub combines the ease of repeating with the flexibility of having four separate networks within a stack. You can manage these segments, and use them to group your users in a logical way, regardless of any physical connections.

With port switching, you're not restricted by physical connections. You can create location- and technology-independent networks.

You can move users between segments easily—you simply switch the ports between the segments, as necessary, using the management software.

The segments are carried throughout the stack. You can add hubs, when necessary, to continue the existing cascaded segments.

Each segment is more efficient. Network traffic is contained within each cascaded segment, so they avoid congestion from the

other segments. You can increase the efficiency by putting workstations that communicate frequently on the same segment.

The segments are faster. Each segment runs at 10 Mbps, so four separate segments provide a total of 40 Mbps; 5 segments provide 50 Mbps.

Segments can be configured remotely, since no physical changes have to be made to move users between the segments by port switching.

There is extra security: Unused hub segments can be isolated from the cascaded segments, and workstations can only communicate with each other if they are part of the same segment (unless a connection between the segments has been made by the network administrator).

Port switching enables you to continue any existing workgroups you may have, across the whole network infrastructure, including shared Ethernet workgroups.

Additional equipment you may need:

The Port Switch Hubs are part of the 3Com® SuperStack II series. Everything in the SuperStack II line works together, with common

management, so keeping track of your whole network is easy. Call 724-746-5500 to find out more about the rest of the SuperStack II line.

Ordering Information

This information will help you place your order quickly.

PRODUCT NAME	ORDER CODE
SuperStack II Port Switch Hub 40	
12-Port.....	3C16405
24-Port.....	3C16406
SuperStack II Port Switch Hub 50	
24-Port.....	3C16450
Port Switch Hub Cascade Cables	
0.3-m.....	3C16420
0.9-m.....	3C16421
2.7-m.....	3C16422
Hot-Swap Cascade Unit.....	3C16430