

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

Models EIR-M-ST, EIR-M-SC, EIR-S-SC

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## PRODUCT FEATURES

- Class 1/Division 2 rated
- NEMA TS1/TS2 requirements for traffic control equipment
- EN61000-6-2, -3 EMC generic standard immunity for industrial environments
- Rugged metal case, DIN rail mount (optional)
- Wide temperature range (-40 to +75 °C)
- Alarm for power or port link failure via relay output (dry contact)
- Redundant 10 to 48 VDC power inputs (via terminal blocks)
- IEC 60068 Vibration resistance, Shock, Free fall

The EIR-s-Sx Series is a group of 10/100 copper to 100Mbps fiber unmanaged media converters. LANs can be extended beyond the normal 100 meter limit up to 2km with multi-mode fiber and up to 20km with single-mode fiber. Since 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, or tying two buildings together, or 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. These 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 (SC)	2 km	X
EIR-S-SC	1 (RJ-45)	Single-mode (SC)	20 km	X

## ACCESSORIES

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

All product specifications are subject to change without notice.  
EIR-x-Sx Series\_3117ds

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## SPECIFICATIONS

TECHNOLOGY	
Standards	IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/100Base-FX, IEEE802.3x
Processing Type	Store-and-Forward. Full and Half-duplex supported, and IEEE 802.3 Flow Control.
Forward and Filtering Rate:	14,880pps for 10 Mbps; 148,810 pps for 100 Mbps
Packet buffer memory:	128K bits
MAC Address	2K
INTERFACE	
Ethernet Port	10/100Base-TX: 1 port 100Base-FX: 1 port
LED Indicators:	Per Unit: Power Status (Power 1, Power 2, Fault), Link-Fault-Pass-Through 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:	-40 to 85°C (-40 to 185°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 (1.76 lbs.)
Installation:	DIN rail mount (panel mount option)
REGULATORY APPROVALS	
Safety:	Hazardous locations: Class 1, Division 2 group A,B,C&D UL60950-1, EN60950-1, IEC60950-1
EMS/EMI:	CE 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 Test Compliance	Vibration Resistance (IEC 60068-2-6 Fc) Shock (IEC 60068-2-27 Ea) Free Fall (IEC 60068-2-32 Ed)
NEMA	NEMA TS1 / TS2
MEANTIME BEFORE FAILURE	
MTBF	EIR-M-ST = 1,624,400.73 hours EIR-M-SC = 1,624,400.73 hours EIR-S-SC = 1,624,400.73 hours
MTBF Calc. Method	Parts Count Reliability Prediction

## MECHANICAL DIAGRAM

(dimensions in inches & centimeters)

