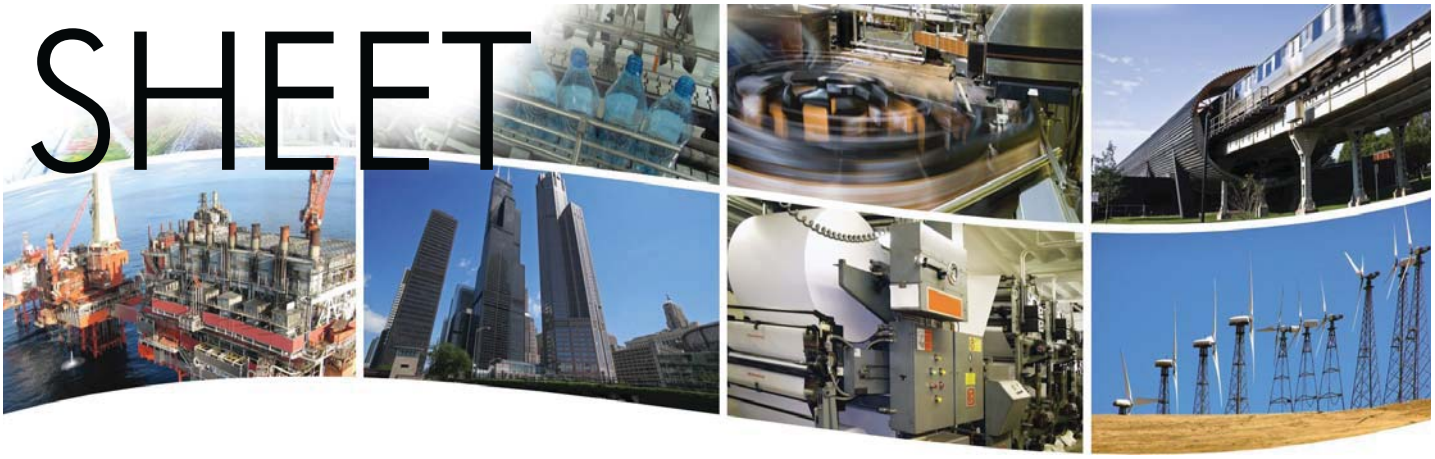
data SHEET



EIS Ethernet Switch — UL 864 Compliant

For Fire Alarm Systems

All Ethernet Interconnect Switch models offer UL 864 compliance as Component Control Units and Accessories for Fire Alarm Systems.

The EIS8-100T offers eight ports for twisted-pair cabling. If greater distance or galvanic isolation is required, three models offer two fibre ports to accommodate a fibre backbone and four twisted-pair ports for local drops. Both the EIS6-100T/FC and the EIS6-100T/FT use multimode fibre. The EIS6-100T/FCS uses single-mode fibre.

Each twisted-pair port automatically optimises its data rate to 10 Mbps or 100 Mbps. The data rate of fibre ports is fixed at 100 Mbps. Each port negotiates flow control with the PAUSE function for full-duplex links and the backpressure scheme for half-duplex links.

The switch front-panel features LEDs for link status, port activity, and data rate of each port. All units operate from low-voltage AC or DC power and are DIN-rail or panel mountable.

Plug-and-Play Functionality

- Auto-negotiated data rate, duplex, flow control, and cabling, on copper ports
- 10BASE-T/100BASE-TX/100BASE-FX compliant
- Full- or half-duplex operation on copper ports

CTRLink®

Standards Compliant

- UL 864 10th Ed. Recognized Component — Control Units and Accessories for Fire Alarm Systems
- UL 508 Listed, Industrial Control Equipment
- C-UL Listed, CSA 22.2 No. 14-M91, Industrial Control Equipment
- CE Mark
- RoHS compliant
- Industrial environment EMC compatible

Underwriters Laboratories 864 Recognized Component

Contemporary Controls has recently re-qualified the EIS Series to comply with *UL 864 Control Units and Accessories for Fire Alarm Systems 10th Edition*. All new fire alarm and smoke control systems being installed claiming UL 864 compliance must comply with this latest edition.

