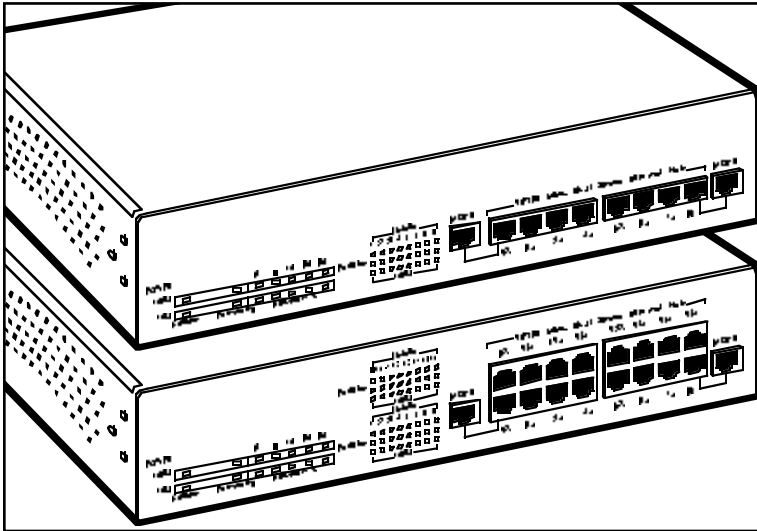


# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

### STACKABLE HUBS



*Scalable connectivity solution for 10/100-Mbps twisted-pair workgroups and small-office LANs.*

#### Key Features

- ▶ **Choose from 8- or 16-port models.**
- ▶ **Each port is 10/100-Mbps autosensing.**
- ▶ **S-models include an internal switch (bridge) module.**
- ▶ **Cascade up to four hubs per stack for a total of 64 ports.**
- ▶ **Complete with two MDI-II (uplink) ports.**
- ▶ **Internal, universal power supply.**
- ▶ **Innovative desk stacks included with each unit.**

Perfect for workgroups or small office LANs, the 8- or 16-Port Stackable Hubs automatically sense whether a port is running 10- or 100-Mbps Ethernet. Choose from models with or without an integrated switch.

All the Hubs are optimized for integrated 10BASE-T/100BASE-TX environments to accommodate bandwidth, migration, and growth demands. You get performance, speed, and upgradability in one economical unit.

And the Hubs each have two MDI-II uplink ports—shared with ports 1 and 8 respectively—to provide support for backbone uplinks. You can manually set the MDI-II ports to operate in one of the three modes (100 Mbps, 10 Mbps, or auto-sensing) via four DIP switches on the back panel of the Hub.

If you need to bridge between the 10 and 100 Mbps domains, select the 8- or 16-Port Stackable

Hub with Integrated Switch. The internal switch module is active across an entire stack and supports up to 8K MAC addresses, eliminating the need for an external switch.

If you have more than 8 or 16 users in your LAN, you can stack (cascade) up to four units for a total of 64 ports. The DB25 cascade cable and innovative stack clips included with each

Hub provide a simple and secure method for desktop stacking.

An optional rackmounting bracket is also available for installation into a standard 19" equipment rack.

The compact, flexible, plug-and-play Hubs provide the connectivity you need to meet changing network conditions quickly, easily, and cost effectively.

