

## Workgroup Minibridge

Increase workgroup performance  
by filtering non-local traffic  
from your central network.

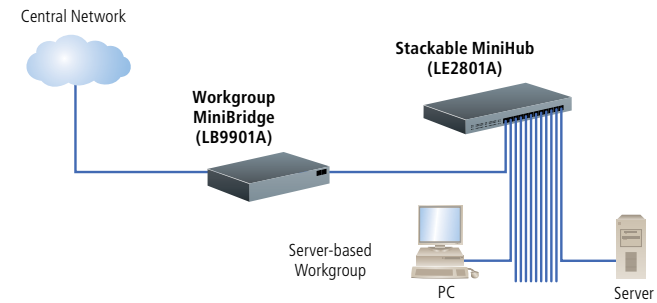


## FEATURES

- » Learns workgroup's network addresses automatically.
- » Instantly frees up network bandwidth.
- » Filters out unneeded traffic.
- » Easy operation and plug-and-play installation.
- » Software-transparent.
- » Supports server-based workgroups—from 4 to 256 nodes.
- » Configurations to support any standard Ethernet media and cabling system.

## Bridge isolation of a cascaded workgroup

This configuration is typical of departmental workgroups. Although it's fairly self-sufficient, it has been slowed down by unnecessary traffic from the rest of the network. By simply placing a Workgroup MiniBridge in the workgroup's uplink connection, local traffic is reduced, and workgroup bandwidth is increased.



## OVERVIEW

Get your traffic moving with the [Workgroup MiniBridge](#). It bridges between the workgroup and the central network, filtering out extra central network traffic that causes congestion.

Ideal for workgroups that have their own local server but have become clogged with both heavy local and network traffic, the MiniBridge can bridge-isolate the workgroup and local servers from the rest of the network, particularly since traffic is typically between the workgroup users and their servers. The result: It instantly frees up bandwidth for increased performance, essentially performing as a two-port switching hub.

Plug-and-play, this miniature local bridge learns the network addresses of the local workgroup network devices from the packets in the traffic, so there's no software setup required. In fact, because it operates as a transparent bridge—forwarding only packets that aren't needed on the network segment—it won't affect any standard software applications or SNMP network-management platforms.

And as you add or change users or servers on the network, the [Workgroup MiniBridge](#) learns the new network addresses and adapts automatically.

You can install the [Workgroup MiniBridge](#) in an existing network, either on a wiring-closet shelf, on a table-top, or on a wall (brackets are included). Its compact size allows it to be installed in virtually any location that's within reach of a standard AC wall outlet. Its portable design also makes it easy for hotspot analysis throughout your network and deploying in areas where traffic bottlenecks suddenly occur.

The [Workgroup MiniBridge](#) contains one repeater port module (RPM) and one bridge port module (BPM), both of which are enclosed at opposite ends of the MiniBridge's compact yet rugged metal enclosure.

The RPM, which connects to the upstream network, behaves as a repeater port and relays all packets in both directions. The BPM, which connects to the workgroup segment, gives the [Workgroup MiniBridge](#)

its bridge functionality by making a filter/forward decision on each packet based on the contents of its address table. Each BPM is equipped with a media interface connector.

The chassis also houses the main circuit board, which is used to power the modules and serves as a connection plane between the BPM and RPM cards. The top side of the chassis has one DC power jack for the included external power supply, and one green power (PWR) LED, which lights when DC power is present.

### Repeater port module available:

The AUI RPM (found on our LB9901A-AUI, LB9901AE-AUI, LB9901A-AST and LB9901AE-AST) enables connections to a 10BASE5 (Thicknet) backbone or to any AUI segment, functions as an IEEE 802.3 repeater, and has a DB15 AUI female connector and a slide-lock. It's also a "universal" Ethernet media interface, because you can use it with a variety of mini-transceivers to connect to any media type. Use the module, for instance, to connect Ethernet devices using standard AUI cabling.

