



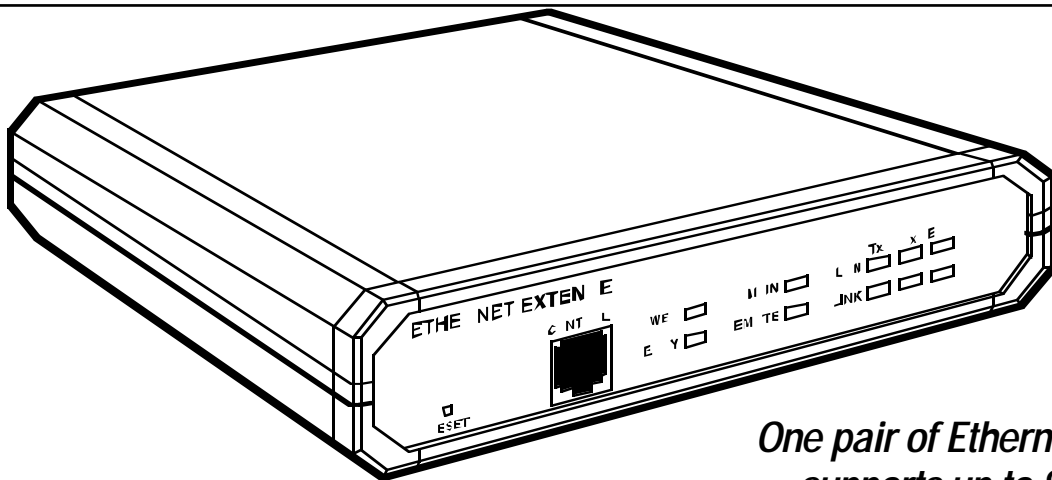
BLACK BOX[®]

NETWORK SERVICES

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Black Box Corporation.

Black Box Network Services • 464 Basingstoke Road • Reading, Berkshire, RG2 0BG • Tech Support: 0118 965 6000 • www.blackbox.co.uk • e-mail: techhelp@blackbox.co.uk

ETHERNET EXTENDERS



*One pair of Ethernet Extenders
supports up to 80 remote
LAN workstations.*

Key Features

- ▶ **Four WAN configurations support a variety of popular interfaces: 4-wire UTP, V.35, V.24/RS-232, V.36/RS-422.**
- ▶ **Automatically learn and store remote-node address tables upon power-up.**
- ▶ **Offers Single IP/Solid Firewall Scripting Tool per port.**
- ▶ **Use as a backup router link for regular and Single IP links.**
- ▶ **Uses STAC data compression.**

You need to link remote nodes back to your central LAN, but you may not need a pair of full-featured, full-priced routers to get the job done.

If you can sacrifice some of the more sophisticated management features of a router, then BLACK BOX[®] Ethernet Extenders offer an affordable alternative solution for linking remote network segments. Simple, MAC-layer (Layer 2) bridging gets the job done without the IP-number complications that routers can introduce.

Works Like a Bridge...

These units operate in pairs over a variety of serial data links. Once on-line, they support wide-area networking and limit traffic congestion by filtering and forwarding data frames based on address tables that the remote extender learns automatically.

These standalone units are available in two basic models: for one remote node or up to 80 remote nodes—printers, servers, PCs, you name it.

Choose From Many Styles.

Both of these basic models are available with a variety of LAN and WAN interface options. You just pick the one that best suits your own network.

Choose a model with WAN ports configured for 4-wire unshielded twisted pair (UTP), V.24/RS-232, V.36/RS-422, or V.35. Next, specify which type of Ethernet LAN ports you need: DB15 AUI for a standard coaxial Ethernet backbone, BNC for thin Ethernet, or RJ-45 for 10BASE-T UTP.

Extenders with 4-wire WAN ports have built-in short-haul modems to support direct links to nearby LAN segments over private UTP circuits.

All other models require some type of telco connection via modems, CSU/DSUs, even ISDN lines.

Works in Any Environment.

