

# data SHEET



## EISK16-100T Skorpion Switch

### Cost Effective, 100 Mbps-speed — Compact Size

The EISK16-100T Skorpion Switch is a sixteen-port unmanaged Ethernet switch that provides 100 Mbps performance on all ports 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 that 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 accommodates either a straight-through or crossover cable 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. LEDs assist in troubleshooting.

- 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

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## Overview

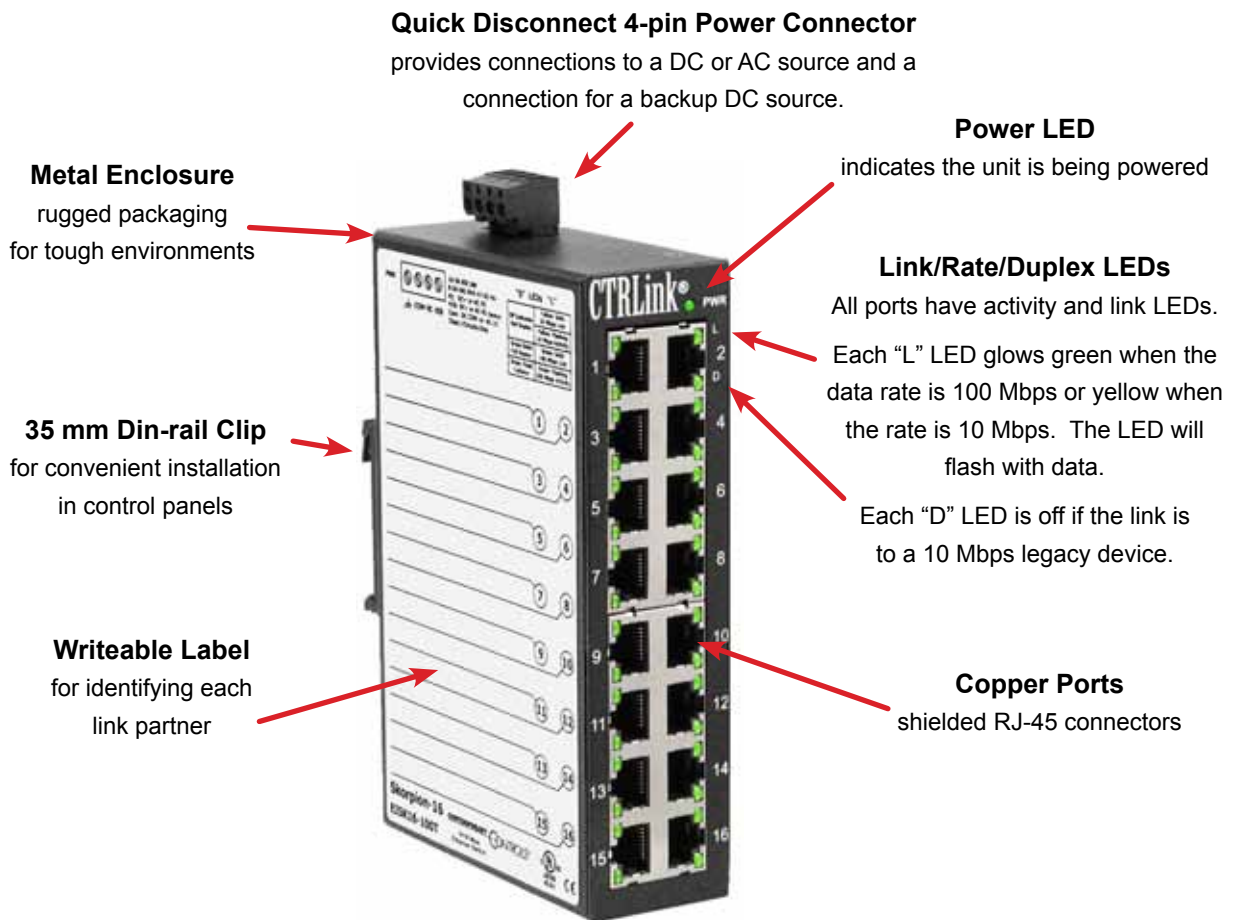
The Skorpion Switch is intended for control panel installations where DIN-rail space is at a premium by requiring a width of only 41 mm of rail space. A metal DIN-rail clip attached to the aluminium enclosure can survive the toughest installation. A writable side label allows the installer an opportunity 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 — 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