For diagnostic purposes, the AUI RPM has partition (PART) and receive (RX) LEDs that function the same as the LEDs on the BNC RPM.

### Bridge port module available:

The AUI BPM (mounted in the LB9901A-AUI and LB9901AE-AUI models) has a DB15 AUI female connector and a slide-lock, and provides bridge isolation from a 10BASE5 (Thicknet) backbone or any AUI segments. Self-learning, it filters and forwards packets at full Ethernet wire speed.

With its "universal" Ethernet media interface, the AUI BPM can be used with a variety of different mini-transceivers to provide connection to any media type (in particular, you'll need to use a transceiver when using the [Workgroup MiniBridge](#) to connect to a Thicknet segment).

For easy monitoring of activity, the module has one FWD-I LED and one FWD-X LED. These operate the same as the LEDs on the BNC BPM.

## TECH SPECS

**Approvals** — FCC Part 15, Class A; UL® 1950; CSA LR68048;  
 LB9901AE (230-VAC) versions are also CE approved  
**BPM Auto-Learning Address List** — 256-node capacity  
**BPM Filtering and Forwarding Rate (Maximum)** — 14,880 pps  
**Ethernet Segment Lengths (Maximum)** —

10BASE-T (twisted-pair):  
 100 m (328 ft.);  
 10BASE2 ThinNet (BNC):  
 185 m (607 ft.);  
 10BASE5 ThickNet:  
 500 m (1640.4 ft.)  
 FOIRL multimode fiber optic:  
 1 km (0.6 mi.)  
 10BASE-FL multimode fiber optic:  
 2 km (1.2 mi.)

**Protocol** — MAC layer, protocol independent

**RPM Partitioning** — Enforced after 32 consecutive collisions

**RPM Reconnect** — Occurs after 512 bits error-free transmission

**Speed** — 10 Mbps

**Standards** — Ethernet Ver.1.0–2.0 IEEE 802.3: 10BASE-T, 10BASE5, 10BASE2,  
 10BASE-FL and FOIRL

**Connectors** — LB9901A-AUI: (2) AUI; LB9901A-AST: (1) AUI, (1) Fiber Port

**Indicators** — (1) LED for Power; (1) Partition and (1) Receive LED for each port  
 module; fiber modules also have (1) Link LED

**Temperature Tolerance** —

Operating: 32 to 122°F (0 to 50°C);  
 Storage: -4 to +140°F (-20 to +60°C)

**Humidity Tolerance** — Operating:

10 to 95%, noncondensing

**Power** — External: Input:

LE9901A models:  
 95–125 VAC, 60 Hz;  
 LE9901AE models:  
 200–250 VAC, 50 Hz;

Consumption: 12 watts  
 (maximum)

**Size** — 3"H x 6"W x 1.7"D

(7.6 x 15.2 x 4.3 cm)

**Weight** — 2.5 lb. (1.1 kg)



LB9901A-AUI

## What's included

- ◆ Workgroup MiniBridge with (1) bridge port module (BPM) and (1) repeater port module (RPM) installed
- ◆ (1) external power supply
- ◆ (2) mounting brackets
- ◆ (2) mounting screws
- ◆ (1) VELCRO® tape section, approximately 3 inches (7.6 cm) long
- ◆ Users' manual

## Item

## Code

Workgroup MiniBridge

(2) AUI 115-VAC

(1) AUI, (1) Fiber Port 115-VAC

**LB9901A-AUI**

**LB9901A-AST**

## You may also need...

Ethernet Transceiver Cable (Office Environment),  
 10-ft. (3-m)

ThinNet Cable, PVC, 10-ft. (3-m)

Ceramic Terminated Multimode Duplex Fiber Optic  
 Cable, PVC, ST–ST, Custom Lengths

**LCN210-0010**

**LCN300-0010**

**EFN062-CC**

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