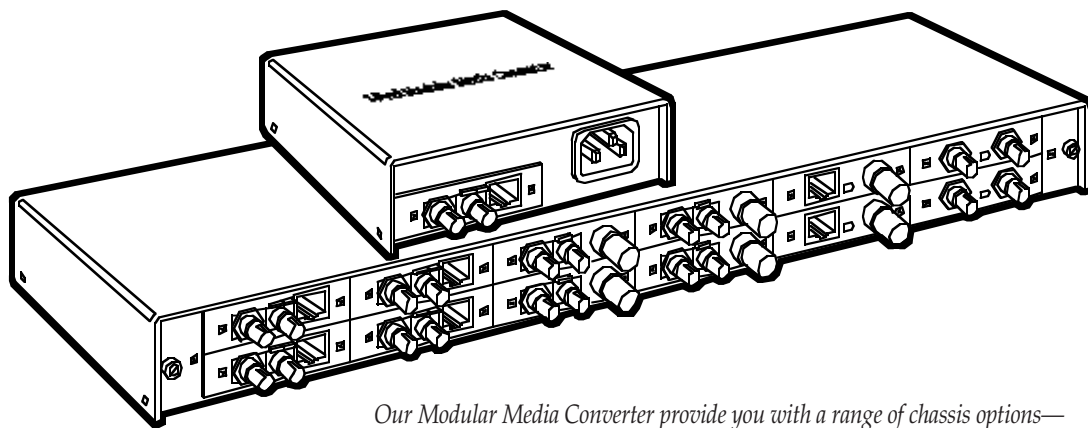


## Modular Media Converters



*Seven chassis options plus 13 converter modules equals complete flexibility in media conversion.*

*Our Modular Media Converter provide you with a range of chassis options—such as the 1- and 12-port chassis shown here—and all chassis come equipped with an internal AC power supply. The 12-port model is also available with a DC power supply and an extra slot for a second, redundant AC or DC power supply should your applications demand this.*

### Key Features

- ▶ 1-, 4-, 8-, and 12-slot chassis versions available.
- ▶ Supports any combination of 10- or 100-Mbps Ethernet or protocol-independent single- or multimode fibre.
- ▶ Unique Link Loss feature provides instant notification of fibre segment link problems.
- ▶ All models come equipped with internal AC power supplies; 12-slot chassis version also offers optional DC power supply.
- ▶ Choose from 13 modules for complete media converter flexibility.

### Technically Speaking

Converting your 10BASE-T, BNC, and fibre media cable types just got even easier—thanks to Black Box's new line of Modular Media Converters.

With these Media Converters, you can convert 10- and 100-Mbps data between ThinNet, single- and multimode fiber, and twisted-pair cable types in half- or full-duplex mode. We've even got protocol-independent single- and multimode conversion models over 1300 nm. What's more, you can choose from 1-, 4-, 8-, and 12-slot versions and 13 converter modules so you get the exact configuration you need.

#### Chassis Options

Each of the seven available chassis models offers an internal AC power supply, as opposed to the typical external power supply offered by most other media

converters.

The 1- and 4-slot versions are standalone models. The 8-port model is rackmountable and stands 1U high.

The 12-slot rackmount chassis version is the only product available today that supports media conversion for 12 independent links, including 10- and 100-Mbps Ethernet, protocol-independent single- and multimode fibre, and ThinNet.

This chassis is also available with an AC or DC power supply as well as a slot for installing a second redundant power supply module. In addition, you can

choose between 1U- and 2U-high units. The 2U-high unit places the power and data on one side of the unit for added convenience during network operation and maintenance.

#### Module Options

Any combination of modules can be installed in the multiple port chassis for complete configuration flexibility.

The 10- and 10-Mbps modules also offer user-selectable Link Loss. With this feature active, the twisted-pair segment reflects the status of the fibre segment. That means you can instantly identify

### Typical Application

*You want the flexibility offered by Media Converters and you have a variety of media types you need to translate. The problem? Limited space. Well, if you select our 2U-high 12-slot chassis, your power and data cable are located on one side of the unit so it's easier to access your equipment. What's more, you don't have to worry about crowded installations.*

failures on the fibre link without waiting for users at the other end to report the problem. And that means you save time and money.

### 10-Mbps Modules

All 10-Mbps modules feature an internal two-position crossover/pass-through switch that eliminates the need for any external crossover cables. Simply move the switch to the appropriate setting on the module before installing the card.

Go from twisted-pair to ThinNet or to single- or multimode fibre cabling. You can even select a module that supports single-mode fibre distances in excess of 20 km. Simply select the module that offers a higher power output (dBm) specification and more

transmitter strength so you have the power to attain those longer distances.

### 100-Mbps Modules

Use the Fast Ethernet modules to translate from twisted-pair to single-mode or multimode fibre with either SC or ST connectors.

With the single-mode 100-Mbps versions—like the 10-Mbps single-mode modules—you can choose modules that support distances in excess of 20 km and that offer SC or ST connectors.

### Single-to-Multimode Modules

These modules work in pairs and require two slots on your Media Converter Chassis. (That means, of course, that you can't use these modules with the one-slot chassis.)

