

# EIR102 Series

## Industrial Ethernet Media Converter

- ✓ 10 to 48 VDC External Power Input
- ✓ Removable Terminal Blocks
- ✓ Multi-mode or Single-mode Fiber
- ✓ Virtually any Port Combination
- ✓ Easy DIP Switch Control for:
  - 10/100 Mbps - Auto or Forced
  - Full/Half Duplex - Auto or Forced
  - Link Fault Pass Through - Enable or Disable
  - Snooping Mode – Store & Forward or Forward All



Have you ever needed to convert your multi-mode fiber into a single mode-fiber due to equipment upgrades or pre-existing fiber runs? Or have you simply needed to extend Ethernet beyond its normal capabilities? B&B Electronics Elinx™ Industrial Ethernet Media Converters offer virtually any fiber port combination. This is extremely handy for retrofit applications using existing fiber with new equipment that uses a different fiber type. You may even find that your application requires a mixture of fiber types due to equipment used.

Elinx™ Industrial Media Converters can also be used for Ethernet extension, noise immunity, and protection against surges and spikes.

<b>Ordering Information</b>			
Model Number	10/100 Copper	Multi-Mode Fiber	Single-mode Fiber
EIR102-MT	1	1 (ST)	
EIR102-MC	1	1 (SC)	
EIR102-SC	1		1 (SC)
EIR102-ST	1		1 (ST)
EIR102-SC40	1		1 (SC) 40km
EIR102-ST40	1		1 (ST) 40 km
EIR102-SC80	1		1 (SC) 80km
EIR102-ST80	1		1 (ST) 80 km
EIR102-MT-SC		1 (ST)	1 (SC)
EIR102-MT-ST		1 (ST)	1 (ST)
EIR102-MC-SC		1 (SC)	1 (SC)
EIR102-MC-ST		1 (SC)	1 (ST)

These are only our most popular variations. Visit [www.bb-elec.com/ElinxConfigurator](http://www.bb-elec.com/ElinxConfigurator) to configure to configure your Media Converter with virtually any port combination

<b>Accessory Items</b>	
MDR-20-24	DIN Rail Mount, 24 VDC, 1 A Power Supply
MDR-40-24	DIN Rail Mount, 24 VDC, 1.7 A Power Supply
DRPM25	Panel Mount Adapter

**We also offer a full line of Fiber Optic and RJ-45 Patch Cables**

## Specifications

### Technology

Standards:	IEEE802.3, 802.3u, 802.3x
Processing Type:	Store and forward with IEEE802.3x full duplex, non-blocking flow control
Flow Control:	IEEE802.3x flow control, back pressure flow control
Packet buffer memory:	48 K bytes
Address Table Size	2K MAC Addresses

### Interface

RJ45 Ports:	10/100BaseT(x) auto negation, Full/Half duplex, auto MDI/MDI-connection
Fiber Ports:	100BaseFX ports (multi-mode or single-mode with ST or SC connector)
LED Indicators:	Power and activity

### Fiber Optics

Model	Distance	Wavelength	Output Power	Sensitivity
EIR102-Mx	2 km	1310 nm	-19 to -30 dBm	≤ - 32 dBm
EIR102-Sx	15 km	1310 nm FP	-15 to -8 dBm	≤ - 32 dBm
EIR102-Sx40	40 km	1310 nm FP	-5 to 0 dBm	≤ - 34 dBm
EIR102-Sx80	80 km	1550 nm DFB	-5 to 0 dBm	≤ - 34 dBm

Note: Specifications for mixed fiber optic models are combinations of the above

### Power

Input Voltage	10 to 48 VDC
Power Use	2.5 W
Input Connection	Removable Terminal Block
Protection	Reverse Polarity Protection
Wiring Information	14 to 22 AWG, Solid Copper, 1.7 lb-in torque, Wire temp rating 105 C Minimum, sized for 60 C Ampacity

### Environmental

Op. Temperature	32 to 140 °F (0 to 60°C)
Storage Temperature	-40 to 176 °F (-40 to 80 °C)
Op. Humidity	0 to 95% Non-condensing
MTBF (fiber / fiber)	269729 hours
MTBF (fiber / copper)	292645 hours

### Mechanical

Enclosure	IP 30 Plastic Case
Dimensions (ST)	5.0x1.2x3.5 in (12.8x3.0x9.0 cm)
Dimensions (SC)	5.0x1.2x3.1 in (12.8x3.0x8.0 cm)
Installation	35mm DIN Rail Mount

### Regulatory Approvals

CE, FCC, UL
CE/FCC DoC Available for Download
UL File – E222870
RoHS - Yes