<b>Power Requirements</b>	10–36 VDC 10 W or 24 VAC ±10% 14 VA 47–63 Hz						
<b>Operating Temperature</b>	0°C to 60°C						
<b>Storage Temperature</b>	–40°C to 85°C						
<b>Relative Humidity</b>	10–95%, non-condensing						
<b>Protection</b>	IP30						
<b>Mounting</b>	TS-35 DIN-rail						
<b>Shipping Weight</b>	1 lb (0.45 kg)						
<b>Ethernet Communications</b>	IEEE 802.3 10/100 Mbps data rate using RJ-45 connectors, 100 m (max)						
<b>LEDs</b>	<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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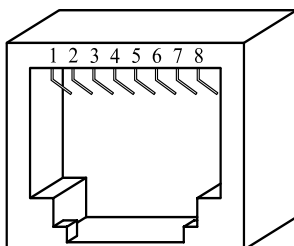
### Regulatory Compliance

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

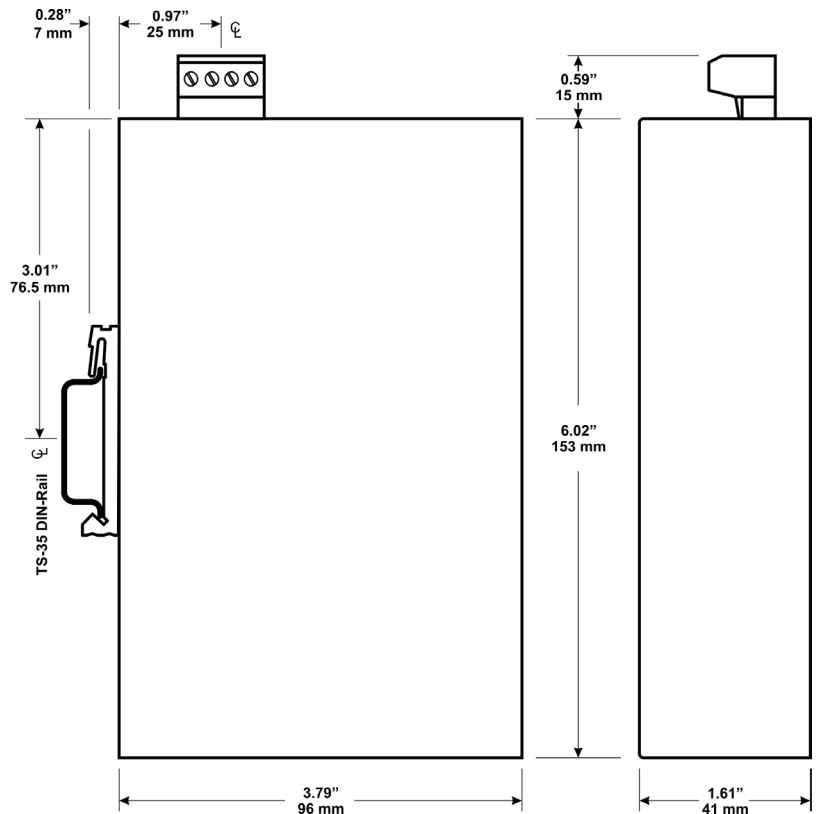


### RJ-45 Connector Pin Assignments

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



