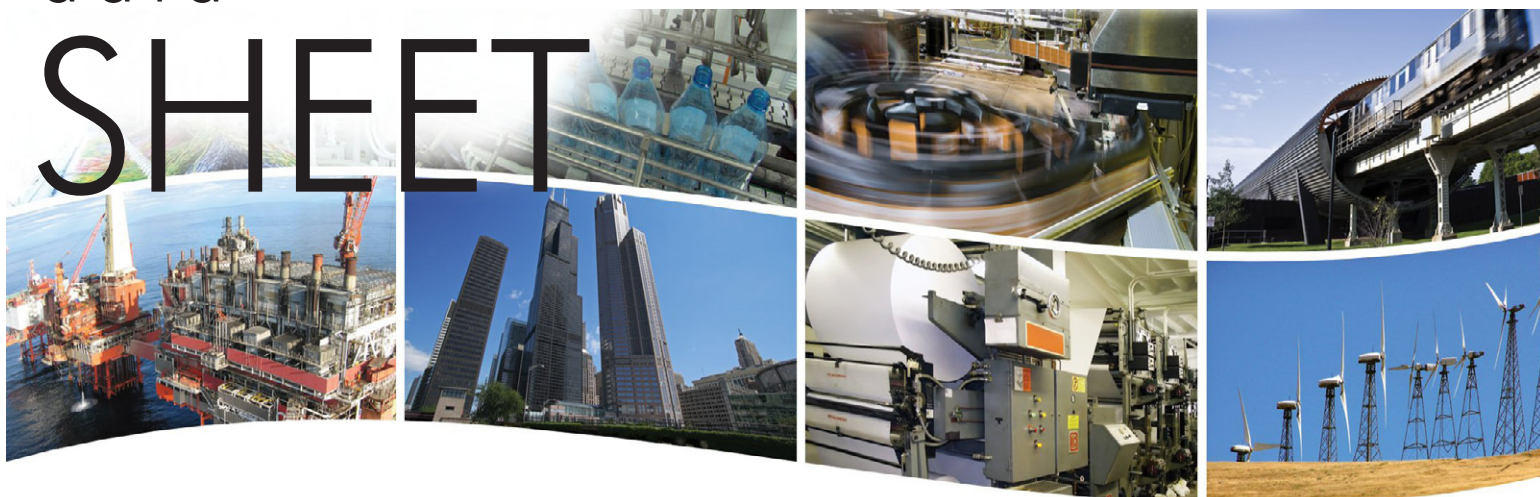# data SHEET

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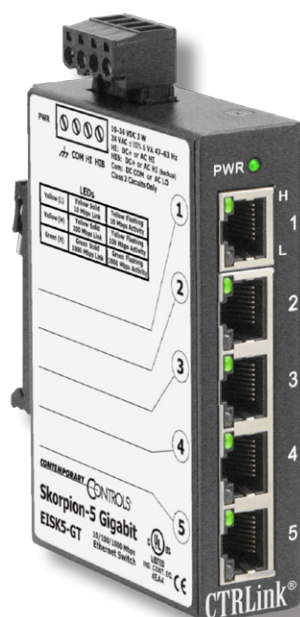
- DIN-rail mounting
- Rugged metal enclosure
- Diagnostic LEDs
- Enhanced EMC compliance
- UL 508 listed, c-UL listed, CE mark
- 24 VAC/VDC powered

