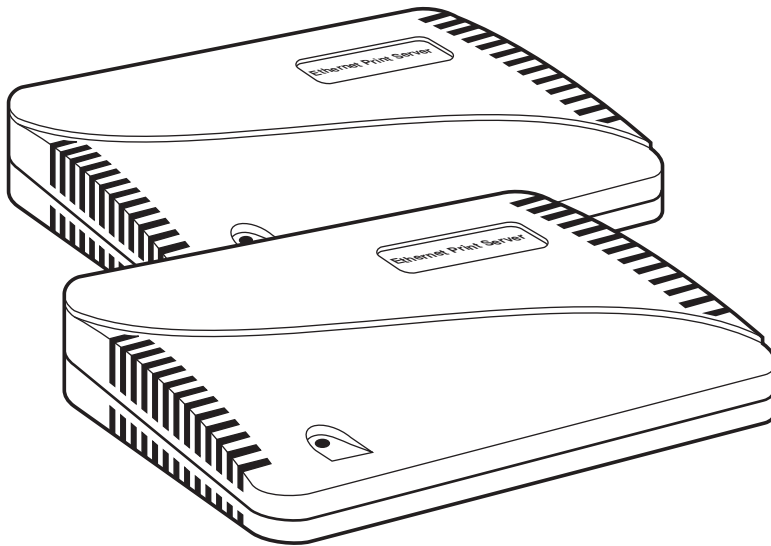




BLACK BOX[®]

NETWORK SERVICES

Ethernet Multiprotocol Print Servers



Share any type of printer—dot matrix, laser, color, PostScript[®], PCL, and plotters—among many users running different protocols.

The Ethernet Multiprotocol Print Servers (pictured above) let users on an Ethernet network running Novell NetWare, UNIX, or Apple protocol access a parallel printer located anywhere on the network.

Key Features

Includes Windows[®] based NIMANAGE diagnostic software.

Trouble-free installation.

Uses any 10BASE-T and/or 10BASE2 cabling.

Prints faster than PCs or file servers.

A variety of models to choose from—including a Multiprotocol Card version.

Supports the most common Ethernet protocols on the market today.



Overview

Add more printers to your LAN with these Print Servers.

Each includes its own Windows based diagnostic software that helps you identify and solve problems, quickly and easily. In addition, each unit includes an operation status LED.

The Servers take just minutes to install. And the installation software is easy to deal with—the installation instructions are printed right on each unit.

The Servers use 10BASE-T and 10BASE2 cabling. Some models feature parallel ports and a serial uniport that can be converted to parallel via the Uniport Adapter LT310A.

Select from models that support the Novell NetWare operating system, models

that support either Novell NetWare or UNIX protocol, or models that support Novell NetWare, UNIX, or Apple protocol.

Each model includes Windows based NIMANAGE diagnostic software.

Models LE3802A and LE3810A have 3 connectors, LE3820A has 5 connectors, and LE3840A, LE3845A have 8 connectors. One connector is for power, and the remaining connectors are for the network or printer and other devices to attach.

