BLACK BOX®
NETWORK SERVICES

Local Repeaters/Remote Fiberoptic/Remote Single-Mode Repeaters

Remote Repeater   LE626A

Remote Repeater   LE603A-R5

Remote Repeater   LE604A-R4

Local Repeater   LE605A-R3

Remote Repeater   LE628A

Local Repeater   LE620A

LE602A-R3
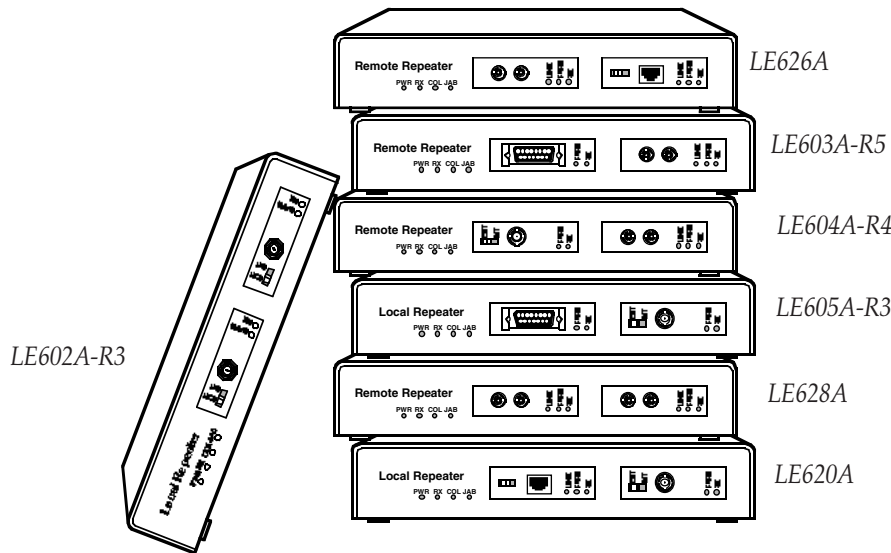
Break your Ethernet network's standard distance barrier—without compromising data integrity or network performance.

Key Features

▶ *Supports standard Ethernet media types—with models for both mixed-media and homogeneous networks.*

▶ *Automatic partitioning and reconnection.*

▶ *Includes internal autosensing power supplies.*

▶ *Remote Fiberoptic Repeaters comply with 10BASE-FL and FOIRL standards.*

▶ *Diagnostic LEDs make troubleshooting easy.*

▶ *Small design, durable construction.*

Overview

Our Local and Remote Repeaters regenerate and retime data packets so you can extend the distance of your Ethernet network. They support all Ethernet media types, including standard or Thin coax, 10BASE-T, or fiber.

Best of all, you'll never worry about data integrity or network performance with these Repeaters. They:
• Detect data collisions;
• Generate jam signals;
• Extend data collision fragments;
• Automatically partition faulty individual network segments;
• Reconnect the segments when they've resumed normal operation.

Easy to install, each Repeater includes its own internal autosensing power supply. Just plug in the Repeater and the power supply automatically adjusts to any power source, with AC voltage from 90 to 260 VAC and power input frequencies between 63 and 47 Hz.

Each Repeater includes port connections, so you can connect two Ethernet segments—each segment conforming to IEEE 802.3 specifications for length and number of nodes.

You can monitor network and network-segment activity at a glance, with the front-panel LEDs.

You can also install the Repeaters anywhere you want them. Each is rated by Underwriters Laboratories® as UL® 1950, CSA certified, and TUV and GS approved. They're perfect for wallmounting, rackmounting, or desktop use.

Enclosed in high-strength steel, the Repeaters are small, so they stay out of your way.

Local Repeaters
Connect—or mix and match— copper-based Ethernet segments with these Repeaters.
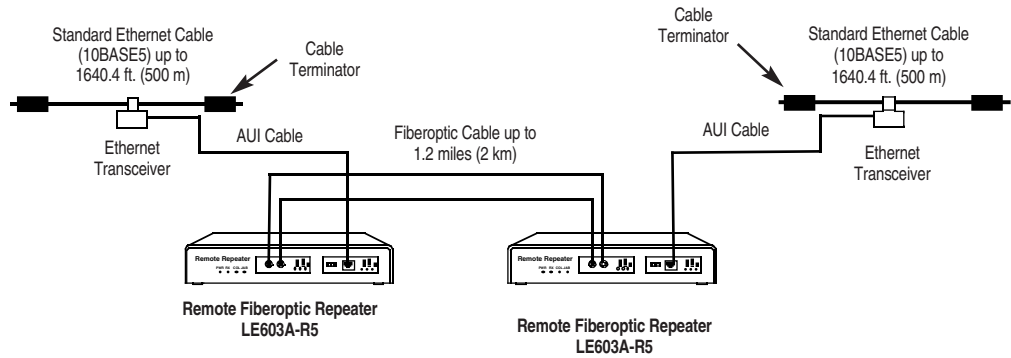
Remote Fiberoptic and Single-mode Repeaters
Link two Ethernet segments via fiberoptic cable with these Repeaters.

