FlexPoint RS-232 to Fiber Converters

Extend RS-232 communications as far as 58 kilometers!

FEATURES

» Provide serial RS-232 to fiber optic conversion and extension.
» Distances up to 58 kilometers (36 miles).
» Autosense speeds up to 115.2 kbps.
» Work as standalone or hot-swappable chassis-based extenders.
» Easy to install.
» Include DC power supplies. Or power multiple units with the space-saving 19" rackmountable FlexPoint Power Chassis.
» Feature DTE/DCE configuration for easy connections to DTE or DCE devices using straight-through cabling.
» Support half- and full-duplex operation.
» Remote loop capability for remote fiber testing and LEDs for status monitoring.

OVERVIEW

To extend your serial connections over secure, interference-free fiber optic media, order BLACK BOX® FlexPoint RS-232 to Fiber Converters.

Ideal for extending links to RS-232 equipment such as controllers, modems, and terminals in industrial networking or office applications, these fiber converters feature baud-rate autosensing at speeds up to 115.2 kbps and, for user flexibility, support half- or full-duplex modes of operation.

With the multimode versions, you can extend RS-232 data up to 2.5 kilometers (1.5 mi.) or 5 kilometers (3.1 mi.). For extra range, such as in long-haul fiber applications, order the single-mode models. Depending on the models ordered, they support long-distance links as as far as 58 kilometers (36 mi.)

Connecting a serial device is easy. Just attach the RS-232 port via a male DB9 serial cable to the RS-232 equipment. The FlexPoint RS-232 to Fiber Converters also feature switch-selectable DTE/DCE configuration. When connecting the RS-232 cable to data terminal equipment such as a computer or controller, you just flip up the DTE switch. And when you need to link to data communication equipment, such as a modem or printer, you just flip down the DCE switch.

And there's no special crossover cabling needed either. An ordinary straight-through cable works whether you're connecting data terminal or data communications equipment in your application.

Flow control can be accessed via software using the X-ON/X-OFF protocol or via the supported RTS, CTS, DCD, DTR, and DCR flow control signals.

To assist you with the installation, operation, and troubleshooting of the converters, FlexPoint RS-232 to Fiber Converters feature an informative diagnostic LED display that provides at-a-glance status information.

The media converters also have a loopback feature set for remote fiber testing. By initiating remote loops, you can verify the integrity of the fiber link connection—without actual data activity on the link itself. You can test both ends of the fiber from one location with no need to set switches on both units simultaneously. When the fiber loopback switch is set in this mode of operation, the local unit's fiber transmit port is encoded to carry a remote loopback protocol over the fiber to the far-end converter and return a signal back to the originating unit. LEDs on the local and remote units will blink to indicate that there's a good fiber link between the converters.

You can use FlexPoint RS-232 to Fiber Converters as standalone, rackmount, or wallmount units. You can also mount multiple units in a FlexPoint 14-Slot Power Chassis, which features either an AC or a 48-VDC power supply and can be used to hold other devices in the FlexPoint family.

TECH SPECS

Compliance — FCC Class A, Part 15; UL® 81J1 E81356; CSA Canada UL LR99169

Distance (Maximum) — Copper side: All: 50 ft. (15.2 m); Fiber side: ME660A-MST, ME660A-MSC: 1.5 mi. (2.5 km); ME661A-MST, ME661A-MSC, ME661A-MRJ: 3.1 mi. (5 km); ME662A-MST, ME662A-SSC, ME622A-SRJ: 18.6 mi. (30 km); ME663A-SSC: 37.2 mi. (60 km)

Fiber Type — 50/125-, 62.5/125-, or 100/140-μm multimode or 9/125-μm single-mode

Flow Control — Software: X-ON, X-OFF; Hardware: RTS, CTS, DCD, DCR

Operating Humidity — Up to 90% noncondensing

Operating Temperature — 32 to 158 ºF (0 to 70 ºC)