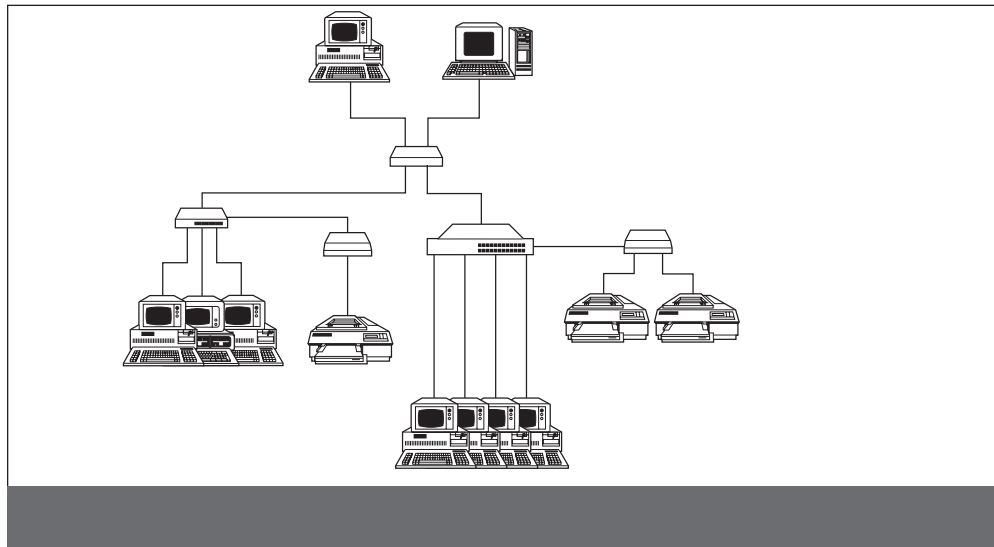


Typical Applications

Connect the network to the ThinNet or 10BASE-T interface, attach the printer(s) to the parallel port(s), and connect a serial device to the Uniport.

Connect up to four parallel devices on your network to your parallel printer.

Simplify printer distribution for localised printing from common hosts in separate departments or work-groups.



Technically Speaking

The Ethernet Print Server hardware, software, and installation programs require the following:

- *NOS version supported:* Novell® NetWare® version 2.15, 3.10, or 4.0 and above; any AppleTalk version (EtherTalk® phase II only), TCP/IP compatible with Sun (Solaris® 1.1, 2.1), BSD System V Rel. 4, DEC™ (ULTRIX 4.3), and HP® UNIX® systems.
- *Software requirements:* NIMANAGE requires any IBM PC or compatible with 512 KB of available random-access memory (RAM), one floppy drive (for the Ethernet Print Server software), and PC-DOS or MS-DOS® version 3.3x or later; AppleTalk Administration Program requires any Macintosh computer with a disk drive; TCP/IP requires that the Ethernet Print Server host software be installed on every host that spools directly to the Print Server.
- *Hardware connections:* The Ethernet Print Server's parallel ports connect to any printer that has a

Centronics parallel port, requiring a Centronics male to Centronics female or DB25 male cable. The network connection supports 10-Mbps Ethernet networks that use either ThinNet (10BASE2) or 10BASE-T hardware. The Uniport is compatible with the RS-232C standard supporting baud rates of up to 19.2 Kbps for input devices, and up to 115 Kbps for output devices using the UNI-PORT-OUT adapter. (If you don't use the adapter, output devices will support baud rates of up to 19.2 Kbps.)

Troubleshooting software

- For Novell, NIMANAGE lets users troubleshoot problems by sending test prints or viewing status reports or error logs on the Ethernet Print Server, check or modify any configuration option not directly tied to the print server, and change the print server name, the printer ports it uses, and the password it uses to log in.
- For AppleTalk, the AppleTalk Administration Program provides functions that let you reset the Ethernet Print Server, view the Ethernet Print Server configuration or an error log, and change the printer setup.

Status light

- The green LED on the front of the Ethernet Print Server indicates power-on status or diagnoses problems. The light tells you when the Print Server:
 - performs self-tests (the LED is ON solid),
 - prints out the status pages (the LED blinks 3 times and stays on solid),
 - is ready to receive print jobs (the LED is ON solid after completing the self-tests),
 - is functioning properly (the LED is ON solid),

The Print Server indicates an error condition when it:

- detects a bad RAM (the LED blinks rapidly),
- fails the Ethernet hardware self-test (the LED blinks rapidly 4 times and then pauses),
- did not pass the ROM checksum test (the LED blinks short and then long

continuously),

- detects that one or more printers needs attention (a printer could be off-line or might need a form change—the LED blinks slowly),
- detects a serious error that prevents proper functioning (the LED blinks rapidly).

Error pages

An error page prints if either one of the following occurs with the Novell NetWare protocol:

- the Ethernet Print Server is unable to log into any active file server, or
- the Ethernet Print Server is unable to communicate with any Novell file servers.

