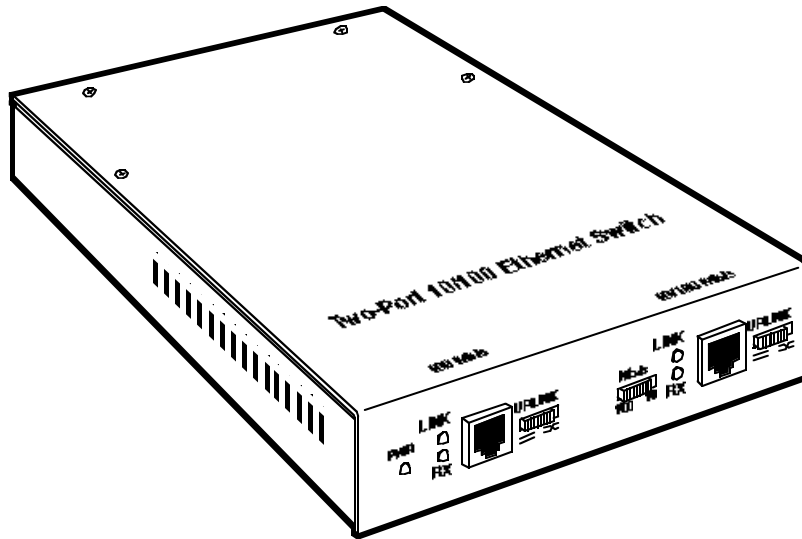


BLACK BOX[®]

NETWORK SERVICES

Two Port 10/100 Ethernet Switch



Connect either one 10-Mbps and one 100-Mbps segment, or two 100-Mbps Fast Ethernet segments.

Key Features

- ▶ Provides a high-performance connection with filtering and forwarding between two shared Ethernet segments.
- ▶ Plug-and-play operation, 1024 addresses per port, 256-KB dynamic packet buffers, store-and-forward operation.
- ▶ Complies with 100-Mbps IEEE 802.3u and 10-Mbps Ethernet 802.3 standards.
- ▶ Internal auto-ranging 20-watt power supply works with any local power, 90 to 260 volts.

Overview

The Two Port 10/100 Ethernet Switch joins a 100-Mbps Fast Ethernet segment with a 10-Mbps standard Ethernet segment, or with another 100-Mbps Fast Ethernet segment. Traffic on the two segments is filtered and forwarded by the Switch to provide unified network operation with maximum throughput, performance, and efficiency on each segment.

Using a Two Port 10/100 Ethernet Switch resets repeater hop-counts and extends cable lengths to the maximum distance allowed. Network configuration and topology limitations are removed, allowing simplified installation and easy expansion of shared Ethernet segments. The Switch's plug-and-play operation allows it to be easily incorporated in the

network when needed. An up-link switch on each port eliminates crossover cables. Up to 1024 addresses of the attached nodes on each segment are self-learned for full operating efficiency without special set-up.

Until now, there has been no practical way to maintain existing network operations while upgrading a portion of the network to 100-Mbps speed. A complete network upgrade and overhaul is expensive and usually unnecessary. When you want to simply upgrade a selected group of users to a shared Fast Ethernet segment, the Two Port 10/100 Ethernet Switch adds switched connectivity between the existing 10-Mbps and the new 100-Mbps segments with little or no upset and with full performance on both segments.

Two Port 10/100 Ethernet Switches meet the IEEE 802.3u and 802.3 specifications and are interoperable with other standards-compliant Fast Ethernet and 10-Mbps Ethernet products. They have an internal auto-ranging power supply and can be conveniently mounted on a shelf or table top in an office, conference room, or out-of-the-way wiring closet. Brackets for optional wall mounting are included.

Specifications

Network Standards —

Ethernet IEEE 802.3u:
100BASE-TX; IEEE 802.3:
10BASE-T

Maximum Ethernet Segment Lengths —

10BASE-T (unshielded twisted pair) or 10BASE-TX (Cat 5 UTP): 328 feet (100 m)

Performance —

Port A:

Data Rate: 100 Mbps
PDV (Path Delay Value): 50BT
Filtering and Forwarding Rate: 148,800 pps max.

Port B:

Switch-selectable, 10 or 100 Mbps
When set to 100 Mbps: Same as Port A
When set to 10 Mbps:
Data Rate: 10 Mbps
Filtering and Forwarding Rate: 14,880 pps max.

Port Module Slots — 2

Mechanical Switches —

Ports A and B Up-Link: MDI-X thumb-operated slide switch, converts RJ-45 port from a regular (= position) user segment to a crossover (X position) up-link port for On/Off connection to a central hub or a cascaded hub; Port B only: 10- or 100-Mbps switch

Indicators — (5) LEDs:

(1) PWR, (2) LINK, (2) RX

Network Cable

Connectors — 100BASE-TX: RJ-45 shielded female (accepts EIA 568 Category 5 data-grade twisted-pair cable); 10BASE-T: RJ-45 shielded female (accepts EIA 568 Category 3 and 5 data-grade twisted-pair cable)

Packet-Processing Type — Store and Forward

Packet-Processing Auto-Learning — 1024 addresses per port

Packet-Processing Packet Buffers — 256 KB, dynamically allocated and shared on both ports

Packet-Processing Latency (not including packet time) — 100 to 100 Mbps: 1µs; 10 to 100 Mbps: 4µs; 100 to 10 Mbps: 4µs

Packet-Processing CPU Type — State machine

Agency Approvals — UL listed (UL® 1950), cUL, CE, FCC Part 15, Class A

Enclosure — High-strength sheet metal, suitable for mounting on wiring-closet shelf, wall, or desktop

Cooling Method — Fan cooled, internal @ 7 cfm

MTBF — 50,000 hours

Operating Temperature — 0 to 50°C

Storage Temperature — -20 to +60°C

Relative Humidity Tolerance — 10 to 95%, noncondensing

Power — AC power connector: IEC-type, male recessed, rear of chassis; Power input voltage: 90 to 260 VAC (auto-ranging); Power input frequency: 47–63 Hz; Power Consumption: 20 watts maximum

Size — 3.3 x 15.5 x 23.1 cm

Weight — 0.7 kg

The complete package

What you get when you order the Two Port 10/100 Ethernet Switch

- (1) Two Port 10/100 Ethernet Switch
- (2) Mounting brackets
- (2) Mounting screws
- (1) AC power cord (U.S. and other 115-VAC locations only)
- (1) User's manual

For these and other components...

Call our expert Technical Support Staff for all your LAN needs. They'll help you find the best equipment for your application.

Ordering Information

This information will help you place your order quickly.

PRODUCT NAME	ORDER CODE
Two Port 10/100 Ethernet Switch	LB9800A