



# **IEC-1120** 10/100 Industrial Media Converter, SC SM 20KM, -10 to 60C

#### **Overview**

LevelOne IEC-1120 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.

#### Safety

Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment; it also complies with IEC60068 vibration and shock resistance as well.

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.

#### 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.

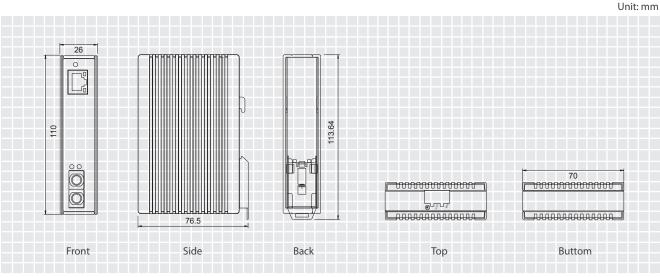
# Features

- Provides 1-port 10/100Base-TX plus 1-port 100Base-FX
- 100Base-FX Single-mode fiber for the link up to 20 kilometers
- -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 input

- Complies with IEC61000-6-2 EMC Generic standard immunity for industrial environment
- 484K bits buffer memory
- IP30 aluminum case

Plug & Play

- Supports DIN-rail mounting installation



# Diagrams

#### Unit: mm

## Specifications

Technology		Environment	
Standards	■IEEE802.3 10BASE-T,	Operating	-10°C to 60°C (14°F to 140°F)
	IEEE802.3u 100BASE-TX/100BASE-FX, IEEE802.3x	Temperature	Test @ -20°C to 70°C (-4°F to 158°F)
Forward and Filtering Rate	<ul><li>14,880pps for 10Mbps</li><li>148,810pps for 100Mbps</li></ul>	Storage Temperature	■ -25°C to 85°C (-13°F to 185°F)
Packet Buffer Memory	■384K bits	Ambient Relative Humidity	■ 5% to 95% (non-condensing)
		MTBF	■121.40 years
Processing	Store-and-Forward		
Туре	<ul> <li>Half-duplex back-pressure and IEEE802.3x full-duplex flow control</li> </ul>	Regulatory Approvals	
		ISO	<ul> <li>Manufactured in an ISO9001 facility</li> </ul>
	1	Safety	UL60950-1, EN60950-1, IEC60950-1
Power Input Power	<ul> <li>Input Voltage: 12 to 48VDC (Terminal Block)</li> <li>4.3W Max. 0.3A @ 12VDC, 0.15A @ 24VDC,</li> </ul>	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>
Consumption			
Reverse Polarity Protection	0.07A @ 48VDC	EMS	EMS = EN61000-6-2 - EN61000-4-2 (ESD Standards) Contact: + / - 6KV Air: + / - 8KV - EN61000-4-3 (Radiated RFI Standards)
			10V/m, 80 to 1000MHz; 80% AM
Mechanical			3V/m, 1400 to 2000MHz; 80% AM
Casing	<ul><li>Plastic case</li><li>IP30</li></ul>		1V/m, 2000 to 3000MHz; 80% AM - EN61000-4-4 (Burst Standards) Signal Ports: + / - 4.4KV D.C. Power Ports: + / - 4.4KV - EN61000-4-5 (Surge Standards) Signal Ports: + / - 1KV; Line-to-Line D.C. Power Ports: + / - 0.5KV; Line-to-earth
Dimensions	<ul> <li>26mm (W) x 70mm (D) x 110mm (H)</li> <li>(1.02" (W) x 2.76" (D) x 4.33" (H))</li> </ul>		
Weight	■0.2Kg (0.44lb.)		- EN61000-4-6 (Induced RFI Standards) Signal Ports: 10Vrms @ 0.15 - 80MHz; 80% AM D.C. Power Ports: 10Vrms @ 0.15 - 80MHz; 80% AM
Installation	DIN-Rail (Top hat type 35mm) Mounting		- EN61000-4-8 (Magnetic Field Standards) 30A/m @ 50, 60Hz
Interface		Environmental Test	<ul> <li>IEC60068-2-6 Fc (Vibration Resistance)</li> <li>5g @ 10 - 150Hz, Amplitude 0.35mm (Operation/Storage)</li> </ul>
Ethernet Port	■ 10/100BASE-TX: 1 port	Compliance	<ul> <li>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>FED STD 101C Method 5007.1 (Free fall w/ package)</li> <li>-Tested with Cross Weight and Drop High standard table</li> </ul>
	■100BASE-FX: 1 port		
LED Indicators	Per Unit: Power Status (Power1, Power2)		
	Per Port: 10/100TX, 100FX: Link/Activity (Green),		
	Speed (Yellow)		

## **Order Information**

IEC-1120 - 10/100 Industrial Media Converter, SC SM 20KM, -10 to 60C

## **Package Contents**

IEC-1120 Quick Installation Guide