

data SHEET



5-Port Skorpion Switch

Cost Effective, 100 Mbps-speed — Compact Size

The EISK5-100T Skorpion Switch is a five-port unmanaged Ethernet switch that provides 100 Mbps performance on all ports in order to accommodate a range of control devices and workstations commonly found in an automation project. For 10 Mbps legacy devices, the switch will automatically reduce its port-speed accordingly. This low-cost compact unit utilizes a rugged metal enclosure and is intended for installation in control panels using DIN-rail mounting.

This is a plug-and-play Ethernet switch which requires no configuration. All ports automatically configure their data rate

and duplex using the Auto-Negotiation protocol. Depending on the capability of the link partner, communication is set at 10 or 100 Mbps and at either half- or full-duplex. Each port will accommodate either a straight-through or crossover cable by using the Auto-MDIX protocol.

The unit is powered from a choice of low-voltages (AC or DC). Redundant power connections are provided for back-up power schemes. LED indicators assist in troubleshooting network issues.

- Plug-and-Play operation
- 10BASE-T/100BASE-TX
- Shielded RJ-45 connectors
- Auto-negotiation of speed and duplex
- Auto-MDIX supports cable inversion



- DIN-rail mounting
- Rugged metal enclosure
- Diagnostic LEDs
- Enhanced EMC compliance
- UL 508 listed, c-UL listed, CE mark
- 24 VAC/VDC powered

CTRLink®

Overview

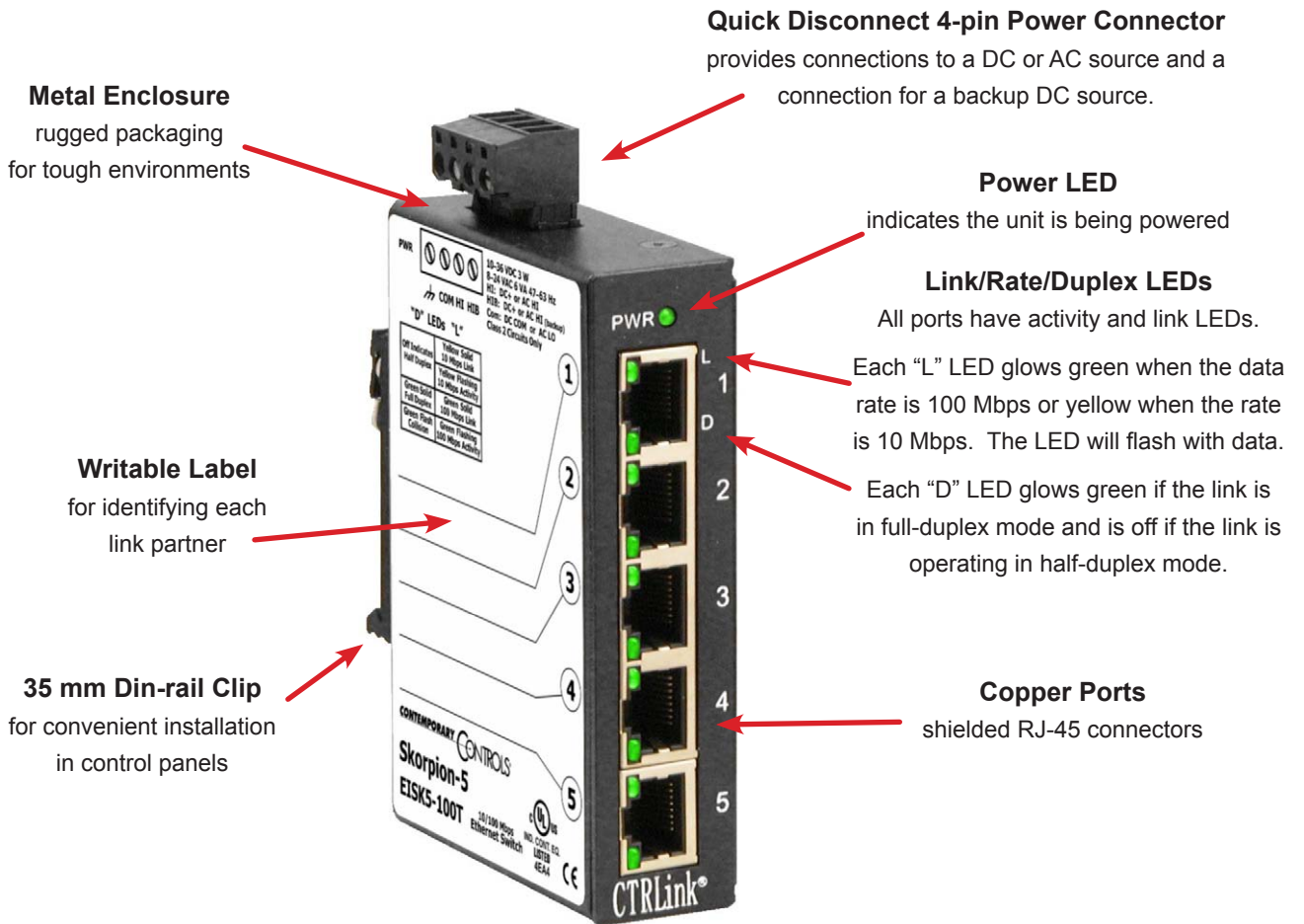
The Skorpion Switch is intended for control panel installations where DIN-rail space is at a premium by requiring a width of only one inch (26 mm) of rail space. A metal DIN-rail clip attached to the aluminium enclosure can survive the toughest installation. A writable side label allows the installer an opportunity to document field cabling locations right on the unit.

