The EISK8-100T Skorpion Switch is an eight-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
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 powered from either a 10–36 VDC or 24 VAC (±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.

Quick Disconnect 4-pin Power Connector
provides connections to a DC or AC source and a connection for a backup DC source.

Power LED
indicates the unit is being powered

Link LEDs
All ports have activity and link LEDs. Each “L” LED glows green when the data rate is 100 Mbps or yellow when the rate is 10 Mbps. Each “D” LED is off if the link is to a 10 Mbps legacy device. Either LED will flash with data.

Copper Ports
shielded RJ-45 connectors

Metal Enclosure
rugged packaging for tough environments

35 mm Din-rail Clip
for convenient installation in control panels

Writeable Label
for identifying each link partner
Specifications

**Power Requirements**
10–36 VDC 5 W or 24 VAC ±10% 7 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**
- **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

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

**RJ-45 Connector Pin Assignments**

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TD+</td>
</tr>
<tr>
<td>2</td>
<td>TD–</td>
</tr>
<tr>
<td>3</td>
<td>RD+</td>
</tr>
<tr>
<td>4</td>
<td>Not Used</td>
</tr>
<tr>
<td>5</td>
<td>Not Used</td>
</tr>
<tr>
<td>6</td>
<td>RD–</td>
</tr>
<tr>
<td>7</td>
<td>Not Used</td>
</tr>
<tr>
<td>8</td>
<td>Not Used</td>
</tr>
</tbody>
</table>

**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.

Typical Switch Installations

Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EISK8-100T</td>
<td>Skorpion 8-Port 10/100Mbps Switch</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Address</th>
</tr>
</thead>
</table>
| United States | Contemporary Control Systems, Inc.  
2431 Curtiss Street  
Downers Grove, IL 60515  
USA            |
| China       | Contemporary Controls (Suzhou) Co. Ltd  
11 Huoju Road  
Science & Technology  
Industrial Park  
New District, Suzhou  
PR China 215009    |
| United Kingdom | Contemporary Controls Ltd  
14 Bow Court  
Fletchworth Gate  
Coventry CV5 6SP  
United Kingdom    |
| Germany     | Contemporary Controls GmbH  
Fuggerstraße 1 B  
04158 Leipzig  
Germany        |

<table>
<thead>
<tr>
<th>Country</th>
<th>Contact Information</th>
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</thead>
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