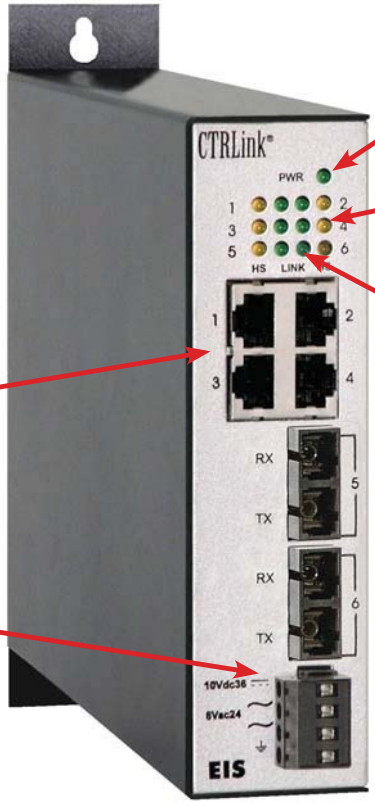
The UL recognized component mark is rarely seen by the customer but is often part of a larger end-product that is UL Listed by the fire alarm system supplier. For an end-product to be listed, UL tests the product to determine that it meets the requirements UL's published Standards of Safety. A UL-recognized component has already been tested to comply with UL's component safety standards — streamlining the qualification process for the end-product.

To specify the EIS Ethernet switch for use in a system, a fire alarm system supplier needs no additional testing on this component. Several fire alarm and security firms have specified the EIS series as part of their system — thereby improving their time-to-market.

Components that bear the UL Recognized Component mark are separately covered under UL's Follow-Up Surveillance program to ensure continued compliance and prevent unpleasant surprises when an end-product is inspected.

UL 864 10th Edition governs safety of fire alarm systems and equipment in accordance with these standards:

NFPA 12, Carbon Dioxide Extinguishing Systems
NFPA 12A, Halon 1301 Fire Extinguishing Systems
NFPA 13, Installation of Sprinkler Systems
NFPA 15, Water Spray Fixed Systems for Fire Protection
NFPA 16, Installation of Foam-Water Sprinkler and Foam-Water Spray Systems
NFPA 17, Dry Chemical Extinguishing Systems
NFPA 17A, Wet Chemical Extinguishing Systems
NFPA 70, National Electrical Code
NFPA 72, National Fire Alarm Code
NFPA 92A, Recommended Practice for Smoke-Control Systems
NFPA 92B, Guide for Smoke Management Systems in Malls, Atria, and Large Areas
NFPA 2001, Clean Agent Fire Extinguishing Systems.



Adjustable Mounting Bracket
can be extended for panel mounting or retracted for DIN-rail mounting.

Metal Enclosure
rugged packaging for rough environments

Shielded 10/100 Ports
support Auto-MDIX and auto-negotiation

Power Connector
detachable for easy field service and offers terminal for attaching backup power supply

Power LED
power OK indicator

High Speed LED
indicates 100 Mbps

Link LED
verifies working equipment is attached

SC or ST Connectors
support a fibre backbone at 100 Mbps, 1300 nm

Specifications

Power Requirements

EIS8-100T: 10–36 VDC 6 W or 8–24 VAC 6 VA 47–63 Hz
Fibre models: 10–36 VDC 10 W or 8–24 VAC 10 VA 47–63 Hz

Operating Temperature

0°C to 60°C

Storage Temperature

–40°C to 85°C

Relative Humidity

10–95%, non-condensing

Protection

IP30

Mounting

TS-35 DIN-rail or panel mounting via extendable brackets

Shipping Weight

1 lb (0.45 kg)

Ethernet Communications

IEEE 802.3 10/100 Mbps data rate
10BASE-T and 100BASE-TX using RJ-45 connectors, 100 m (max)
100BASE-FX multimode using SC or ST connectors, 2 km (max)
100BASE-FX single-mode using SC connectors, 15 km (max)

LEDs

Power	Green = power OK
Link	Green = communication established (flashing = activity)
HS	Yellow = 100 Mbps communication in progress

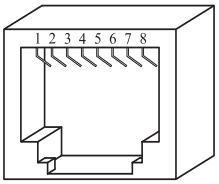
Regulatory Compliance

UL 864 10th Ed. Recognized Component, Control Units and Accessories for Fire Alarm Systems
ULC-S527-11 Control Units for Fire Alarm Systems
UL 508 Industrial Control Equipment
CE Mark; CFR 47, Part 15 Class A; RoHS;

