

## COInfinity

## IES-0823

6 GE + 2 SFP Unmanaged Switch -20 to 60C, DIN-rail Quick Installation Guide

## Overview

LevelOne IES-0823 Industry Ethernet Switch provides 6 ports of Gigabit Ethernet plus 2 1000Base SFP slots to enable high speed network at mission-critical environment. This device is designed to be mounted on an industry standard DIN-rail, plus the clearly visible status LEDs provide simple monitoring of port link activity. Moreover, the SFP slots support pluggable modules that enabling you to choose from a variety of transceivers.

## High Reliability

All components are built to withstand harsh environment applications without compromise where humidity, temperature variation and even shock vibration are concerns, including Electric \& Utility, Critical Infrastructure, Transportation and Surveillance Security. This device operates under -40 to 75 Celsius (-40 to 167 Fahrenheit) temperature.

## Redundancy

This redundant power system is designed to meet the challenge of power failure to ensure reliability and constant availability. Single power design works fine in non-critical network applications, but it falls short drastically for network applications in transportation, automate production or banking.

## Features

- Meets EN61000-6-2 \& EN61000-6-3 EMC Generic Standard Immunity for industrial environment.
- Supports IEEE802.3/802.3u/802.3ab/802.3z/802.3x/802.1p. Auto-negotiation: 10/100/1000Mbps, Full/Half-duplex; Auto MDI/MDIX.
- 1000Base-SX/LX: Multi mode, Single mode SC type. 1000Base-BX: WDM Single mode SC type.
- IEEE802.1p Queue Priority: Support 4 priority queues.
- Supports 8192 MAC addresses. Provides 1.125 M bits buffer memory.
- Supports jumbo frame up to 9K Bytes.
- Alarms for power failure by relay output.
- Power Supplies: Redundant 9-32VDC Terminal Block power inputs and 12VDC DC JACK with 100-240VAC external power supply.
- Field Wiring Terminal: Use Copper Conductors Only, $60 / 75^{\circ} \mathrm{C}, 12-24$ AWG torque value 7 lb -in.
- Operating voltage and Max. current consumption: 0.6A @ 12VDC, 0.3A @ 24VDC. Power consumption: 7.2W Max.
- Operating temperature ranges from $-20^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$
- Supports DIN-Rail or Panel Mounting installation


## Package Contents

- IES-0823
- Quick Installation Guide
- CD User Manual


## LED Status



| LED | Status | Description |
| :--- | :--- | :--- |
| PW 1,2,3 | Steady | Power On |
|  | Off | Power Off |
| $\mathbf{1 0 / 1 0 0 B a s e - T X ~}$ | Steady | Network connection is established |
|  | Flashing | Transmitting or Receiving data |
| $\mathbf{1 0 0 0 B a s e - T / S X / L X / B X ~}$ |  |  |
|  | Steady | Flashing |
|  |  | Transmitting or Receiving data |

## Power Input



|  | PW1 | + | 24VDC (9 to 32VDC) @ 1.5A |
| :---: | :---: | :---: | :---: |
|  |  | - | Power Ground |
|  | PW2 | + | 24VDC (9 to 32VDC) @ 1.5A |
|  |  | - | Power Ground |
|  | (1) | Earth Ground |  |
|  | $\xrightarrow{7}$ | Relay Output | 30VDC @ 1.0A |
|  | 1. The relay contact opens if Power1 or Power2 falls <br> 2. The relay contact opens if the Port Link is broken (When Link Down Detection is enabled) |  |  |

## PW3: 12VDC @ 3.0A DC Jack Input

## DIN Rail Mount



- Assembly: Place the switch on the DIN rail from above using the slot. Push the front of the switch toward the mounting surface until it audibly snaps into place
- Start-up: Connect the supply voltage to start up the switch via the terminal block (or DC JACK)
- Dismantling: Pull out the lower edge and then remove the switch from the DIN rail.


## 10/100Base-TX Connector

The following lists the pin-out of 10/100Base-TX ports.


| Pin | Standard Port | Uplink Port |
| :---: | :--- | :--- |
| 1 | Output Transmit Data + | Input Receive Data + |
| 2 | Output Transmit Data - | Input Receive Data - |
| 3 | Input Receive Data + | Output Transmit Data + |
| 4 | NC | NC |
| 5 | NC | NC |
| 6 | Input Receive Data - | Output Transmit Data - |
| 7 | NC | NC |
| 8 | NC | NC |

## 1000Base-FX Connection



The Tx (transmit) port of device $I$ is connected to the Rx (receive) port of device II, and the Rx (receive) port of device I to the Tx (transmit) port of device II.

## WDM 1000Base-BX Connection



Only one optical fiber is required to transmit and receive data

