

EIBA5-100T (panel mount)

CTRLink®

EIBA5-100T/R (DIN-rail mount)

Building Automation 10/100 Mbps Switching Hubs

Installation Guide

The EIBA5-100T and EIBA5-100T/R switching hubs are designed for the Building Automation environment. The EIBA5-100T is flanged for panel-mounting. The EIBA5-100T/R has a clip for mounting to 35 mm DIN-rail. Either switch divides an Ethernet network into five collision domains — “bridging” data links to create larger network diameters than possible with repeating hubs. Each port automatically negotiates its data rate to 10 Mbps or 100 Mbps — controlling data flow with the PAUSE function in full-duplex links or with the backpressure method in half-duplex links.

Each device provides preamble regeneration with symmetry and amplitude compensation — retiming signals to eliminate jitter. Digital pre-emphasis compensates for inherent signal strength roll-off. Link integrity is monitored, verifying that a working adapter or hub is on the distant end of a segment.

Port assignments are learned by reading Ethernet frames and logging the source addresses to a table. Throughput is improved by restricting traffic to those ports party to a data exchange — while other data is simultaneously exchanged on other ports. Store-and-forward operation is implemented and broadcast, multicast, or unicast transmissions are received by all ports.

Each switch has five Auto MDI/MDIX ports for attaching local devices. In addition to one power LED, each port has an LED showing link/activity/rate.

Each unit operates from a wide range of low-voltage AC or DC power.

Each unit is provided with a writable label and a corresponding set of cable tags for ease of cable identification.



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INDUSTRIAL
CONTROL
EQUIPMENT
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CONTEMPORARY CONTROLS®

Specifications

Electrical

INPUT	DC	AC
Voltage:	10–36V	8–24V
Power:	5 W	5 VA
Frequency:	N/A	47–63Hz
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	EIBA5-100T	panel mount
	EIBA5-100T/R	TS-35 DIN-rail

Shipping Weight 1 lb (0.45 kg)

Regulatory Compliance

CE Mark; FCC Part 15, Class A
UL508 Industrial Control Equipment

Functional

Compliance:	ANSI/IEEE 802.3
Data Rates:	10 and 100 Mbps
Signaling:	10BASE-T and 100BASE-TX
Connectors:	Shielded RJ-45
Segment length:	100 m (maximum)

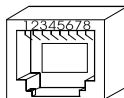
LED Indicators

Power	green
Activity/Link	green or yellow

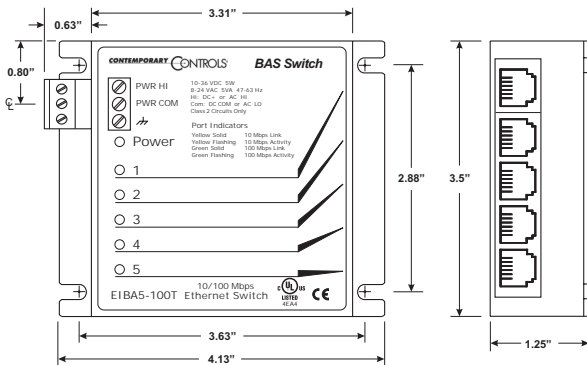
RJ-45 Connector Pin Assignments

Pin	Function
1	TD+
2	TD–
3	RD+
6	RD–

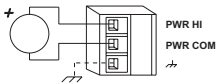
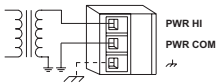
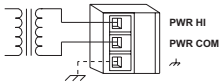
(All other pins are unused.)



Mechanical — EIBA5-100T



Power Options



Power Considerations

Voltage in the range of 10–36 VDC or 8–24 VAC must deliver current commensurate with 5-watt power consumption. Size conductors accordingly. Ground is directly connected to zero volts and the chassis is isolated from zero volts. Input connections are reverse-polarity protected.

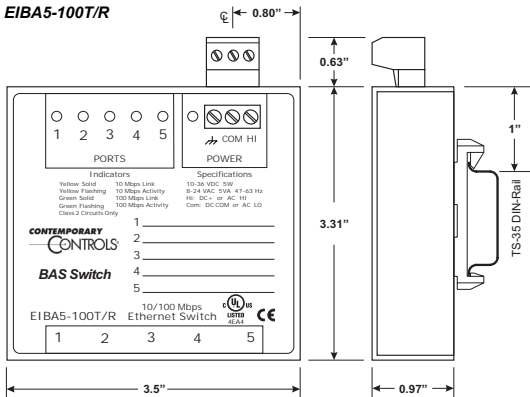
LED Indicators

To aid troubleshooting, each port LED glows solid if a link exists, flashes to show activity and shows data rate by color: green for 100 Mbps and yellow or 10 Mbps. One power LED is provided.

Network Connections

The switch employs AutoMDIX technology so that either straight-through or crossover cables can be used to connect to NIMs or another hub.

Mechanical — EIBA5-100T/R



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. Product returned to CC for repair is warranted for one year from the date that the repaired product is shipped back to the purchaser or for the remainder of the original warranty period, whichever is longer. The customer is responsible for shipping product; CC assumes no responsibility for product until received. This limited warranty covers products only as delivered. User modification may void the warranty. 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

Before returning a product for repair, contact the manufacturer (US office) or its representative (UK office) below for instructions on return procedure:

Contemporary Control Systems, Inc.
2431 Curtiss Street
Downers Grove, Illinois 60515 USA
Tel: +1-630-963-7070
Fax: +1-630-963-0109
E-mail: info@ccontrols.com
WWW: <http://www.ccontrols.com>

Contemporary Controls Ltd
Sovereign Court Two, UWSP
Sir William Lyons Road
Coventry CV4 7EZ UK
Tel: +44 (0)24 7641 3786
Fax: +44 (0)24 7641 3923
E-mail: info@ccontrols.co.uk

DECLARATION OF CONFORMITY

Applied Council Directives: **EMC Directive** 89/336/EEC as amended by 92/31/EEC & 93/68/EEC; **General Product Safety Directive** 92/59/EEC

Standards to which Conformity is Declared: EN 55022:1995 (CISPR22: 1993), Class A; EN 55024:1998, ITE – Immunity – Limits and Methods.

Manufacturer's Declaration of January 1, 2004: I declare that the EIBA5-100T and the EIBA5-100T/R conform to the above directives and standards.

George M. Thomas, President

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