All Ethernet Extenders support the physical and data-link layers of the OSI model. They're completely transparent to higher-level protocols, including TCP/IP, DECnet[™], and ISO.

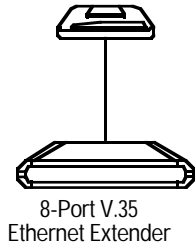
They're also transparent to many Ethernet operating systems, such as NetWare[®], UNIX[®], and VINES[™].

Call our Technical Support Experts at 0118 965 6000 to find out if a pair of Ethernet Extenders are right for your LAN.

Connect up to 80 remote PCs to your main network.

Main Network

Pure Networking
10/100 Ethernet Switch



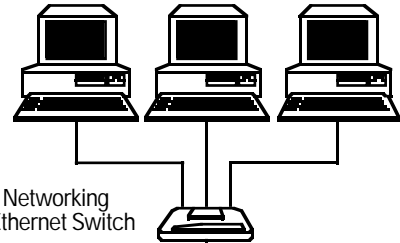
CSU/DSU MS

V.35
Cable

56-kbps
Leased
Line

Remote Network

Pure Networking
10/100 Ethernet Switch



PCs

CSU/DSU MS

V.35
Cable

8-Port V.35
Ethernet Extender

Specifications

Protocol: All models:
LAN: Independent;
WAN: HDLC-based

Speed (Maximum): All models:
LAN: 10 Mbps;
WAN: 4-wire models: 768 kbps;
RS-232 models: 64 kbps;
V.35 and RS-422/V.36 models:
512 kbps

CE Approval: Yes

Interface: LB3104A-R3,
LB3804A-R3: 4-wire UTP;
LB3124A-R3, LB3824A-R3:
RS-232/V.24;
LB3135A-R3, LB3835A-R3:
V.35;
LB3136A-R3, LB3836A-R3:
V.36/RS-422

Connectors: All models: (1) RJ-45
control port;
WAN: 4-wire models: (1) 5-screw
terminal block;

RS-232 models: (1) DB25 F;
V.35 models: (1) M/34 F;
RS-422/V.36 models:
(1) DB37 F;
LAN: (1) DB15 AUI F, (1) BNC, or
(1) RJ-45, depending on the
model

Indicators: (6) LEDs: Power, LAN,
Link, DATA TX, DATA RX, Ready

Power: 115–260 VAC, 50–60 Hz,
autosensing

Size: 1.8"H x 8.5"W x 11.8"D
(4.6 x 21.6 x 30 cm)

Weight: 4.2 lb. (1.9 kg)

Ordering Information

ITEM	CODE
Ethernet Extenders for 1 Workstation	
4-Wire	AUILB3104A-AUI-R3
	BNCLB3104A-BNC-R3
	10BASE-TLB3104A-BT-R3
RS-232	AUILB3124A-AUI-R3
	BNCLB3124A-BNC-R3
	10BASE-TLB3124A-BT-R3
V.35	AUILB3135A-AUI-R3
	BNCLB3135A-BNC-R3
	10BASE-TLB3135A-BT-R3
RS-422	AUILB3136A-AUI-R3
	BNCLB3136A-BNC-R3
	10BASE-TLB3136A-BT-R3
Ethernet Extenders for up to 80 Workstations	
4-Wire	AUILB3804A-AUI-R3
	BNCLB3804A-BNC-R3
	10BASE-TLB3804A-BT-R3
RS-232	AUILB3824A-AUI-R3
	BNCLB3824A-BNC-R3
	10BASE-TLB3824A-BT-R3
V.35	AUILB3835A-AUI-R3
	BNCLB3835A-BNC-R3
	10BASE-TLB3835A-BT-R3
RS-422	AUILB3836A-AUI-R3
	10BASE-TLB3836A-BT-R3

Typical Applications

- Connect an entire remote LAN—up to 80 nodes—to your central network over a private, short-range, 4-wire circuit.
- For greater distances, link a pair of Ethernet Extenders using asynchronous modems, CSU/DSUs, even an ISDN line.
- You can also use Ethernet Extenders to connect a single remote workstation back to your central LAN.