Operation — Asynchronous, point-to-point

Speed (Maximum) — 115.2 kbps

TX/RX Wavelength — ME660A-MST, ME660A-MSC: 850 nm; ME661A-MST, ME661A-MSC, ME661A-MRJ, ME662A-SST, ME662A-SSC, ME662A-SRJ, ME661A-SSC: 1310 nm

Minimum TX Power (dBm) — ME660A-MST, ME660A-MSC: -21; ME661A-MST, ME661A-MSC, ME661A-MRJ: -24; ME662A-MST, ME662A-SSC, ME662A-SRJ: -15; ME663A-SSC: -5

Maximum TX Power (dBm) — ME660A-MST, ME660A-MSC: -11; ME661A-MST, ME661A-MSC, ME661A-MRJ: -14; ME662A-MST, ME662A-SSC, ME662A-SRJ: -8; ME663A-SSC: 0

Minimum RX Power (dBm) — ME660A-MST, ME660A-MSC, ME661A-MST, ME661A-MSC, ME661A-MRJ, ME662A-MST, ME662A-SSC, ME662A-SRJ, : ME663A-SSC: -31

Maximum RX Power (dBm) — ME660A-MST, ME660A-MSC: -11; ME661A-MST, ME661A-MSC, ME661A-MRJ: -14; ME662A-MST, ME662A-SSC, ME662A-SRJ: -8; ME663A-SSC: -3

Optical Power Budget — ME660A-MST, ME660A-MSC: 10; ME661A-MST, ME661A-MSC, ME661A-MRJ: 7; ME662A-MST, ME662A-SSC, ME662A-SRJ: 16; ME663A-SSC: 26

CE Approval — Yes

Connectors — All: RS-232 side: DB9 F; Fiber side: ME660A-MST, ME661A-MST, ME662A-MST: (1) pair of ST; ME660A-MSC, ME661A-MSC, ME662A-SSC, ME663A-SSC: (1) pair of SC; ME661A-MRJ, ME662A-SRJ: (1) MT-RJ

Indicators — (4) LEDs: PWR (Power), DTE/DCE Select, Copper Link/Receive, Fiber Link/ Receive

Power — From the included DC power supply (9 VDC/500 mA or 5 VDC/750 mA); or from the FlexPoint Power Chassis

Size — 1"H x 3"W x 4"D (2.5 x 7.6 x 10.2 cm)

Weight — 0.4 lb. (0.2 kg)

NOTE: Must be used in pairs.

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ME660A-MST

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.

Item		Code
FlexPoint RS-232 to Fiber Converters		
Multimode		
2.5 km	ST	**ME660A-MST**
	SC	**ME660A-MSC**
5 km	ST	**ME661A-MST**
	SC	**ME661A-MSC**
	MT-RJ	**ME661A-MRJ**
Single-Mode		
28 km	ST	**ME662A-SST**
	SC	**ME662A-SSC**
	MT-RJ	**ME662A-SRJ**
58 km	SC	**ME663A-SSC**

For your chassis, you may also need…

Item	Code
Rackmounting Kit (for 5 Units)	**LMC205**
Wallmounting Hardware	**LMC206-WALL**
FlexPoint DIN Rail Mounting Kit	**LMC207-DRM**
DC Power Converter, 18-to-72 VDC, Standalone	**LMC204A**
DC Power Converter Wallmounting Kit (for LMC204A)	
	LMC206A-WALL-DC
International Power Supply (9 V, 1.0 A)	**LMC203A**

To power multiple converters in a space-saving chassis, order…

Item		Code
FlexPoint 14-Slot Power Chassis		
Single Power Supply	115–230 VAC	**LMC200**
	48-VDC	**LMC200A-DC**
Dual Power Supply	115–230 VAC	**LMC200-2PS**
	48-VDC	**LMC200A-2PS-DC**
Spare Power Supplies for 14-Slot Power Chassis		
	48 VDC	**PSFP20-DC**
	115–230 VAC	**PSFP200**

NOTE: Must be used in pairs.

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