

Installation Guide

EIMK Industrial Ethernet Media Converters allow transparent, low-cost and robust connections between copper and fibre media. Each model supports full duplex operation for 100BASE-TX and 100BASE-FX segments. Two models support multimode fibre optic connections: the EIMK-100T/FT makes the fibre optic connection via ST-style connectors, whereas the EIMK-100T/FC does so via SC-style connectors. The model EIMK-100T/FCS supports single-mode fibre via SC-style connectors.

Maximum distance with 62.5/125 µm multimode fibre cables is 2 km in full-duplex mode. Single-mode fibre can span up to 15 km. All models support auto-negotiation operation so that the data rate of the copper partner is matched automatically.

Two RJ-45 connectors (one MDI-X port and one MDI port) allow either straight-through or crossover copper cabling. Link and activity LEDs allow troubleshooting from front-panel observations.

All units mount on TS-35 DIN-rail, operate from a wide range of low-voltage AC or DC power and offer redundant power connections.

Designed for Industrial Ethernet applications, all models comply with EMC immunity and emissions compatibility standards for industrial environments.



Specifications

Electrical

INPUT	DC	AC
Voltage: ($\pm 10\%$)	24 V	24 V
Power: (full load)	4 W	4 VA
Frequency:	N/A	47–63 Hz
Class 2 Circuits Only		

Environmental

Operating Temperature:	0°C to +60°C
Storage Temperature:	-40°C to +85°C
Humidity, non-cond.:	10% to 95%
Protection:	IP 30

Mounting

TS-35 DIN-rail

Shipping Weight

1 lb (0.45 kg)

Regulatory Compliance

CE Mark; CFR 47 Part 15, Class A

Mechanical



This device is
intended for use
with Class 2 circuits.

Functional

Compliance:	ANSI/IEEE 802.3
Data Rate:	100 Mbps
Signalling:	100BASE-TX and 100BASE-FX
Connectors:	Shielded RJ-45 SC and ST style
Segment length max:	100 m, copper 2 km, multimode fibre 15 km, single-mode fibre

LED Indicators

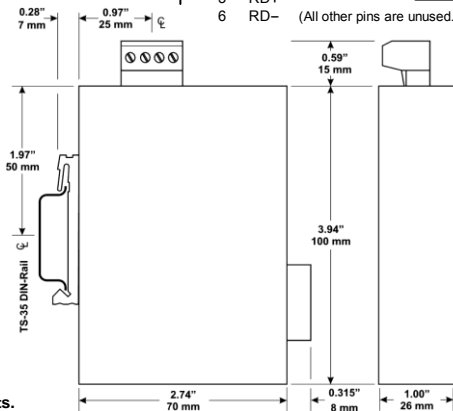
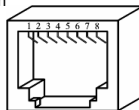
Power	green
Link	green
Activity	green

RJ-45 Pin Assignments

Pin Function

1	TD+
2	TD-
3	RD+
6	RD-

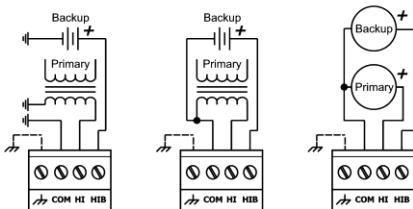
(All other pins are unused.)



Power Considerations

Applied voltage must be in the range of 24 VAC/VDC $\pm 10\%$ and deliver a current commensurate with 4 VA power consumption. The recommended size for solid power conductors is 16–20 AWG; and for stranded conductors use 16–18 AWG. Zero volts (COM) is isolated from chassis (earth). Input connections are reverse-polarity protected.

Connecting chassis to earth or using a backup source is always optional.



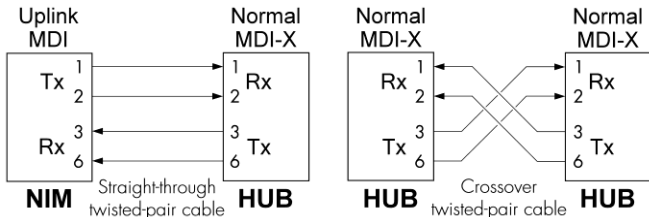
LED Indicators

The power LED glows when proper power is applied. Each port has 2 LEDs: **Link** glows solid if the port has a proper connection to an operating Ethernet device and **Activity** flashes as data is exchanged with the attached device.

Copper Cabling Option

A cabling option exists for copper lines: crossover wiring attached to the “normal” port (marked **X**) or straight-through wiring attached to the “uplink” port (MDI).

Note: the two RJ-45 ports can NOT be used simultaneously.



Uplink Ports Vs Normal Ports

NEED MORE HELP INSTALLING THIS PRODUCT?

More information can be found in the Technical Support part of our web site at www.ccontrols.com. If contacting our office, ask for Technical Support.

WARRANTY

Contemporary Controls (CC) warrants this product to the original purchaser for five years from the shipping date. If it fails to operate in compliance with its specification during this period, CC will, at its option, repair or replace the product at no charge. The customer is responsible for shipping the product; CC assumes no responsibility for the product until received. This limited warranty covers products only as delivered. If user modification damages the product, repair or replacement are not covered. Damage from abuse, accident, disaster, misuse, or incorrect installation are not covered. This warranty in no way warrants suitability of the product for any specific application. More warranty information can be found at www.ccontrols.com.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

RETURNING PRODUCTS FOR REPAIR

To return a product for repair, follow the instructions at: www.ccontrols.com/rma.htm

DECLARATION OF CONFORMITY

Applied Council Directives:

- Low Voltage Directive 2006/95/EC
- General Product Safety Directive 2001/95/EC
- Electromagnetic Compatibility Directive 2004/108/EC
- Restriction of Hazardous Substances Directive 2002/95/EC
- Waste Electrical and Electronic Equipment Directive 2002/96/EC

Standard to which Conformity is Declared:

- EN 55022:2006 + A1:2007, Class A, Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
- EN 55024:1998 + A1:2001 + A2:2003, Information Technology Equipment — Immunity Characteristics — Limits and Methods of Measurement

Manufacturer's Declaration of February 2010: The EIMK conforms to the above directives and standards.

RoHS ✓



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