Compact Media Converters

BLACK BOX®
724-746-5500

Compact
Media Converter

RCV   XMT

FO RCV
TP LNK
FA
FO LNK

X II

10Mbps

Small, inexpensive, easy to install—
and each unit includes its own power supply.

FEATURES

- **Connections for 850-nm multimode, 1300-nm multimode, and 1300-nm single-mode fiber.**
- **Various models support 10BASE-T, 10BASE2, 100BASE-TX, 100BASE-FX, and 100BASE-SX protocols and cabling standards.**
- **LinkLoss and FiberAlert notify network managers of "silent failures."**
- **Externally accessible port settings.**
- **RoHS compliant.**

OVERVIEW

Compact Media Converters are low-cost, fixed-configuration media converters. Converters with 10-Mbps modules provide a single conversion between 10BASE-T and either 10BASE2 (ThinNet) or multimode or single-mode fiber. Converters with 100-Mbps modules provide conversion between 100BASE-TX and either 100BASE-SX multimode fiber or 100BASE-FX multimode or single-mode fiber.

At only 1U high, these units are extremely compact. All selectable features are externally accessible, and each port includes diagnostic LEDs. Twisted-pair ports feature a straight-through/crossover switch. BNC ports feature a termination switch.

An autosensing power supply is built into each converter, so there's no need to buy any additional equipment.

To assist you in pinpointing link faults between media-conversion products, the media converters feature LinkLoss™ and FiberAlert™.

When the fiber segment has a link fault, LinkLoss passes the fault to the twisted-pair segment and drops the twisted-pair link LED.

When a fiber optic receive fault is detected, FiberAlert makes the link LED for the opposite end of the fiber conversion pulse, indicating that there's a problem and eliminating "silent failures."

You can enable or disable LinkLoss/FiberAlert via a DIP switch located on the bottom of any converter unit.

The LMC009A-R4 includes two external switches, one that selects termination on the BNC port and one that selects crossover for the UTP port. The other converters include an external MDI-X switch for selecting crossover or passthrough twisted-pair connections on the UTP port.

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?
- **You wait more than 30 minutes to get through to a vendor's tech support.**
- **The so-called "tech" can't help you or gives you the wrong answer.**
- **You don't have a purchase order number and the tech refuses to help you.**
- **It's 9 p. m. and you need help, but your vendor's tech support line is closed.**

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

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#20400

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◆ **BLACK BOX**
NETWORK SERVICES

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TECH SPECS

Approvals — UL®, cUL, CE, RoHS

Full-Duplex Distance (Maximum) —
LMC001A-R5–LMC004A-R5, LMC007A-R5–LMC008A-R5, LMC009A-R4:
10BASE-T link: 100 m (328 ft.);
LMC001A-R5–LMC002A-R5, LHC001A-R4–LHC002A-R4, LHC009A-R3:
Fiber link: 2 km (1.2 mi.);
LMC003A-R5–LMC004A-R5: Fiber link: 10 km (6.2 mi.);
LMC007A-R5–LMC008A-R5: Fiber link: 40 km (24.9 mi.);
LMC010A–LMC011A: Fiber link: 80 km (49.7 mi.);
LMC012A: Fiber link: 100 km (62.1 mi.);
LMC009A-R4: 10BASE2 link: 185 m (607 ft.);
LHC008A-R3–LHC009A-R3: Fiber link: 300 m (984.3 ft.);
LHC001A-R4–LHC002A-R4, LHC005A-R4–LHC006A-R4,
LHC008A-R3–LHC009A-R3: 100BASE-TX link: 100 m (328 ft.);
LHC005A-R4–LHC006A-R4: Fiber link: 40 km (24.9 mi.);
LHC037A–LHC039A: Fiber link: 80 km (49.7 mi.)

Heat Generated (Maximum) — 30 BTU/hour

Wavelength —
LMC001A-R5–LMC002A-R5: 850 nm multimode;
LMC003A-R5–LMC004A-R5, LHC001A-R4–LHC002A-R4,
LHC008A-R3–LHC009A-R3: 1300 nm multimode;
LMC007A-R5–LMC008A-R5, LHC005A-R4–LHC006A-R4,
LHC037A–LHC038A: 1300 nm single-mode;
LHC039A: 1550 nm single-mode

Connectors — LMC009A-R4: (1) RJ-45 (shielded), (1) BNC F;
All others: (1) RJ-45 (shielded), (1) ST® or SC

Indicators —
LMC001A-R5–LMC004A-R5, LMC007A-R5–LMC008A-R5,
LHC008A-R3–LHC009A-R3, LHC001A-R4–LHC002A-R4,
LHC005A-R4–LHC006A-R4, LHC037A–LHC039A: Fiber Receive,
Twisted-Pair Link, Fiber Alert, Fiber Link;
LMC009A-R4: Twisted-Pair Receive, Twisted-Pair Link, BNC Collision,
BNC Receive

Temperature —
Operating: 32 to 104°F (0 to 40°C);
Storage: 22 to 160°F (-5 to +71°C)

Humidity Tolerance — 5 to 95%, noncondensing

Power —
LMC001A-R5–LMC004A-R5, LMC007A-R5–LMC008A-R5, LMC009A-R4,
LHC008A-R3–LHC009A-R3, LHC037A–LHC039A: 110–240 VAC,
50–60 Hz, internal, autosensing;
LHC001A-R4–LHC002A-R4, LHC005A-R4–LHC006A-R4:
95–240 VAC, 50–60 Hz, 0.1/0.5 A, internal, autosensing

Size — 1.5"H x 4.7"W x 4.4"D (3.8 x 11.9 x 11.2 cm)

Weight — 2 lb. (0.9 kg)

LMC001A-R5

Item	Code
Compact Media Converters	
10-Mbps Modules with Internal Power Supply	
10BASE-T/Multimode Fiber, 850-nm	
ST	**LMC001A-R5**
SC	**LMC002A-R5**
10BASE-T/Multimode Fiber, 1300-nm	
ST	**LMC003A-R5**
SC	**LMC004A-R5**
10BASE-T/Single-Mode Fiber Plus, 1300-nm	
40 km	
ST	**LMC007A-R5**
SC	**LMC008A-R5**
80 km	
ST	**LMC010A**
SC	**LMC011A**
100 km	
SC	**LMC012A**
10BASE-T/ThinNet	**LMC009A-R4**
100-Mbps Modules with Internal Power Supply	
100BASE-TX/100BASE-SX Multimode Fiber, 850-nm	
300 m	
ST	**LHC008A-R3**
SC	**LHC009A-R3**
100BASE-TX/100BASE-FX Multimode Fiber, 1300-nm	
2 km	
ST	**LHC001A-R4**
SC	**LHC002A-R4**
100BASE-TX/100BASE-FX Single-Mode Fiber Plus, 1300-nm	
40 km	
ST	**LHC005A-R4**
SC	**LHC006A-R4**
80 km	
ST	**LHC037A**
SC	**LHC038A**
100BASE-TX/100BASE-FX Single-Mode Fiber Plus, 1550-nm	
80 km	
SC	**LHC039A**

For optimum performance, order…
Category 5 Solid-Conductor Cable, 4-Pair, 10-ft. (3-m), Straight-Pinned, PVC	**EYN556MS-0010**
Coax Cable, 10-ft. (3-m), PVC	**ETN62-0010-BNC**
Duplex Fiber Optic Cable, Custom Lengths, PVC	
ST–ST	**EFN110-STST**
SC–SC	**EFN110-SCSC**
ST–SC	**EFN110-STSC**

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