5-Port Skorpion Gigabit Switch

Cost Effective, High-speed — Compact Size

The EISK5-GT Skorpion Gigabit Switch is a five-port unmanaged Ethernet switch that provides Gigabit Ethernet (GigE) performance on all ports in order to accommodate high-speed devices such as IP cameras and modern workstations. In addition, GigE jumbo frames up to 9216 bytes are supported for the highest possible system performance. For 10/100 Mbps legacy devices, the switch will automatically reduce its port-speed accordingly, thereby accommodating the needs of just about any Ethernet automation system. 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 requiring 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, 100 or 1000 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/1000BASE-T
- 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 Gigabit 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 (±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 is RoHS compliant, complies with CFR 47 Part 15 Class A, and carries the CE Mark.
Specifications

Power Requirements
10–36 VDC 3 W or 24 VAC ±10% 5 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 10/100/1000 Mbps data rate using RJ-45 connectors, 100 m (max)
Supports jumbo frames up to 9216 bytes

LEDs
Power Green = power OK
“H” LEDs Green = 1000 Mbps communication established
Yellow = 100 Mbps communication established
“L” LEDs Yellow = 10 Mbps communication established
“H” or “L” LEDs Flashing = data transmissions occurring

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>BI_DA+</td>
</tr>
<tr>
<td>2</td>
<td>BI_DA–</td>
</tr>
<tr>
<td>3</td>
<td>BI_DB+</td>
</tr>
<tr>
<td>4</td>
<td>BI_DC+</td>
</tr>
<tr>
<td>5</td>
<td>BI_DC–</td>
</tr>
<tr>
<td>6</td>
<td>BI_DB–</td>
</tr>
<tr>
<td>7</td>
<td>BI_DD+</td>
</tr>
<tr>
<td>8</td>
<td>BI_DD–</td>
</tr>
</tbody>
</table>

Mechanical Drawing
Data Sheet — EISK5-GT

Power Considerations

Applied voltage must be 10–36 VDC or 24 VAC ±10% 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 Installation

Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EISK5-GT</td>
<td>Skorpion 5-Port GigE Switch</td>
</tr>
</tbody>
</table>

United States
Contemporary Control Systems, Inc.
2431 Curtiss Street
Downers Grove, IL 60515
USA
Tel: +1 630 963 7070
Fax: +1 630 963 0109
info@ccontrols.com
www.ccontrols.com

China
Contemporary Controls (Suzhou) Co. Ltd
11 Huoju Road
Science & Technology Industrial Park
New District, Suzhou
PR China 215009
Tel: +86 512 68095866
Fax: +86 512 68093760
info@ccontrols.com.cn
www.ccontrols.asia

United Kingdom
Contemporary Controls Ltd
14 Bow Court
Fletchworth Gate
Coventry CV5 6SP
United Kingdom
Tel: +44 (0)24 7641 3786
Fax: +44 (0)24 7641 3923
info@ccontrols.co.uk
www.ccontrols.eu

Germany
Contemporary Controls GmbH
Fuggerstraße 1 B
04158 Leipzig
Germany
Tel: +49 341 520359 0
Fax: +49 341 520359 16
info@ccontrols.de
www.ccontrols.eu