They're 10BASE-FL compliant, so your long-distance connections can be over two miles (2 km) long.

Fully backward-compliant with FOIRL, you can easily integrate the Repeaters into your existing Ethernet network.

NOTE: Remote Fiberoptic Repeaters are also available with SMA connectors. Call for more information.

Standard Ethernet Cable (10BASE5) up to 1640.4 ft. (500 m) — Cable Terminator — Ethernet Transceiver — AUI Cable — Fiberoptic Cable up to 1.2 miles (2 km) — AUI Cable — Cable Terminator — Standard Ethernet Cable (10BASE5) up to 1640.4 ft. (500 m) — Ethernet Transceiver

Remote Fiberoptic Repeater LE603A-R5 **Remote Fiberoptic Repeater LE603A-R5**

Technically Speaking

- An internal termination switch on the BNC model eliminates the need for a T-connector on the end of a segment application.
- The AUI model features a slide-lock that ensures secure cable connections.
- The twisted-pair model includes a shielded port and a crossover switch so the Repeater can support a user segment or an uplink segment—without crossover cable.
- The fiber model supports both the new 2-km 10BASE-FL specifications, and the older 1-km FOIRL specifications.
- **LED Status**
  PWR: Steady-on green when power is present.
  RX (+ per port): Blinks when there's network activity.
  COL: Flashes yellow; indicates COLLISION has been detected on any port.
  JAB: Steady-on amber indicates JABBER (illegal packet-length fault) condition.
  PART (per port): Steady-on yellow when the port partitioned to isolate a fault.
  LINK (per port): Steady-on green shows the connection (fibre and TP only) is made at both ends; segment is ready.

Max. Standard Ethernet Lengths
DTE (AUI drop cable) . . . . 50 m
10BASE-T (UTP) . . . . 100 m
10BASE-T (STP) . . . . 150 m
10BASE2 ThinNet (BNC) . . . . 185 m
10BASE5 ThickNet . . . . 500 m
FOIRL Fiberoptic . . . . 1 km
10BASE-FL Fiberoptic . . . . 2 km

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.

Additional equipment you may need:
- ThinNet Cable (10BASE2)
- BNC Terminators (50 Ohm)
- Standard Ethernet Cable
- Cable Terminators (N Series or BNC)
- Ethernet Transceivers (Thick, Thin, or BNC)
- Fiberoptic Cable and AUI Cable (with ST® or SMA connectors)

Ordering Information

This information will help you place your order quickly.

PRODUCT NAME	ORDER CODE
Local Repeaters	
2 AUILE601A-R3	
2 BNC	LE602A-R3
AUI/BNC	LE605A-R3
BNC/10BASE-T	LE620A
AUI/10BASE-T	LE622A
10BASE-T/10BASE-T	LE624A
Remote Fiberoptic Repeaters	
AUI/Fiber ST	LE603A-R5
BNC/Fiber ST	LE604A-R4
10BASE-T/Fiber ST	LE626A
Fiber/Fiber ST	LE628A
Remote Single-Mode Fiberoptic Repeaters	
AUI/Single-Mode Fiber ST	LE629A
BNC/Single-Mode Fiber ST	LE630A
10BASE-T/Single-Mode Fiber ST	LE631A
Multimode/Single-Mode Fiber ST	LE632A
Single Mode/Single-Mode Fiber ST	LE633A

Specifications

Performance — Partitioning: Enforced after 32 consecutive collisions; Reconnect: After 512 bits of error-free transmission

Speed — 10 Mbps

Standards — Depending on the unit: Ethernet Ver. 2, IEEE 802.3, 10BASE5, 10BASE2, 10BASE-T, 10BASE-FL, FOIRL

Connectors — Fiberoptic: ST; ThinNet: BNC for RG-58A/U coax cable; 10BASE-T: RJ-45 female;

Standard Ethernet: DB15 female

Indicators — All models: PWR, RX, Jab, Col; AUI and BNC ports: (1) Port, (1) RX for each port; 10BASE-T and fiber ports: (1) Link, (1) Port, (1) RX for each port

Power — 90-260 VAC, 63-47 Hz (autosensing), 15 watts

Size — 4.6H x 21.6W x 13.7D cm

Weight — 1.1 kg