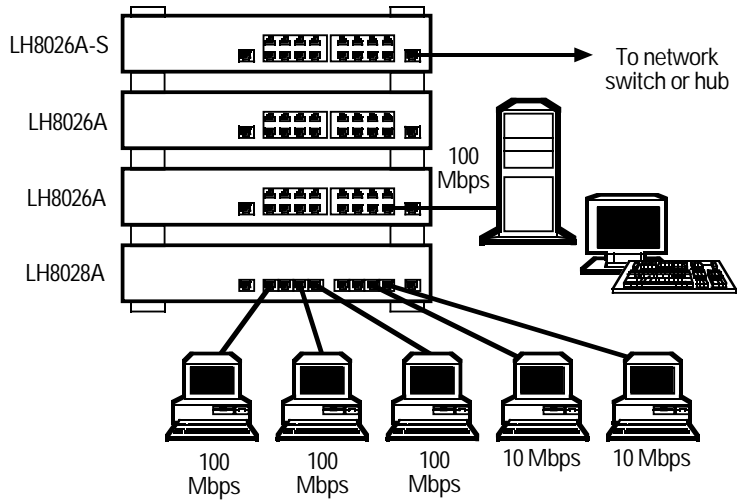
#### Typical Application

- Stack up to four 8-or-16-Port Hubs for a total of 32 or 64 users.

#### The complete package

- Stackable Hub or Stackable Hub with Integrated Switch
- "Desk stacks"
- DB25 cascade cable
- A users' manual

**Combine 10- and 100-Mbps twisted-pair links via one cascaded Stackable Hub with Integrated Switch and three Stackable Hubs for a total of 64 users.**



## Specifications

**Standards:** IEEE 802.3u, IEEE 802.3

**Compliance:** FCC Class A, CSA, CE (EN60950), C-UL, TUV

**Indicators:** LEDs: Per device:  
Power; Collision for both 10-Mbps and 100-Mbps segments; Utilization % indication for both 10-Mbps and 100-Mbps segments;  
Per port: Link/RX, Partition, 10 Mbps/100 Mbps/Autosensing

### Connectors:

Front panel: (8) or (16) unshielded twisted pair RJ-45 uplink ports, (2) MDI-II shared UTP\* RJ-45 uplink ports (\*must relinquish one of the 8 or 16 ports to use);  
Rear panel: (2) DB25 cascade connectors

### Temperature:

Operating: 0 to 50°C (32 to 122°F);  
Storage: -30 to +60°C (-22 to +140°F)

**Humidity:** 5 to 95% noncondensing

**Power:** 100 to 240 VAC, 50/60 Hz, 1.2 A max.

**Size:** 4.4 x 19.6 x 29.8 cm (1.75"H x 7.75"W x 11.75"D)

**Weight:** 1.4 kg (3 lb.);  
19" rack-mounting bracket: 0.9 kg (2 lb.)

## Technically Speaking

### About Fast Ethernet

100BASE-T is theoretically ten times faster than 10BASE-T, although you can't count on getting exactly ten times the data throughput. Just as in 10-Mbps Ethernet, repeaters are typically used to interconnect multiple LAN segments into one large network or to add more user-accessible ports. But where 10-Mbps networks can have up to four repeaters between any two workstations, 100-Mbps networks are limited to just two repeaters between any two workstations.

For flexibility at higher speeds, you can use stackable repeater/hubs and switching hubs—just as for 10-Mbps Ethernet. But be aware that along with faster operating speeds, 100-Mbps Ethernet comes with other limitations. To ensure proper collision detection, the maximum network length is limited to

200 meters (656 feet). The maximum hub-to-workstation distance is 100 meters (328 feet).

### What are my other options?

- 1000-Mbps (1 Gigabit-per-second) Ethernet—For more information on this, see Faxback #19620.
- ATM—Asynchronous Transfer Mode, which is a high-speed cell-switching technology that handles data and realtime voice and video.

### Why choose Fast Ethernet?

If you have a small- to mid-sized company, you are probably better off implementing Fast Ethernet than ATM. 100-Mbps Ethernet, with its variety of standards, a tenfold increase in speed, and broad support for a range of applications, will open a more appropriate, more affordable, and more natural migration path to the high-speed networks of the future.

## Additional equipment you might need

- Rackmount Bracket for LH802x Hubs
- Unshielded twisted-pair cable

## Ordering Information

ITEM	CODE
Stackable Hubs	
8-Port .....	LH8028A
8-Port with Integrated Switch .....	LH8028A-S
16-Port .....	LH8026A
16-Port with Integrated Switch .....	LH8026A-S
<i>You may also need...</i>	
Rackmount Bracket for LH802x Hubs .....	LH802X-RM