



## IES-0510

### 4 FE + 1 MM SC Unmanaged Switch -10 to 60, DIN-rail

#### Overview

LevelOne IES-0510 Industry Ethernet Switch provides 4 ports of 10/100Base-TX Ethernet plus 1 port 100FX Multimode SC fiber 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.

#### Safety

With UL60950 standard complied that gives basic protection against electric shock, fire spread from within, ignition and burning, current circuit hazardous under normal and fault condition. As well as set of compliances to meet many EMC, isolation, vibration and shock standards.

#### Cost Effective

This device operates under -10 to 60 Celsius (-14 to 140 Fahrenheit) temperature that offers optimal suitability for industrial applications at low cost while maintaining all components built to withstand harsh environment applications without compromise reliability and stability.

#### Plug & Play

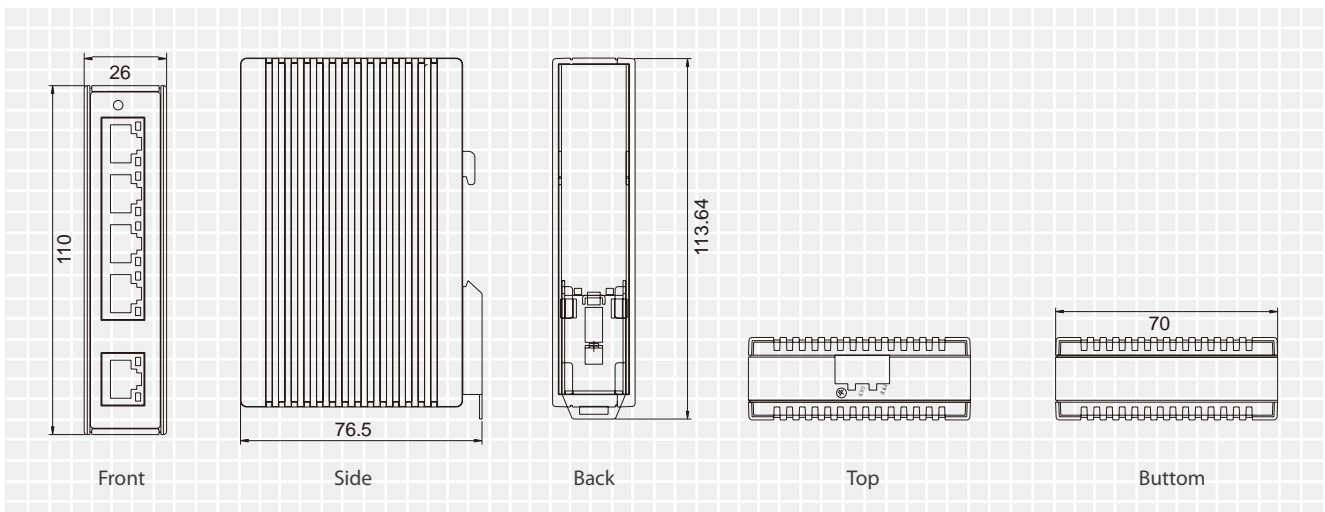
This unmanaged Industrial Ethernet Switch is designed for the demanding industrial environments at businesses in need of instant connectivity with no setup or configure required, truly plug and play.

#### Features

- Provides 4-port 10/100BASE-TX plus 1-port 100BASE-FX
- The fiber port is available with SC with a fiber connection that can reach up to 120Km (74.4miles)
- -10°C to 60°C (14°F to 140°F) and is tested for functional operation @-20°C to 70°C (-4°F to 158°F)
- 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Supports 12 to 48VDC Power inputs
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment

#### Diagrams

Unit: mm



## Specifications

Technology	
Standards	<ul style="list-style-type: none"> <li>IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/100BASE-FX, IEEE802.3x</li> </ul>
Forward and Filtering Rate	<ul style="list-style-type: none"> <li>14,880pps for 10Mbps</li> <li>148,810pps for 100Mbps</li> </ul>
Packet Buffer Memory	<ul style="list-style-type: none"> <li>384K bits</li> </ul>
Processing Type	<ul style="list-style-type: none"> <li>Store-and-Forward</li> <li>Half-duplex back-pressure and IEEE802.3x full-duplex flow control</li> </ul>
Address Table Size	<ul style="list-style-type: none"> <li>2048 MAC addresses</li> </ul>