### Mechanical Drawing

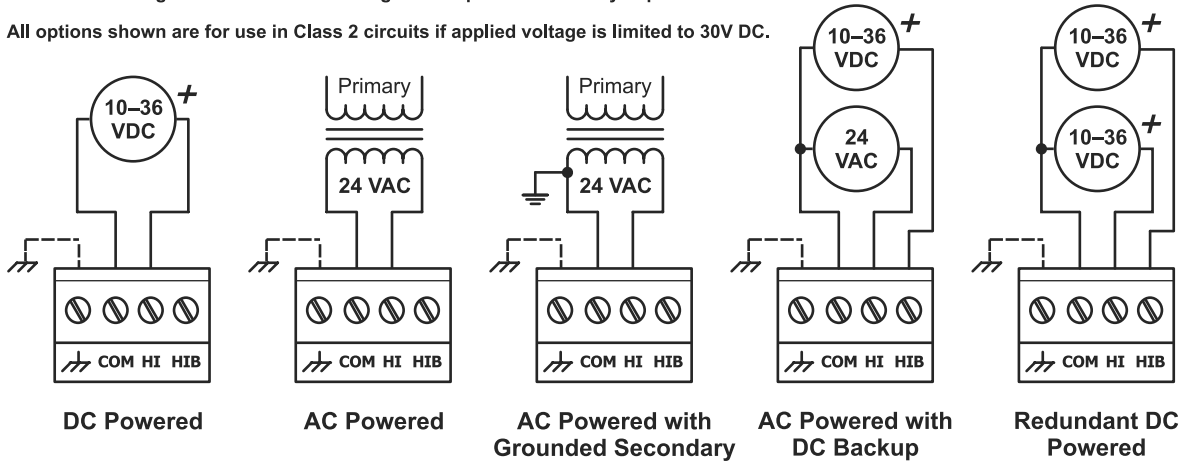


**Power Considerations**

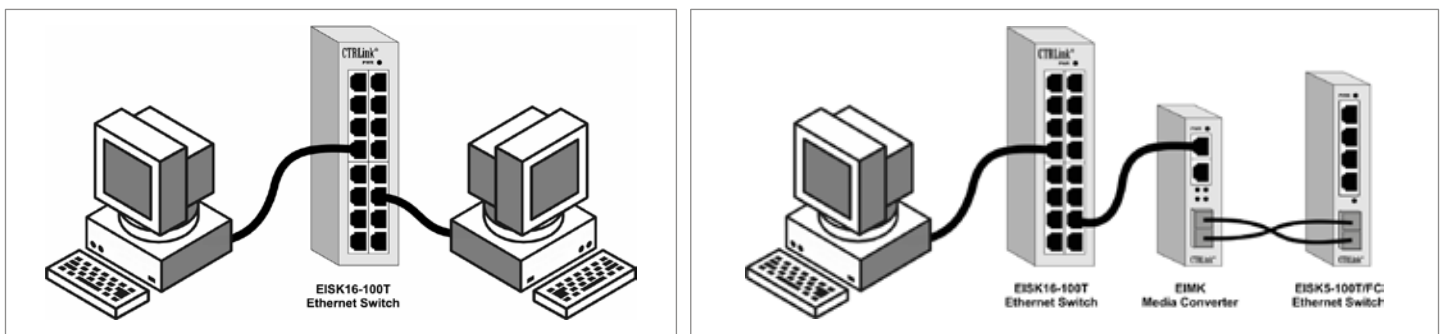
Applied voltage must be in the specified range and deliver a current commensurate with power consumption. The recommended size for solid power conductors is 16–20 AWG; and for stranded conductors use 16–18 AWG. Zero volts (COM) is isolated from chassis (earth). Input connections are reverse-polarity 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 if applied voltage is limited to 30V DC.



**Typical Switch Installations**



**Ordering Information**

<i>Model</i>	<i>Description</i>
EISK16-100T	Skorpion 16-Port 10/100Mbps Switch

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