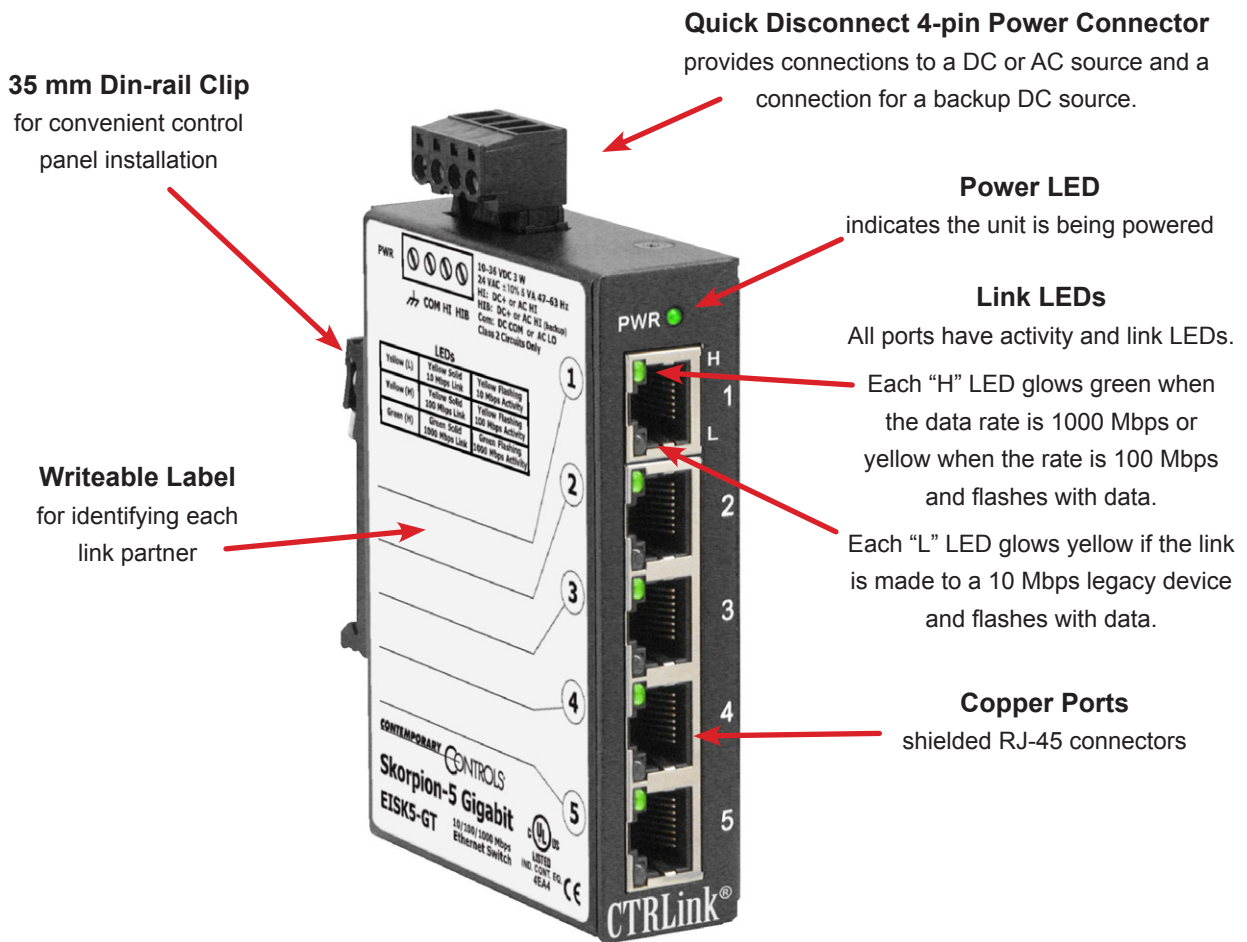## CTRLink®

CONTEMPORARY CONTROLS®

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.

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

35 mm Din-rail Clip
for convenient control panel installation

Power LED
indicates the unit is being powered

Link LEDs
All ports have activity and link LEDs.

Each "H" LED glows green when the data rate is 1000 Mbps or yellow when the rate is 100 Mbps and flashes with data.

Each "L" LED glows yellow if the link is made to a 10 Mbps legacy device and flashes with data.

Writeable Label
for identifying each link partner

Copper Ports
shielded RJ-45 connectors

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

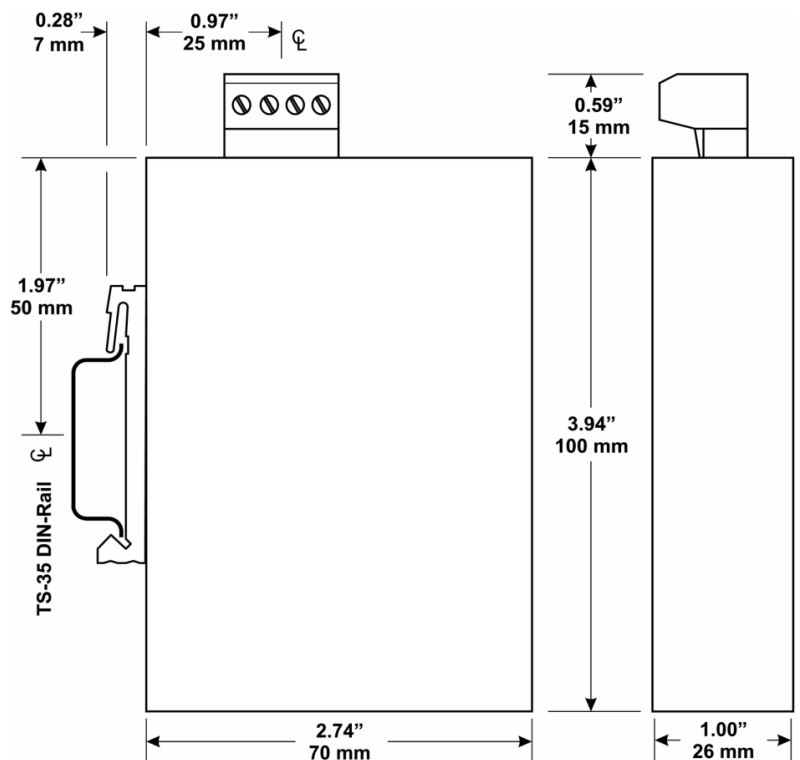***Regulatory Compliance***   CE Mark; CFR 47, Part 15 Class A; RoHS; UL 508 Industrial Control Equipment