The switch can be powered from either a 10–36 VDC or 24 VAC ($\pm 10\%$) source. Its half-wave rectified low-voltage power supply allows the sharing of power with other 24 VAC/VDC control devices from a common power supply. With

redundant power connections, a backup power scheme can be supported. A removable power connector facilitates the servicing of the unit.

LEDs built into the connector indicate data rate and activity on each of the five ports. For each port, the data rate will be indicated along with port activity thereby greatly assisting in troubleshooting connection issues.

The switch is UL 508 Listed and c-UL Listed for Industrial Control Equipment. It complies with CFR 47 Part 15 Class A, and carries the CE Mark. It is RoHS compliant.



Specifications

| | | | | | | | |
|--------------------------------|---|-------|------------------|----------|---|----------|--|
| Power Requirements | 10–36 VDC 3 W or 24 VAC ±10% 6 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 | | | | | | |
| Shipping Weight | 1 lb (0.45 kg) | | | | | | |
| Ethernet Communications | IEEE 802.3 10/100 Mbps data rate using RJ-45 connectors, 100 m (max) | | | | | | |
| LEDs | <table border="0"> <tr> <td>Power</td> <td>Green = power OK</td> </tr> <tr> <td>“L” LEDs</td> <td>Green = 100 Mbps communication established Yellow = 10 Mbps communication established Flashing = data transmissions occurring</td> </tr> <tr> <td>“D” LEDs</td> <td>Green = Full-duplex communication established Off = Half-duplex communication established</td> </tr> </table> | Power | Green = power OK | “L” LEDs | Green = 100 Mbps communication established Yellow = 10 Mbps communication established Flashing = data transmissions occurring | “D” LEDs | Green = Full-duplex communication established Off = Half-duplex communication established |
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Regulatory Compliance

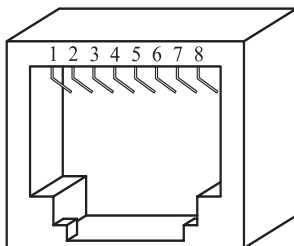
CE Mark; CFR 47, Part 15 Class A; RoHS; UL 508 Industrial Control Equipment



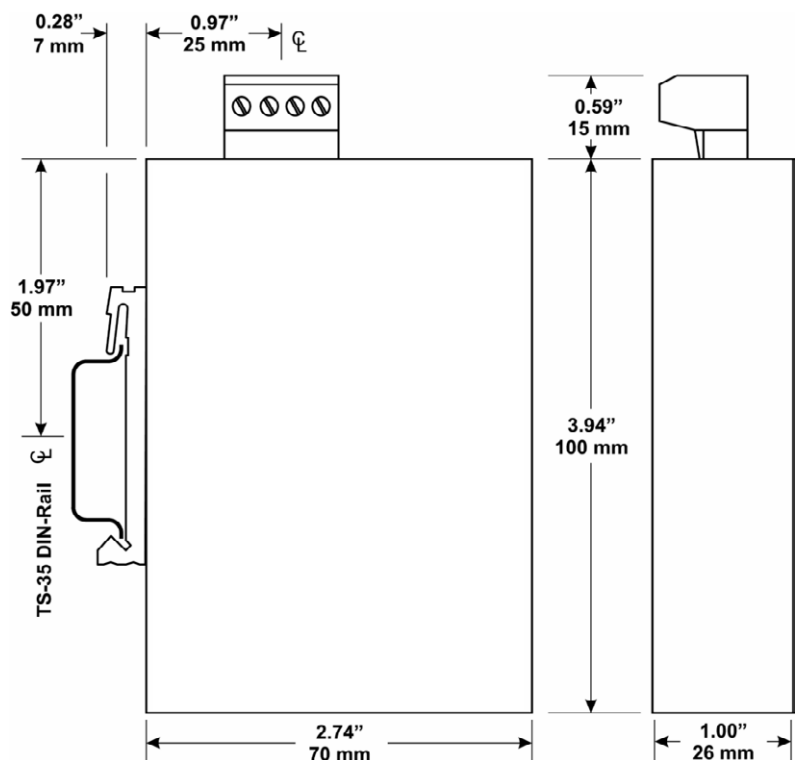
RJ-45 Connector Pin Assignments

| Pin | Function |
|-----|----------|
| 1 | TD+ |
| 2 | TD– |
| 3 | RD+ |
| 4 | Not Used |
| 5 | Not Used |
| 6 | RD– |
| 7 | Not Used |
| 8 | Not Used |

