





IEC-1040

10/100 Industrial Media Converter, SC SM 40KM -40 to 75C

Overview

LevelOne IEC-1040 is an industrial Fast Ethernet media converter with a rugged aluminium case which providing superb heat dissipation. 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. It also features Link Fault Pass Through in order to alert remote location when link status changes.

Safety

Complies with NEMA (National Manufacturers Association) TS1 & TS2 Environmental certified for the Traffic Control Equipment that withstand extreme temperatures, operating voltage and humidity fluctuation, vibration and shock commonly experienced in severe outdoor environments.

Fault Detection

Relay contact sends alert signal when the power failed or a port link disconnected, therefore the system operator can respond quickly. This relay contact can be easily configured with a simple DIP switch.

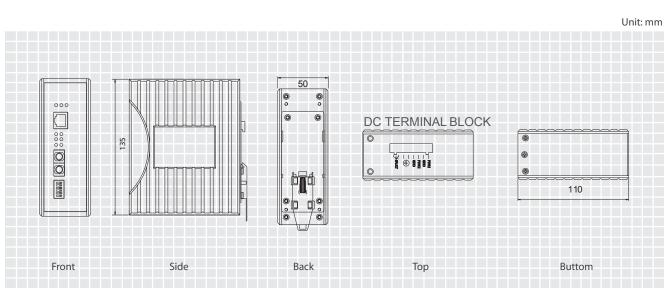
High Reliability

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.

Features

- 100Base-FX Single-mode fiber for the link up to 40 kilometers
- Complies with NEMA TS1 & TS2 Environmental requirements for Traffic control equipment
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- ISA 12.12.01 (UL1604) Class I, Division 2 Classified for use in hazardous locations with DC Terminal Block power
- DIP switch configuration for "Link-Fault-Pass-Through," link down alarm, speed, duplex mode
- 128K bits buffer memory
- 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- Alarms for power and port link 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)
- IP30 aluminum case
- Supports DIN-rail mounting installation

Diagrams



Technology		Environment	
Standards	■IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/100Base-FX, IEEE802.3x	Operating Temperature	■ -40°C to 75°C (-40°F to 167°F) Tested @ -40°C to 85°C (-40°F to 185°F)
Forward and Filtering Rate	■14,880pps for 10Mbps ■148,810pps for 100Mbps	Storage Temperature	■ -40°C to 85°C (-40°F to 185°F)
Packet Buffer Memory	■128K bits	Ambient Relative Humidity	■ 5% to 95% (non-condensing)
Processing Type	Store-and-Forward	MTBF	■104.02 years
	■ Half-duplex back-pressure and IEEE802.3x full-duplex flow control	Regulatory Ap	
Power		ISO	Manufactured in an ISO9001 facility
Input	■Input Voltage: 10 to 48VDC (DC Terminal Block) or 12VDC (DC Jack , optional)	Safety	 Hazardous locations: Class 1, Division 2 gr UL60950-1, EN60950-1, IEC60950-1
Power	■4.32W MAX. 0.36A @ 12VDC, 0.09A @ 48VDC	EMI	■ FCC Part 15, Class A ■ EN61000-6-3
Consumption Overload Current	■Present		- EN55022 - EN61000-3-2 - EN61000-3-3
Protection Reverse Polarity Protection	Present	EMS	■ EN61000-6-2 - EN61000-4-2 (ESD Standards) Contact: + / - 4KV Air: + / - 8KV
Mechanical			- EN61000-4-3 (Radiated RFI Standards)
Casing	Aluminum caseIP30	-	10V/m, 80 to 1000MHz; 80% AM - EN61000-4-4 (Burst Standards) Signal Ports: + / - 4KV
Dimensions	■50mm (W) x 110mm (D) x 135mm (H) (1.97" (W) x 4.33" (D) x 5.31" (H))		D.C. Power Ports: + / - 4KV - EN61000-4-5 (Surge Standards) Signal Ports: + / - 1KV; Line-to-Line
Weight	■0.8Kg (1.76lbs.)		D.C. Power Ports: + / - 0.5KV; Line-to-ea - EN61000-4-6 (Induced RFI Standards)
Installation	■DIN-Rail (Top hat type 35mm)		Signal Ports: 10Vrms @ 0.15 - 80MHz; 809
Interface			D.C. Power Ports: 10Vrms @ 0.15 - 80M - EN61000-4-8 (Magnetic Field Standards
Ethernet Port	■10/100BASE-TX: 1 port ■100BASE-FX: 1 port		30A/m @ 50, 60Hz
LED Indicators	■Per Unit: Power Status (Power 1, Power 2, Fault), Link-Fault-Pass-Through	Environmental Test Compliance	 IEC60068-2-6 Fc (Vibration Resistance) 5g @ 10 - 150Hz, Amplitude 0.35mm (Oper Transport)

Storage Temperature	= -40°C to 85°C (-40°F to 185°F)	
Ambient Relative Humidity	= 5% to 95% (non-condensing)	
MTBF	■104.02 years	
Regulatory Ap	pprovals	
ISO	■ Manufactured in an ISO9001 facility	
Safety	■ Hazardous locations: Class 1, Division 2 group A,B,C&D UL60950-1, EN60950-1, IEC60950-1	
EMI	■ FCC Part 15, Class A ■ EN61000-6-3 - 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 ■ NEMA TS1/2 Environmental requirements for traffic control equipment	

Order Information

0.5A @ 120VAC

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Per Port: 10/100TX: Link/Activity, Full-duplex/Collision,

Relay contact rating with current 1A @ 30VDC,

100FX: Link/Activity, Full-duplex/Collision

Package Contents

IEC-1040

Relay Contact

Quick Installation Guide