RJ-45 Connector Pin Assignments

Pin	Function
1	BI_DA+
2	BI_DA–
3	BI_DB+
4	BI_DC+
5	BI_DC–
6	BI_DB–
7	BI_DD+
8	BI_DD–
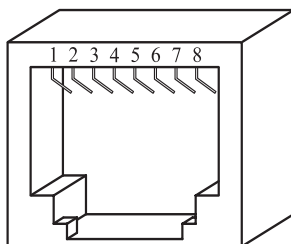
Mechanical Drawing

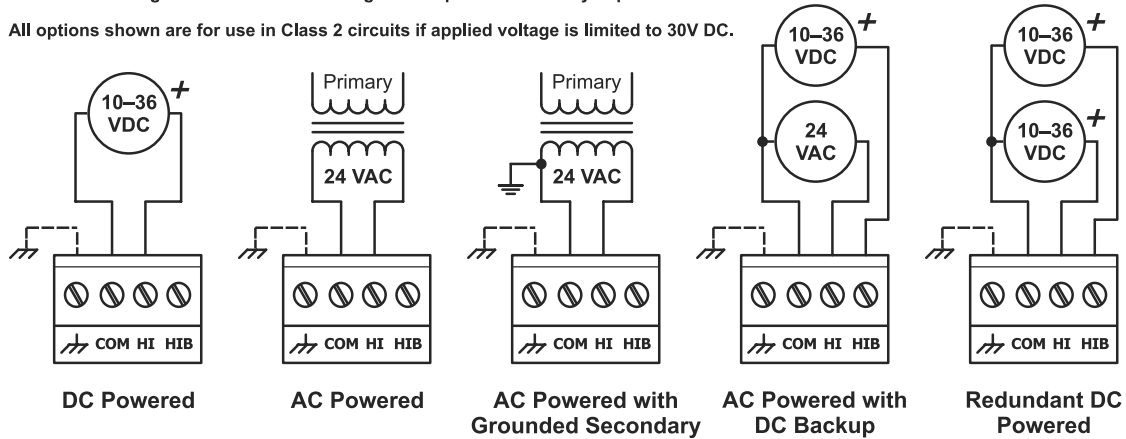## Power Considerations

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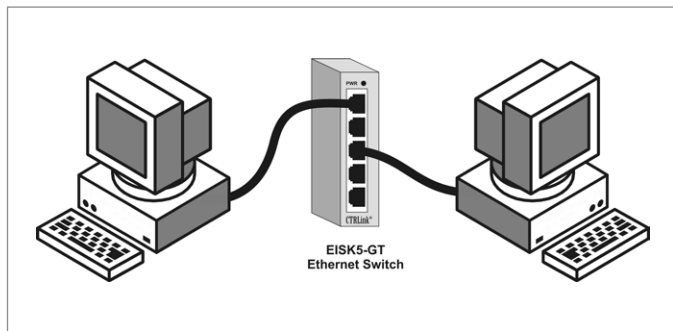
Input power: 10–36 VDC or 24 VAC ± 10%, 47–60 Hz.
Connecting chassis to earth or using a backup source is always optional.

All options shown are for use in Class 2 circuits if applied voltage is limited to 30V DC.

DC Powered	AC Powered	AC Powered with Grounded Secondary	AC Powered with DC Backup	Redundant DC Powered

Typical Switch Installation

EISK5-GT
Ethernet Switch

Ordering Information

Model	Description
EISK5-GT	Skorpion 5-Port GigE Switch