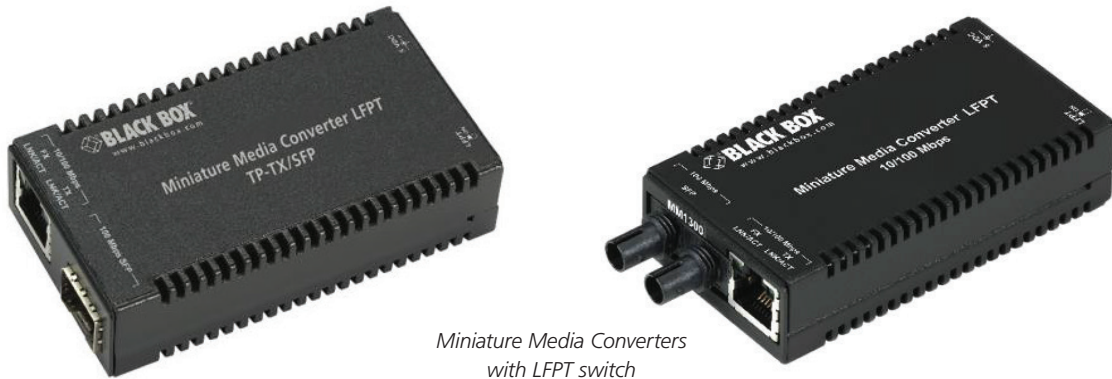


Product Data Sheet

Multipower Miniature Media Converters

First, choose your Multipower Miniature Media Converters (for a complete list of available models, see Ordering Information on page 4).



Miniature Media Converters
with LFPT switch
(LHC0xxA-R3)

Optionally, you can mount up to 18 Multipower Miniature Media Converters in the PowerTray (part number LHC018A-AG-R2, shown below).



PowerTray, 18-Slot
(LHC018A-AC-R2)

Features

- Convert 10-, 100-, or 1000-Mbps copper ports to fiber optic cable.
- Bring fiber to the desktop more economically than fiber NICs.
- Compact size makes them easy to integrate.
- Autonegotiating for speed and duplex..
- LHC0xxA-R3 models include a Link Fault Pass-Through (LFPT) switch that turns LFPT off for troubleshooting.

Multipower Miniature Media Converters Data Sheet

Overview

Now it's easier than ever to bring fiber to your network, no matter if your network is spread across a business campus, a large industrial site, or over great distances and/or subjected to temperature extremes. The Multipower Miniature Media Converters bring fiber to the desktop.

Good things, small packages.

Multipower Miniature Media Converters are easy to install (literally plug-and-play), tiny enough to fit in anywhere, and very economical.

Use them to bring fiber to the desktop or add fiber segments to your network to gain extra distance—up to 43.5 miles (70 km) with single-mode fiber.

Twice the conversion power!

A Multipower Miniature Media Converter enables you to connect 10/100/1000-Mbps twisted-pair network segments to fiber optic cabling. It's both a media and data rate converter with 10/100/1000 auto-negotiation on the twisted-pair port. The fiber port operates at 100 Mbps or 1000 Mbps, depending on model.

All Multipower Miniature Media Converters have an HDX/FDX function for half- and full-duplex autosensing.

Installation is easy.

Just connect a Multipower Miniature Media Converter to the RJ-45 connector on your PC's 10/100/1000-Mbps Ethernet port using CAT5e cable, then connect fiber optic cable to the other side of the media converter.

What's more, these tiny converters tuck unobtrusively behind your PC.

Go the distance with fiber.

Multipower Miniature Media Converters using multimode fiber support distances of up to 984.2 feet (300 m) or 1.2 miles (2 km)—enough distance for most LAN applications. For more extensive campus applications, choose Single-Mode or Single-Mode, Single-Strand models for long-distance runs of up to 6.2, 12.4, 24.8, or 43.5 miles (10, 20, 40, or 70 km).

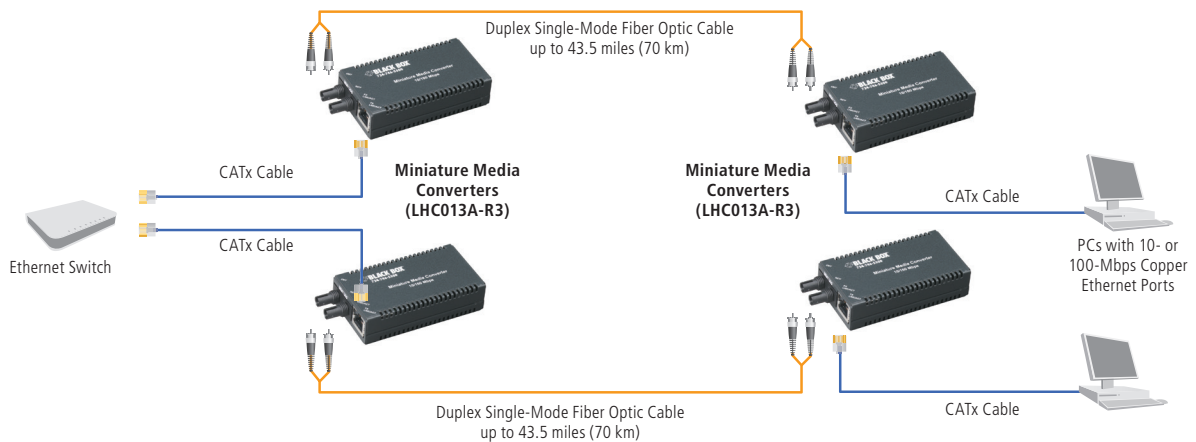
Three power options.

