



IES-1620

16 FE Unmanaged Switch -40 to 75, DIN-rail

Overview

LevelOne IES-1620 Industry Ethernet Switch provides 16 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.

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.

Traffic Control Application

This device is certified by NEMA (National Manufacturers Association) TS2 Environmental requirements for the Traffic Control Equipment that withstand extreme temperatures, operating voltage and humidity fluctuation, vibration and shock commonly experienced in severe outdoor environments.

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.

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.

Safety

This device has been tested under UL508 standard for Industrial Control Equipment to endurance under test turn on and off 6,000 times while loaded, with no single failure. It's highly reliability and safety measurement to ensure field hardened, especially for the harsh environment.

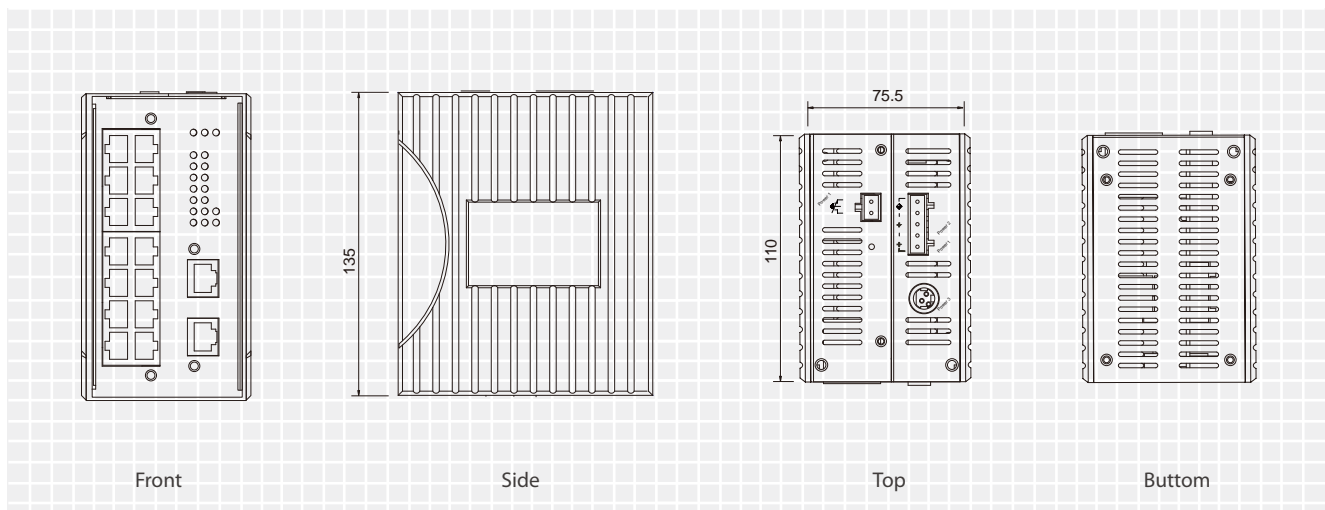
Features

- Provides flexibility of 16 10/100BASE-TX ports
- Supports 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Redundant power inputs (12 - 48VDC) with Terminal Block and DC Jack (12VDC)
- Alarms for power failure by relay output

- -40°C to 75°C (-40°F to 167°F) operating temperature range, tested for functional operation @ -40°C to 85°C (-40°F to 185°F).
- Provides DIN-rail, panel or rack mounting
- Complies with NEMA TS2 Environmental requirements for Traffic control equipment
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment

Diagrams

Unit: mm



Specifications

Technology	
Standards	<ul style="list-style-type: none"> IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/100BASE-FX, IEEE802.3x
Forward and Filtering Rate	<ul style="list-style-type: none"> 14,880pps for 10Mbps 148,810pps for 100Mbps
Packet Buffer Memory	<ul style="list-style-type: none"> 1.625M bits
Processing Type	<ul style="list-style-type: none"> Store-and-Forward Half-duplex back-pressure and IEEE802.3x full-duplex flow control
Address Table Size	<ul style="list-style-type: none"> 4096 MAC addresses
Latency	<ul style="list-style-type: none"> Less than 10µs

Power	
Input	<ul style="list-style-type: none"> Input Voltage: 12 to 48VDC (Terminal Block) 12VDC (DC Jack)
Power Consumption	<ul style="list-style-type: none"> 7.4W Max. 0.6A @ 12VDC, 0.3A @ 24VDC, 0.15A @ 48VDC
Overload Current Protection	<ul style="list-style-type: none"> Present

Mechanical	
Casing	<ul style="list-style-type: none"> Aluminum case IP30
Dimensions	<ul style="list-style-type: none"> 75.5mm (W) x 110mm (D) x 135mm (H) (2.98" (W) x 4.33" (D) x 5.31" (H))
Weight	<ul style="list-style-type: none"> 0.87Kg (1.92lbs.)
Installation	<ul style="list-style-type: none"> DIN-Rail (Top hat type 35mm), Panel, Rack Mounting

Interface	
Ethernet Port	<ul style="list-style-type: none"> 10/100BASE-TX: 16, 15 or 14 ports 100BASE-FX: 0, 1 or 2 ports
LED Indicators	<ul style="list-style-type: none"> Per Unit: Power Status (Power 1, Power 2, Power 3) Per Port: 10/100TX, 100FX: Link/Activity
Alarm Contact	<ul style="list-style-type: none"> One relay output with current 1A @ 24VDC

Environment	
Operating Temperature	<ul style="list-style-type: none"> -40°C to 75°C (-40°F to 167°F) Tested @ -40°C to 85°C (-40°F to 185°F)
Storage Temperature	<ul style="list-style-type: none"> -40°C to 85°C (-40°F to 185°F)
Ambient Relative Humidity	<ul style="list-style-type: none"> 5% to 95% (non-condensing)
MTBF	<ul style="list-style-type: none"> 106.94 years

Regulatory Approvals	
ISO	<ul style="list-style-type: none"> Manufactured in an ISO9001 facility
Safety	<ul style="list-style-type: none"> UL508
EMI	<ul style="list-style-type: none"> FCC Part 15, Class A, VCCI EN61000-6-4 <ul style="list-style-type: none"> EN55022 EN61000-3-2 EN61000-3-3
EMS	<ul style="list-style-type: none"> EN61000-6-2 <ul style="list-style-type: none"> 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 2700MHz; 80% AM Criteria A EN61000-4-4 (Burst Standards) Signal Ports: + / - 4KV; Criteria B D.C. Power Ports: + / - 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 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 EN61000-4-8 (Magnetic Field Standards) 30A/m @ 50, 60Hz; Criteria A
Environmental Test Compliance	<ul style="list-style-type: none"> IEC60068-2-6 Fc (Vibration Resistance) 5g @ 10 - 150KHz, Amplitude 0.35mm (Operation/Storage/Transport) IEC60068-2-27 Ea (Shock) 25g @ 11ms (Half-Sine Shock Pulse; Operation) 50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport) IEC60068-2-32 Ed (Free Fall) 1M (3.281ft.)

Order Information

IES-1620 – 16 FE Unmanaged Switch -40 to 75, DIN-rail

Package Contents

IES-1620

Quick Installation Guide