Each set consists of two modules. One module has a single-mode receive port and

a multimode transmit. The other module has a multimode receive ports and a single-mode transmit port.

Choose from modules that support conversions from 1300-nm single-mode to 1300-nm multimode at distances of 10 km and power output of 8.5 dBm, or distances of 20 km and power output of 17.5 dBm.

### Redundant Power Supply Modules

If you don't want to lose power at a critical point during your application, install a redundant, fault-tolerant AC or DC power supply in the additional slot provided on the 12-slot chassis. Modules are available for both the 1U- and 2U-high chassis models.

### Additional equipment you may need:

- Category 5 Solid Conductor Cable
- Bulk Duplex Fibre Optic Cable
- 10- and 100-Mbps Hubs
- 10- and 100-Mbps Ethernet Switches

### Specifications

#### Chassis

**Humidity** — 5 to 95% (non-condensing)

#### Temperature —

Operating: 0° to 50°C;  
Storage: -6° to 71°C)

#### Power — AC Input Load:

120/240 VAC,  
50/60 Hz, 1/5 A;  
DC Input Load: -48 VDC

#### Size — LE7401A-R2:

3.8H x 11.8W x 11.3D cm  
(1.5"H x 4.7"W x 4.4"D);  
LE7404A:  
4.4H x 21.9W x 12.7D cm  
(1.8"H x 8.6"W x 5"D);  
LE7408A:  
4.4H x 44.5W x 12.7Dcm  
(1.8"H x 17.5"W x 5"D);  
LE7412A, LE7412A-DC:  
4.4 Hx 44.5W x 29.4Dcm  
(1.8"H x 17.5"W x 11.5"D);  
LE7412A-2, LE7412A-2DC:  
8.9H x 44.5W x 17.1Dcm  
(3.5"H x 17.5"W x 6.8"D)

**Weight** — LE7401A,  
LE7412A-DC: 0.9 kg;

LE7404A: 1.6 kg;  
LE7408A: 2.8 kg;  
LE7412A, LE7412A-2,  
LE7412A-DC,  
LE7412A-2DC: 5 kg

#### Modules

**CE Approval** — All items listed are approved

#### Connectors — 10-Mbps

**Conversion Modules:**  
LE740-TPSTM: (1) RJ-45,  
(1) ST multimode;  
LE740-TPSTS, LE740-TPSTS20: (1) RJ-45, (1) ST single-mode;  
LE740-BNSTM: (1) BNC, (1) ST multimode;  
LE740-TPBNC: (1) RJ-45, (1) BNC;

**100-Mbps Conversion Modules:** LH740-TPSCM: (1) RJ-45, (1) SC multimode;  
LH740-TPSCS, LH740-TPSCS20: (1) RJ-45, (1) SC single-mode;  
LH740-TPSTM: (1) RJ-45, (1) ST multimode;  
LH740-TPSTS, LH740-TPSTS20: (1) RJ-45, (1) ST single-mode

### 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.

## Ordering Information

This information will help you place your order quickly.

PRODUCT NAME	ORDER CODE
<b>Chassis</b>	
120/240 VAC Power Supply	
1-Slot.....	LE7401A-R2
4-Slot.....	LE7404A
8-Slot.....	LE7408A
12-Slot (1U High).....	LE7412A
12-Slot (2U High).....	LE7412A-2
<b>48-VDC Power Supply</b>	
12-Slot (1U High).....	LE7412A-DC
12-Slot (2U High).....	LE7412A-2DC
<b>10-Mbps Conversion Modules</b>	
10BASE-T/Fibre-ST (Multimode).....	LE740-TPSTM
10BASE-T/Fibre-ST (Single-Mode) 7.0-dBm.....	LE740-TPSTS
10BASE-T/Fibre-ST (Single-Mode) 16.5-dBm.....	LE740-TPSTS20
ThinNet/Fibre-ST (Multimode).....	LE740-BNSTM
10BASE-T/ThinNet.....	LE740-TPBNC
<b>100-Mbps Conversion Modules</b>	
100BASE-TX/Fibre-SC (Multimode).....	LH740-TPSCM
100BASE-TX/Fibre-SC (Single-Mode) 6.0-dBm.....	LH740-TPSCS
100BASE-TX/Fibre-SC (Single-Mode) 16.5-dBm.....	LH740-TPSCS20
100BASE-TX/Fibre-ST (Multimode).....	LH740-TPSTM
100BASE-TX/Fibre-ST (Single-Mode) 6.0-dBm.....	LH740-TPSTS
100BASE-TX/Fibre-ST (Single-Mode) 14.0-dBm.....	LH740-TPSTS20
<b>1300-nm Single-Mode to 1300-nm Multimode Modules</b>	
10 km.....	LE740-SMMM2
20 km.....	LE740-SMMM
<b>Redundant Power Supply Modules</b>	
For 1U 12-slot chassis	
40 Watts, 120/240-VAC.....	PS7412A
50 Watts, -48-VDC.....	PS7412A-DC
For 2U 12-slot chassis	
40 Watts, 120/240-VAC.....	PS7412A-2
50 Watts, -48-VDC.....	PS7412A-2DC