Multipower Miniature Media Converters can be powered one of three ways: by an external AC power supply included with each unit, by an optional USB Power Adapter Cable that plugs into a PC's USB port, or by an optional rackmount PowerTray.

The AC power supply is a universal external transformer that requires a nearby AC power outlet. The PowerTray provides power for up to 18 converters in only 1.5U of rack space. Rackmount ears are included.

Typical application.

Multipower Miniature Media Converters extend your 10/100/1000BASE-T network beyond the 328-foot (100-m) limit—perfect for connecting remote workstations.



Specifications

Operating Environment	Temperature: 32 to 122° F (0° to 50° C); Humidity: 5 to 95%, noncondensing
Standards/Approvals	IEEE 802.3, IEEE 802.3u, CE, RoHS
User Controls	All -R3 models: (1) LFPT switch
Connectors	All except for LGC300A-R2 (SFP model): Copper side: (1) RJ-45; Fiber side: ST or SC: LHC040A-R3, LHC013A-R3, LHC036A-R3: (1) pair of ST®; LHC041A-R3, LHC014A-R3–LHC015A-R3, LGC010A-R2–LGC011A-R2, LGC120A-R2–LGC128A-R2: (1) pair of SC; LHC042A-R3–LHC043A-R3, LHC028A-R3–LHC029A-R3, LGC014A-R2–LGC015A-R2: (1) SC; LGC300A-R2 (SFP-to-SFP model): (2) SFP, (1) AC power, (1) 4-terminal DC power
Power	All except for LGC300A-R2 (SFP model): From the included external 100–240-VAC, 50–60-Hz, autosensing adapter; Via the optional USB Power Adapter Cable (LHC021A or LGC022A) connected to computer’s USB port; From the optional PowerTray with a 100–240 VAC, 50–60-Hz (LHC018A-AC-R2) power supply; Draw: 96 watts, fully loaded LGC300A-R2 (SFP model): Dual power: AC: Input: External 100–240-VAC, 50–60-Hz, autosensing power supply with country-specific power clips; Output: 5 VDC, 2 amp, 10 watts
Dimensions	1.8"H x 0.8"W x 3.4"D (2 x 4.6 x 8.6 cm)
Weight	0.3 lb. (0.1 kg)

NOTE: The LHC040A-R3 and LHC041A-R3 use a 850-nm wavelength, so they meet the 100BASE-SX standard.

Multipower Miniature Media Converters Data Sheet

Ordering Information

Item	Code
Multipower Miniature Media Converters	
10-/100-Mbps Copper to 100-Mbps Duplex Fiber	
Multimode, 850-nm 300 m ST	LHC040A-R3
	LHC041A-R3
Multimode, 1300-nm 2 km ST	LHC013A-R3
	LHC014A-R3
Single-Mode, 1310-nm 40 km ST	LHC036A-R3
	LHC015A-R3
10-/100-Mbps Copper to 100-Mbps Single-Strand Fiber, 2 km (Order one of each.)	
Multimode, 1310-nm TX/1550-nm RX SC	LHC042A-R3
Multimode, 1550-nm TX/1310-nm RX SC	LHC043A-R3
10-/100-Mbps Copper to 100-Mbps Single-Strand Fiber, 20 km (Order one of each.)	
Single-Mode, 1310-nm TX/1550-nm RX SC	LHC028A-R3
Single-Mode, 1550-nm TX/1310-nm RX SC	LHC029A-R3
1000-Mbps Copper to 1000-Mbps Duplex Fiber	
Multimode, 850-nm 220 m SC	LGC010A-R2
Single-Mode, 1310-nm 10 km SC	LGC011A-R2
1000-Mbps Copper to 1000-Mbps Single-Strand Fiber, 10 km (Order one of each.)	
Single-Mode, 1310-nm TX/1550-nm RX SC	LGC014A-R2
Single-Mode, 1550-nm TX/1310-nm RX SC	LGC015A-R2

Item	Code
10-/100-/1000-Mbps Copper to 1000-Mbps Duplex Fiber	
Multimode, 850-nm 220 m SC	LGC120A-R2
Single-Mode, 1310-nm 10 km SC	LGC121A-R2
	LGC122A-R2
	LGC124A-R2
10-/100-/1000-Mbps Copper to 1000-Mbps Single-Strand Fiber, 10 km (Order one of each.)	
Single-Mode, 1310-nm TX/1550-nm RX SC	LGC125A-R2
Single-Mode, 1550-nm TX/1310-nm RX SC	LGC126A-R2
10-/100-/1000-Mbps Copper to 1000-Mbps Single-Strand Fiber, 40 km (Order one of each.)	
Single-Mode, 1310-nm TX/1550-nm RX SC	LGC127A-R2
Single-Mode, 1550-nm TX/1310-nm RX SC	LGC128A-R2
Multipower Miniature 100-/1000-Mbps SFP-to-SFP Mode Converter LGC300A-R2	
To power a single converter via your computer's USB port, order...	
USB Power Adapter Cable (for use with 10/100 converters)	LHC021A
Dual USB Power Adapter Cable (for use with Gigabit converters)	LGC022A
To rackmount multiple Miniature Media Converters, order...	
PowerTray, 18-Slot with AC Power	LHC018A-AC-R2
For DIN rail mounting, order...	
DIN Rail Clip	LXC-DR

About Black Box:

Black Box is a leading technology product solutions provider that helps customers build, manage, optimize, and secure their networks. The Black Box quality management system is ISO 9001:2008 certified, and the company has received numerous industry recognitions. Black Box provides its customers with free, 24/7 pre- and post-sales technical support. The Black Box catalog and Web site offer an extensive range of infrastructure products including Cabling, Cabinets & Racks, Data Center Cooling Solutions, Power & Surge Protection, and Environmental Monitoring.

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