IEC-1300
10/100 Industrial Media Converter w/ 30W PoE PSE, SC MM 2KM -10 to 60C

Overview

LevelOne IEC-1300 is an industrial Fast Ethernet media converter with IP30 ingress protection case. This converter is designed to be mounted on an industrial standard DIN-rail, plus the clearly visible status LEDs provide simple monitoring of port link activity.

Power over Ethernet

This switch is Power Sourcing Equipment (PSE), and it is fully complied with IEEE 802.3at PoE standard at maximum 30W power budget per port. It helps to save infrastructure wiring costs dramatically by eliminating electric wiring and less UPS needed. Also, it is compatible with IEEE802.3af standard PD devices.

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.
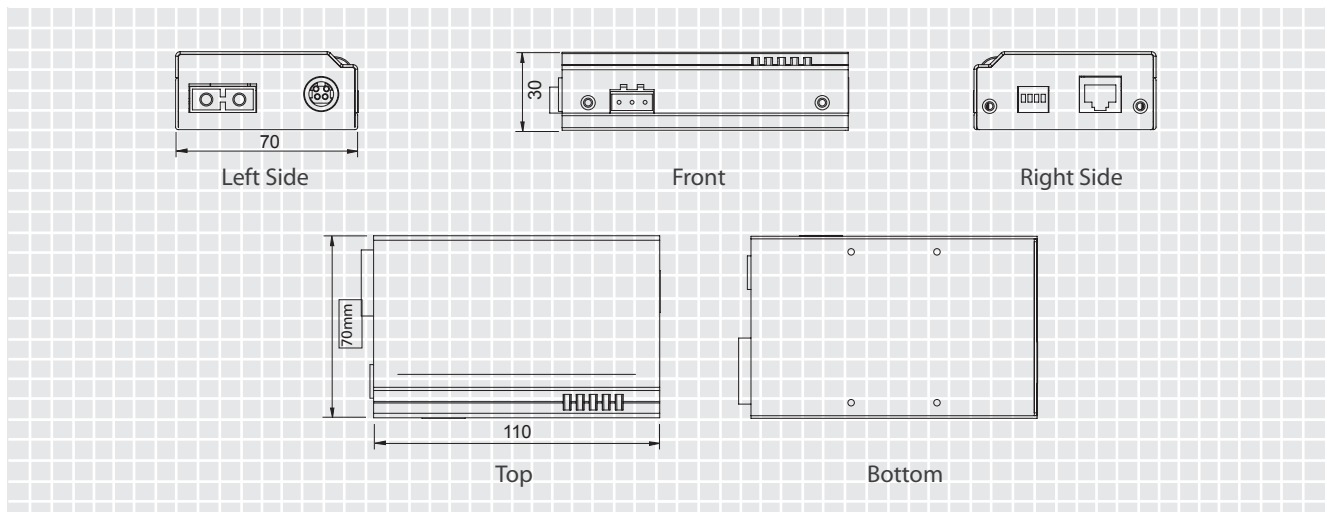
Plug & Play

This Industrial Media Converter 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 1-port 10/100Base-TX plus 1-port 100Base-FX
- 100Base-FX Multi-mode fiber for the link up to 2 kilometers
- IEEE802.3af/at PoE PSE with 30W power budget
- 10/100Mbps Full/Half duplex, Auto-negotiation, Auto-MDI/MDIX
- Complies with IEC61000-6-2 EMC Generic standard immunity for industrial environment

- 228K bits buffer memory
- -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)
- IP30 aluminum case
- Supports DIN-rail mounting installation

Diagrams

Unit: mm

Left Side

Front

Right Side

Top

Bottom

Specifications

Technology

Standards	• IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/FX
Forward and Filtering Rate	• 14,880pps for 10Mbps • 148,810pps for 100Mbps
Packet Buffer Memory	• 228K bits
Processing Type	• Store-and-Forward • Half-duplex back-pressure and IEEE802.3x full-duplex flow control

Power

Input	• 48 to 52 VDC supports up to 15.4 Watts 52 to 57 VDC supports up to 30 Watts

Power Consumption	• 3.6W Max. 0.075A @ 48VDC
	• 19.2W Max. 0.4A @ 48VDC when PoE link
	  with 15.4W IEEE802.3af PD
	  34.1W Max. 0.62A @ 55VDC when PoE link
	  with 30Watts high power PD high power PoE

Overload Current Protection	• Present
Reverse Polarity Protection	• Present

Mechanical

Casing	• Aluminum case • IP30
Dimensions	• 70mm (W) x 110mm (D) x 30mm (H) (2.76" (W) x 4.33" (D) x 1.18" (H))
Weight	• 0.25Kg (0.55lb.)
Installation	• DIN-Rail (Top hat type 35mm), Panel, Wall Mounting

Interface

Ethernet Port	• 10/100BASE-TX: 1 port • 100BASE-FX: 1 port
LED Indicators	• Per Unit: Power Status (Power) • Per Port: 10/100TX: Link/Activity, Full-duplex/Collision, 100FX: Link/Activity • PoE: PD connect/PD disconnect

Environment

Operating Temperature	• -10°C to 60°C (14°F to 140°F) Test @ -20°C to 70°C (-4°F to 158°F)
Storage Temperature	• -40°C to 85°C (-40°F to 185°F)
Ambient Relative Humidity	• 5% to 95% (non-condensing)
MTBF	• 92.54 years

Regulatory Approvals

ISO	• Manufactured in an ISO9001 facility
Safety	• UL508

EMI	• FCC Part 15, Class A
	• EN61000-6-4
	  - EN55022
	  - EN61000-3-2
	  - EN61000-3-3

EMS	• EN61000-6-2
	  - EN61000-4-2 (ESD Standards)
	    Contact: + / - 4KV
	    Air: + / - 8KV
	  - EN61000-4-3 (Radiated RFI Standards)
	    10V/m, 80 to 1000MHz; 80% AM
	  - EN61000-4-4 (Burst Standards)
	    Signal Ports: + / - 4KV
	    D.C. Power Ports: + / - 4KV
	  - EN61000-4-5 (Surge Standards)
	    Signal Ports: + / - 1KV; Line-to-Line
	    D.C. Power Ports: + / - 0.5KV; Line-to-earth
	  - EN61000-4-6 (Induced RFI Standards)
	    Signal Ports: 10Vrms @ 0.15 - 80MHz; 80% AM
	    D.C. Power Ports: 10Vrms @ 0.15 - 80MHz; 80% AM
	  - EN61000-4-8 (Magnetic Field Standards)
	    30A/m @ 50, 60Hz

Environmental Test Compliance	• IEC60068-2-6 Fc (Vibration Resistance)
	  5g @ 10 - 150Hz, 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)
	• FED STD 101C Method 5007.1 (Free fall w/ package)
	  -Tested with Cross Weight and Drop High standard table

Order Information

IEC-1300 – 10/100 Industrial Media Converter w/ 30W PoE PSE, SC MM 2KM -10 to 60C

Package Contents
IEC-1300
Quick Installation Guide