





## **IES-0500**

## 5 FE Unmanaged Switch -10 to 60, DIN-rail

#### **Overview**

LevelOne IES-0500 Industry Ethernet Switch provides 5 ports of 10/100Base-TX Ethernet 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 UL 60950 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 flexibility of 5 10/100BASE-TX ports
- -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**

## **Specifications**

Technology	
Standards	■ IEEE802.3 10BASE-T, IEEE802.3u 100BASE- TX/100BASE-FX, IEEE802.3x, IEEE802.3az EEE(Energy Efficient Ethernet), IEEE802.1p QoS with two priority queues
Forward and Filtering Rate	■ 14,880pps for 10Mbps
	■ 148,810pps for 100Mbps
Packet Buffer Memory	■ 384K bits
Processing Type	Store-and-Forward
	■ Half-duplex back-pressure and IEEE802.3x full-duplex flow control
Address Table Size	■ 2048 MAC addresses

Power	
nput	■ Input Voltage: 12 to 48VDC (Terminal Block)
ower Consumption	• 4.3W Max. 0.3A @ 12VDC, 0.15A @ 24VDC, 0.07A @ 48VDC
verload urrent rotection	■ Present
everse olarity rotection	■ Present

Mechanical	
Casing	■ Plastic case
	■ IP30
Dimensions	■ 26mm (W) x 70mm (D) x 110mm (H)
	(1.02" (W) x 2.76" (D) x 4.33" (H))
Weight	■ 0.2Kg (0.44lb.)
Installation	DIN-Rail (Top hat type 35mm)
Interface	
Ethernet Port	■ 10/100BASE-TX: 5, 4 or 1 ports
	■ 100BASE-FX: 0 or 1 ports
LED Indicators	Per Unit: Power Status (Power 1)
	Per Port: 10/100TX, 100FX: Link/Activity (Green),
	Speed (Yellow)

Environment	
Operating Temperature	■ -10°C to 60°C (14°F to 140°F) Tested @ -20°C to 70°C (-4°F to 158°F)
Storage Temperature	25°C to 85°C (-13°F to 185°F)
Ambient Relative Humidity	= 5% to 95% (non-condensing)
MTBF	■ 191.53 years

<b>Regulatory A</b> ISO	Manufactured in an ISO9001 facility
130	= Walidactured in an 1303001 facility
Safety	■ UL60950-1
EMI	<ul> <li>FCC Part 15, Class A, VCCI</li> <li>EN61000-6-4</li> <li>EN55022</li> <li>EN61000-3-2</li> <li>EN61000-3-3</li> </ul>
EMS	■ EN61000-6-2  - EN61000-4-2 (ESD Standards) Contact: + / - 6KV; Criteria B Air: + / - 8KV; Criteria B - 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 - EN61000-4-4 (Burst Standards) Signal Ports: + / - 4.4KV; Criteria B D.C. Power Ports: + / - 4.4KV; Criteria B - EN61000-4-5 (Surge Standards) Signal Ports: + / - 1KV; Line-to-Line; Criteria B D.C. Power Ports: + / - 0.5KV; Line-to-Earth; Criteria B D.C. Power Ports: + / - 0.5KV; Line-to-Earth; Criteria B - EN61000-4-6 (Induced RFI Standards) Signal Ports: 10Vrms @ 0.15 - 80MHz; 80% AM Criteria A - EN61000-4-8 (Magnetic Field Standards) 30A/m @ 50, 60Hz; Criteria A
Environmental Test Compliance	<ul> <li>IEC60068-2-6 Fc (Vibration Resistance)</li> <li>5g @ 10 - 150Hz, Amplitude 0.35mm</li> <li>(Operation/Storage/Transport)</li> <li>IEC60068-2-27 Ea (Shock)</li> <li>25g @ 11ms (Half-Sine Shock Pulse; Operation)</li> <li>50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)</li> <li>IEC60068-2-32 Ed (Free Fall)</li> <li>1M (3.281ft.)</li> </ul>

### **Order Information**

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# Package Contents IES-0500

Quick Installation Guide