ETHERNET PRINT SERVERS

SERVER NAME AND PRODUCT CODE	PRINTERS SUPPORTED TOTAL TYPES	TOPOLOGY	NETWARE DIRECTORY SERVICES	NETWARE BINDERY	DEC LAT	UNIX & WINDOWS NT	APPLE	FLASH ROM
Single Protocol 10BASE-T (LE3802A)	1 1P	10BASE-T		X				
1-Port Multiprotocol (LE3810A-R3)	1 1P	10BASE2 10BASE-T		X		X		
5-Port Single Protocol (LE3840A-R3)	5 4P, 1S/P	10BASE2 10BASE-T		X				X
2-Port Multiprotocol (LE3820A)	2 1P, 1S/P	10BASE2 10BASE-T		X		X	X	
5-Port Multiprotocol (LE3845A-R3)	5 4P, 1S/P	10BASE2 10BASE-T		X		X	X	X
Multiprotocol MIO Card (LE3901C-R2)	2 1HP MIO 1S/P	10BASE2 10BASE-T		X		X	X	
3-Port Multiprotocol (LE3900A-R2)	3 2P, 1S/P	10BASE2 10BASE-T	X	X		X	X	X
3-Port Multiprotocol for LAT (LE3900A-LAT)	3 2P, 1S/P	10BASE2 10BASE-T		X	X	X		X

Specifications

Indicators—(1) green LED for power and status

Connectors—LE3802A, LE3802AE, LE3810A-R3: Network: (1) RJ-45 female (10BASE-T), (1) DB25 female (parallel); LE3820A, LE3820AE: (1) RJ-45 female (10BASE-T), (1) BNC female, (1) RJ-45 Uniport, (1) DB25 female (parallel); LE3840A-R3, LE3840AE-R3: Network: (1) RJ-45 female (10BASE-T), (1) BNC female (10BASE2), (4) DB25 female (parallel), (1) RJ-45 female (Uniport); All units: 5-pin DIN female to external power supply

Temperature—0° to 50°C (32° to 122°F)

Humidity—5 to 80%, non-condensing

Printer Ports—Parallel (all units)—Speed: 600 Kbps; Word Size: 8 bits; Strobe: 1 microsecond (can be set to 0.5, 1, 5, or 10); Flow Control: Ready/Busy; Serial Uniport (LE3840A-R3, LE3840AE-R3 only)—Speed: 9600 baud (can be set to 19,200); Word Size: 8 (can be set to 5, 6, 7, or 8); Parity: None (can be set to None, Even, Odd, Mark, Space); Stop Bits: None (can be set to None, Even, Odd, Mark, Space); Flow Control: Ready/Busy

Power—LE3810A: 115 VAC, 5 VDC 1A output, 12V at 200 MA, external transformer, power consumption 20 VA; LE3810AE, LE3840A-R3, LE3840AE-R3: 115/230 VAC autosensing, in-line power supply 2/IEC 950 connector

Size—5.1 x 17.8 x 10.1 cm (2"H x 7"W x 4"D)

Weight—0.6 kg (1.2 lb.)

The complete package

What you get when you order the Ethernet Print Server.

- (1) 10BASE-T Print Server, Ethernet Print Server High Speed, or Ethernet Print Server 4-Port
- (3) Utility and diagnostics diskettes
- Velcro for attaching the unit to the printer
- User manual
- 115-VAC or 230-VAC power adapter

Additional equipment you might need

- 10BASE-T cable

Ordering Information

This information will help you place your order quickly.

SERVER NAME	ORDER CODE
Ethernet Print Servers	
1-Port Multiprotocol	LE3810AE-R3
5-Port Single Protocol	LE3840AE-R3
5-Port Multiprotocol.....	LE3845AE-R3
Multiprotocol MIO Card	LE3901C-R2
3-Port Multiprotocol with LAT	LE3900AE-LAT
10BASE-T Cable	EQN202