MDI and MDIX



Mechanical Drawing

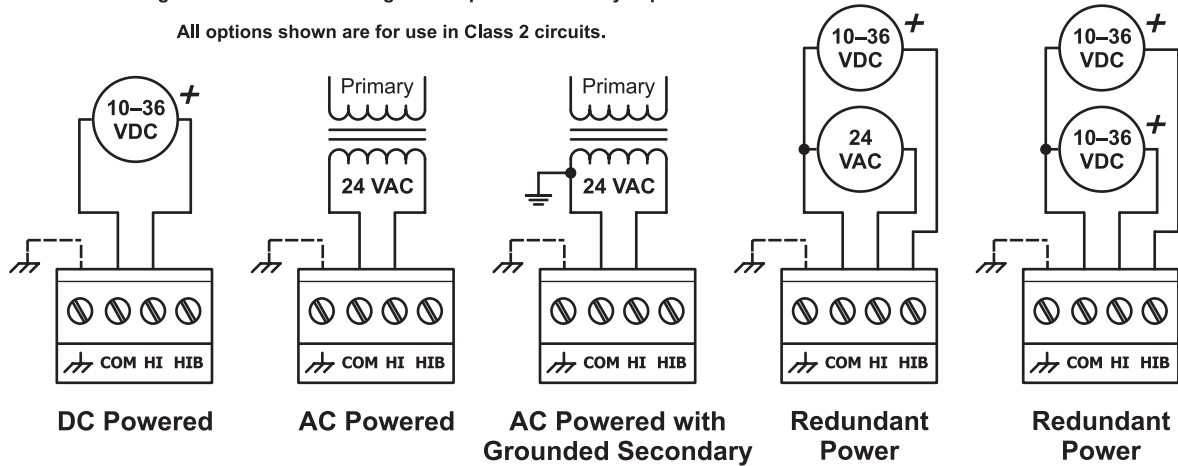


Power Considerations

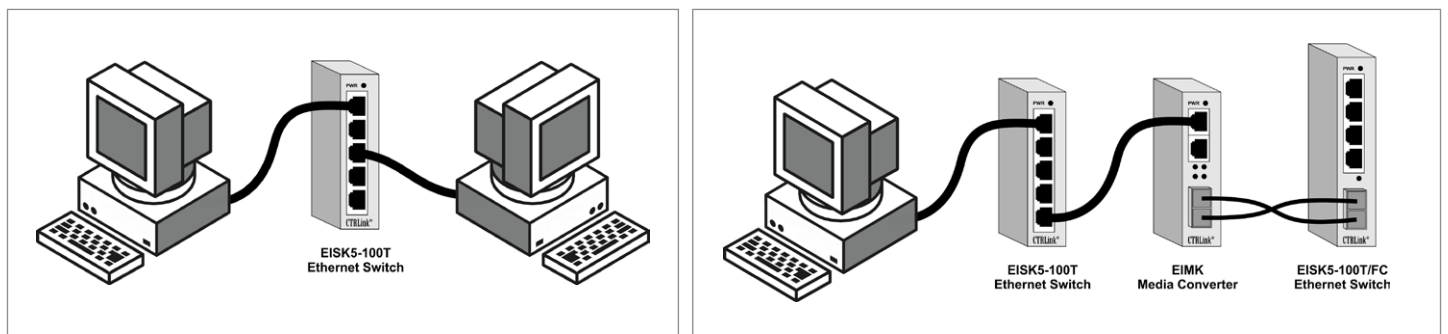
Applied voltage must be in the specified range and deliver a current commensurate with power consumption. The recommended size for solid power conductors is 16–20 AWG; and for stranded conductors use 16–18 AWG. Zero volts (COM) is isolated from chassis (earth). Input connections are reverse-polarity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

Input power: 10–36 VDC or 24 VAC ± 10%, 47–60 Hz.
Connecting chassis to earth or using a backup source is always optional.

All options shown are for use in Class 2 circuits.



Typical Switch Installations



Ordering Information

| Model | Description |
|------------|-----------------------------------|
| EISK5-100T | Skorpion 5-Port 10/100Mbps Switch |

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