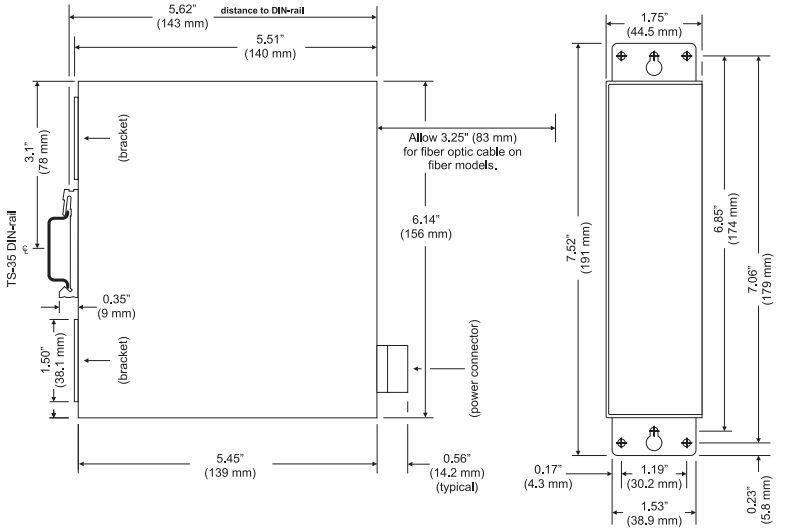
RJ-45 Connector Pin Assignments

Pin	Function
1	TD+
2	TD–
3	RD+
4	N/C
5	N/C
6	RD–
7	N/C
8	N/C

MDI and MDIX



Mechanical Drawing

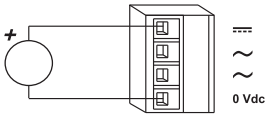


Side View showing DIN-rail Clip (Mounting Brackets Retracted)

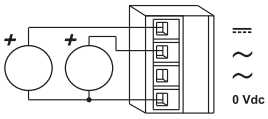
Front View with Mounting Brackets Extended

Power Considerations

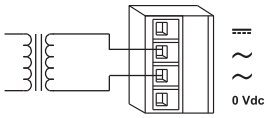
Applied voltage must be within the specified range and deliver a current commensurate with power consumption. The recommended size for solid power conductors is 16–20 AWG; and for stranded conductors use 16–18 AWG. Zero volts (COM) is isolated from chassis (earth). Input connections are reverse-polarity protected.



DC Powered

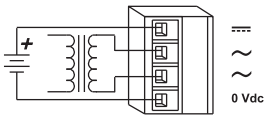


Redundant DC Powered

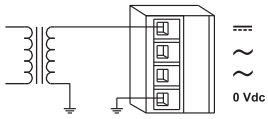


AC Powered

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

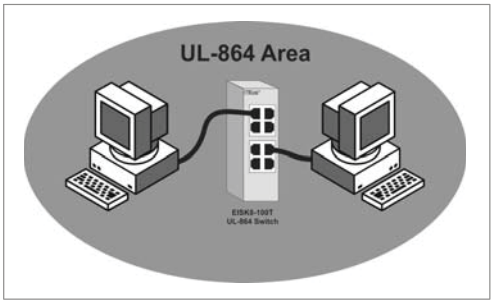


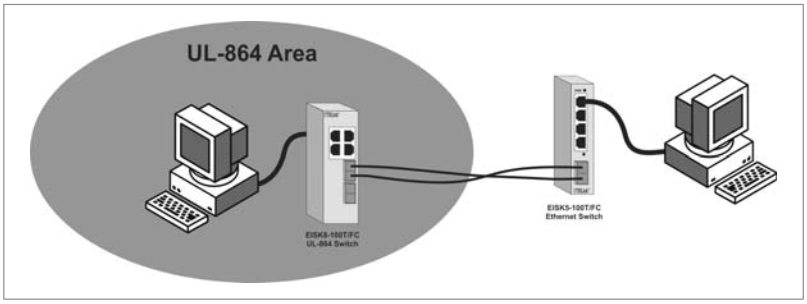
AC Powered with Battery Backup



AC Powered with Grounded Secondary

Typical Installations





Ordering Information

Model	*Description*
EIS8-100T	8-Port 10/100Mbps UL-864 EIS Switch
EIS6-100T/FC	4-Port 10/100Mbps 2-Port MM SC-fiber UL-864 EIS Switch
EIS6-100T/FCS	4-Port 10/100Mbps 2-Port SM SC-fiber UL-864 EIS Switch
EIS6-100T/FT	4-Port 10/100Mbps 2-Port MM ST-fiber UL-864 EIS Switch

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