

**B&B ELECTRONICS**

Industrial Hardened 10/100Base-TX to 100Base-FX Media Converters

EIR-x-Sx Series

PRODUCT FEATURES

- Class 1/Division 2
- NEMA TS1/TS2 requirements for traffic control equipment
- IEC61000-6-2 EMC generic standard immunity for industrial environments
- Rugged DIN rail metal cases (panel mount kit available)
- Wide temperature range (-34 to +74 °C)
- Alarm for power or port link failure via relay output (dry contact)
- Redundant 10 to 48 VDC power inputs (via terminal blocks)
- Vibration Resistance, Shock, Free Fall

Media converters convert twisted pair copper signals to fiber optic signals. LANs can be extended beyond the normal 100 meter limit up to 2km with multimode fiber and up to 20km with single-mode fiber. Since your data is traveling via fiber, it is protected from ground loop problems and electrical interference present along the cable run.

Extension of LAN distances make it possible to communicate with remotely located Ethernet enabled devices. The application could be as simple as getting data from one end of the warehouse to the other, tying two buildings together, enabling communications on a tank farm, or monitoring a SCADA system at a waste water plant.

Extended temperature and voltage specifications allow installation in the toughest environments. Media converters are highly qualified for environmental 10/100BASE Ethernet applications and certified by UL with ISA12.12.01 Class I, Division 2 for use in hazardous locations.

ORDERING INFORMATION

MODEL NUMBER	10/100 COPPER	FIBER	DISTANCE	CLASS 1/ DIVISION 2
EIR-M-ST	1 (RJ-45)	Multi-mode (ST)	2 km	X
EIR-M-SC	1 (RJ-45)	Multi-mode (ST)	2 km	X
EIR-S-SC	1 (RJ-45)	Single-mode (SC)	20 km	X

ACCESSORIES

ERS35 - DIN Rail 1 Meter 35MM Steel

C5UMB3FBG - 3 ft - Beige - Category 5e UTP Patch Cord Assemblies

DR-30-24 - DIN rail mount power supply, 24 VDC, 1.5 A power output

MDR-40-24 - DIN rail mount power supply 24VDC, 1.7 A output power

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SPECIFICATIONS

TECHNOLOGY	
Standards	IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/100Base-FX, IEEE802.3x Store-and-Forward
Processing Type	Half-duplex back-pressure and IEEE802.3x full-duplex flow control
Forward and Filtering Rate:	14,880pps for 10Mbps; 148,810pps for 100Mbps
Packet buffer memory:	128K bits
MAC Address	2K
INTERFACE	
Ethernet Port	10/100BASE-TX: 1 port 100BASE-FX: 1 port Per Unit: Power Status (Power 1, Power 2, Fault), Link-Fault-Pass-Through
LED Indicators:	Per Port, 10/100TX: Link/Activity, Full-duplex/Collision, Speed Per Port, 100FX: Link/Activity, Full-duplex/Collision
Relay Contact	Relay contact rating with current 1A @ 30VDC, 0.5A @ 120VAC
Configuration	DIP switch
POWER	
Input Voltage:	Input Voltage: 10 to 48VDC (DC Terminal Block) or 12VDC (DC Jack) or 24VAC, 0.185A (AC Terminal Block)
Consumption	4.32W MAX. 0.36A @ 12VDC, 0.09A @ 48VDC
ENVIRONMENTAL	
Operating Temperature:	-34 to +75°C (-29 to +167°F)
Storage Temperature:	-40 to 85°C (-40 to 185°F)
Test Temperature:	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity:	5% to 95% (non-condensing)

MECHANICAL	
Enclosure	IP30, aluminum case
Dimensions:	50W x 110D x 135H mm (1.97W x 4.33D x 5.31H inches)
Weight:	0.8Kg (1.76lbs.)
Installation:	DIN rail (panel mount option)
REGULATORY APPROVALS	
ISO:	Manufactured in an ISO9001 facility
Safety:	Hazardous locations: Class 1, Division 2 group A,B,C&D UL60950-1, EN60950-1, IEC60950-1
EMS/EMI:	CE Mark FCC Part 15, Class A VCCI Class A EN55022 EN61000-3-2, -3-3, -4-3, -4-4, -4-5, -4-6, -4-8, -6-2, 6-3
Environmental:	NEMA TS1/2

MECHANICAL DIAGRAM

(dimensions in inches & millimeters)

