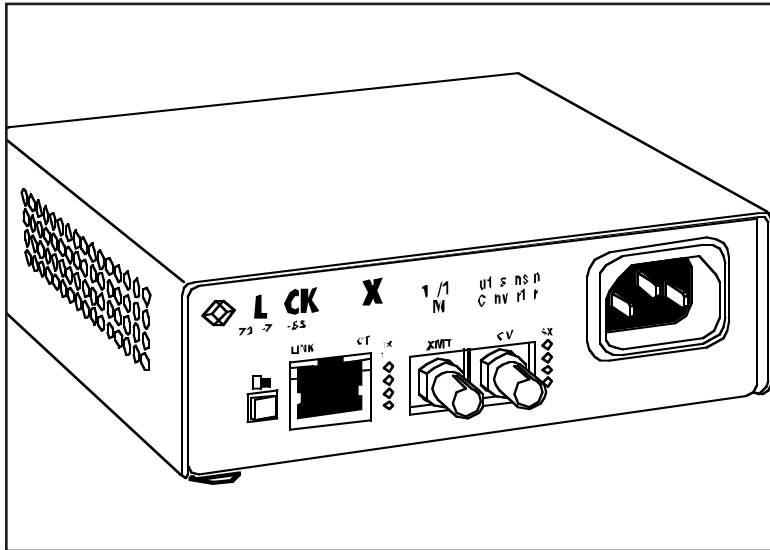


# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

### 10-/100-MBPS AUTOSENSING MEDIA CONVERTERS



**Convert either 10BASE-T or 100BASE-TX to fibre with this 10-/100-Mbps autosensing media converter.**

#### Key Features

- ▶ **10-/100-Mbps auto-sensing on the copper port.**
- ▶ **Choose multimode or single mode, ST or SC connectors.**
- ▶ **Internal power supply included.**
- ▶ **Only 1U high—fits nearly anywhere!**

Now it's possible to connect 10BASE-T or 100BASE-TX devices to your fibre-based cabling infrastructure with a single product. Black Box proudly introduces 10-/100-Mbps Autosensing Media Converters, the only device you need to convert 10BASE-T to fibre now and 100BASE-TX to fibre later.

Reduce fiber connectivity costs by using these 1U-high media converters as the glue between your fiber network and

your copper-based switches. Not only are they ideal for future-proofing your fibre-to-desktop applications, they also make upgrading to 100-Mbps workstations affordable. All you have to do is change the network interface card. It's that simple!

The Converters are available in multimode and single-mode versions with ST or SC connectors. Choose multimode for shorter distances (up to 1.2 miles [2 km]) and short-wave transmissions over 850-nm in fibre accordance with the 100BASE-SX standard. Single-mode versions support distances up to 20 km and transmit over 1300-nm fibre. They're 100BASE-FX compliant.

Power is supplied through an internal 100/240-VAC power supply, eliminating the need for unreliable, bulky external AC/DC transformers.

To make fault location easier,

the Converters feature Link-Fault Detection. When faults occur, the front-panel LEDs will light and show you exactly where the cable fault is located. The Converters also feature a push button by the twisted-pair port for selecting a crossover workstation connection or a pass-through repeater/hub/switch connection.

The Converter has three modes of operation:

- **PNP/Transparent.** Autonegotiating, where the converter automatically configures for 10 or 100 Mbps and half- or full-duplex. This is the default operation mode.
- **Force-10.** The unit acts as a regular 10BASE-T↔10BASE-FL converter.
- **Force-100.** The unit functions as 100BASE-TX↔100BASE-SX or 100BASE-TX↔100BASE-FX converter (depending on the model).

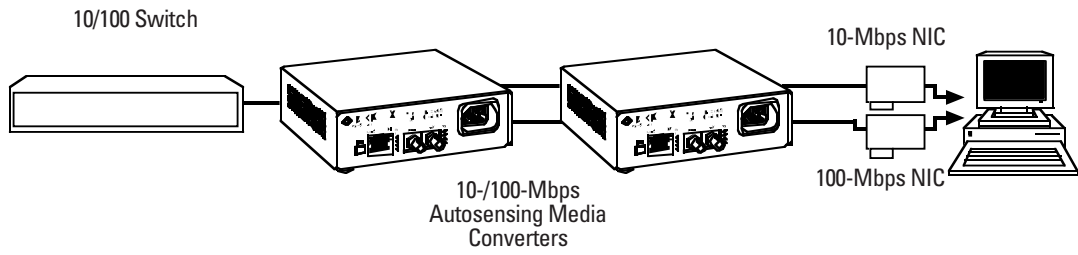
#### Is this product right for my network?

These media converters are ideally suited for small companies and remote campuses requiring minimal fibre connectivity.

The typical user has a 10-Mbps fibre network, plans to upgrade to 100 Mbps in the future, and doesn't want to have to buy new media converters for the upgrade.



# Upgrading a workstation to 100 Mbps is as easy as replacing a NIC. No other changes are required.



## Specifications

**Controls:** (1) external 8-position DIP switch, (1) twisted-pair crossover/pass-through push button

**Maximum Full-Duplex Distance:** LMC7001A–LMC7002A: 1.2 miles (2 km); LMC7003A–LMC7004A: 12.4 miles (20 km)

**Fibre Cable Requirements:** LMC7001A–LMC7002A: Multimode duplex, 850 nm;

LMC7003A–LMC7004A: Single-mode duplex, 1300 nm

**Standards:** All: IEEE 802.3: 10BASE-T, 10BASE-FL; LMC7001A–LMC7002A: IEEE 802.3u: 100BASE-TX, 100BASE-SX; LMC7003A–LMC7004A: IEEE 802.3u: 100BASE-TX, 100BASE-FX

**Approvals:** CE

**Connectors:** All: (1) RJ-45; LMC7001A, LMC7003A:

(1) pair of ST; LMC7002A, LMC7004A: (1) pair of SC, (1) IEC 320 power connector

**Indicators:**

Twisted-pair and fiber ports:  
 Link: On when link is established and all cables are connected;  
 Act: Blinks when data is detected; 100: On when 100-Mbps data is detected;  
 Twisted-pair ports also have:  
 AN: On when PNP/Transparent mode is enabled;

LFD: On when Link Fault Detection is available (only in PNP/Transparent mode);  
 PWR: ON when unit has power

**Power:** 100/240 VAC (±10%), 50/60 Hz, 0.1/0.05 A

**Size:** 4.4 x 11.9 x 11.2 cm

**Weight:** 0.6 kg

## Ordering Information

ITEM	CODE
10-/100-Mbps Autosensing Media Converters	
Multimode, 850-nm	
ST.....	LMC7001A
SC.....	LMC7002A
Single-Mode, 1300-nm	
ST.....	LMC7003A
SC.....	LMC7004A
<i>You may also want to order cable...</i>	
Multimode Duplex Fibre Optic Cable, PVC, Custom Lengths	
ST-ST.....	EFN062-CC
SC-SC.....	EFN4025
Single-Mode Duplex Fibre Optic Cable, PVC, Custom Lengths	
ST-ST.....	EFN5009
SC-SC.....	EFN5010