Power	
Input	<ul style="list-style-type: none"> <li>Input Voltage: 12 to 48VDC (Terminal Block)</li> </ul>
Power Consumption	<ul style="list-style-type: none"> <li>4.3W Max. 0.3A @ 12VDC, 0.15A @ 24VDC, 0.07A @ 48VDC</li> </ul>
Overload Current Protection	<ul style="list-style-type: none"> <li>Present</li> </ul>
Reverse Polarity Protection	<ul style="list-style-type: none"> <li>Present</li> </ul>

Mechanical	
Casing	<ul style="list-style-type: none"> <li>Plastic case</li> <li>IP30</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>26mm (W) x 70mm (D) x 110mm (H) (1.02" (W) x 2.76" (D) x 4.33" (H))</li> </ul>
Weight	<ul style="list-style-type: none"> <li>0.2Kg (0.44lb.)</li> </ul>
Installation	<ul style="list-style-type: none"> <li>DIN-Rail (Top hat type 35mm)</li> </ul>

Interface	
Ethernet Port	<ul style="list-style-type: none"> <li>10/100BASE-TX: 5, 4 or 1 ports</li> <li>100BASE-FX: 0 or 1 ports</li> </ul>
LED Indicators	<ul style="list-style-type: none"> <li>Per Unit: Power Status (Power 1)</li> <li>Per Port: 10/100TX, 100FX: Link/Activity (Green), Speed (Yellow)</li> </ul>

Environment	
Operating Temperature	<ul style="list-style-type: none"> <li>-10°C to 60°C (14°F to 140°F)</li> <li>Tested @ -20°C to 70°C (-4°F to 158°F)</li> </ul>
Storage Temperature	<ul style="list-style-type: none"> <li>-25°C to 85°C (-13°F to 185°F)</li> </ul>
Ambient Relative Humidity	<ul style="list-style-type: none"> <li>5% to 95% (non-condensing)</li> </ul>
MTBF	<ul style="list-style-type: none"> <li>122.27 years</li> </ul>

Regulatory Approvals	
ISO	<ul style="list-style-type: none"> <li>Manufactured in an ISO9001 facility</li> </ul>
Safety	<ul style="list-style-type: none"> <li>UL60950-1</li> </ul>
EMI	<ul style="list-style-type: none"> <li>FCC Part 15, Class A, VCCI</li> <li>EN61000-6-4 <ul style="list-style-type: none"> <li>EN55022</li> <li>EN61000-3-2</li> <li>EN61000-3-3</li> </ul> </li> </ul>
EMS	<ul style="list-style-type: none"> <li>EN61000-6-2 <ul style="list-style-type: none"> <li>EN61000-4-2 (ESD Standards) Contact: + / - 6KV; Criteria B Air: + / - 8KV; Criteria B</li> <li>EN61000-4-3 (Radiated RFI Standards) 10V/m, 80 to 1000MHz; 80% AM Criteria A 3V/m, 1400 to 2000MHz; 80% AM Criteria A 1V/m, 2000 to 3000MHz; 80% AM Criteria A</li> <li>EN61000-4-4 (Burst Standards) Signal Ports: + / - 4.4KV; Criteria B D.C. Power Ports: + / - 4.4KV; Criteria B</li> <li>EN61000-4-5 (Surge Standards) Signal Ports: + / - 1KV; Line-to-Line; Criteria B D.C. Power Ports: + / - 0.5KV; Line-to-Earth; Criteria B</li> <li>EN61000-4-6 (Induced RFI Standards) Signal Ports: 10Vrms @ 0.15 - 80MHz; 80% AM Criteria A D.C. Power Ports: 10Vrms @ 0.15 - 80MHz; 80% AM Criteria A</li> <li>EN61000-4-8 (Magnetic Field Standards) 30A/m @ 50, 60Hz; Criteria A</li> </ul> </li> </ul>
Environmental Test Compliance	<ul style="list-style-type: none"> <li>IEC60068-2-6 Fc (Vibration Resistance) 5g @ 10 - 150Hz, Amplitude 0.35mm (Operation/Storage/Transport)</li> <li>IEC60068-2-27 Ea (Shock) 25g @ 11ms (Half-Sine Shock Pulse; Operation) 50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)</li> <li>IEC60068-2-32 Ed (Free Fall) 1M (3.281ft.)</li> </ul>

## Order Information

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## Package Contents

IES-0510

Quick Installation Guide