

EL1033

Industrial 10/100BASE-TX to 100BASE-FX Media Converter with PoE/PD Fast Ethernet

Overview



The EL1033 is positioned as a Fast Ethernet Media Converter to meet the requirements of fibre networking applications. The EL1033 Series is one of the most complete solutions in media conversion and is available with a selection of fibre connector options. The RJ-45 port on this unit is dual speed 10/100Mbps with half/full duplex auto sensing. Better than a regular converter, the EL1033 has switching capabilities that are able to filter traffic and record MAC addresses. The 1033 uses PoE technology to receive electrical power, along with data, from PoE PSE device over standard twisted-pair cable in an Ethernet network. It can be used in some applications where it would be inconvenient or not possible to supply power separately

Features

- Complied with 802.3af PoE/PD technology
- DIP switch configuration for "Link-Fault-Pass Through" speed, duplex mode
- 10/100Mbps-Full/Half-duplex, Auto-negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- 2.25M bits buffer memory
- -10°C to 60°C (14°F to 140°F) operating temperature
- Aluminium case
- Supports DIN-Rail, Panel or Wall Mounting installation

Ordering Information

EL1033-XOZ Industrial 10/100BASE-TX to 100BASE-FX Media converter with PoE/PD

100FX Fibre Options:

- | | |
|---|--|
| <p>(X) =</p> <ul style="list-style-type: none"> 1: Multi Mode (SC) 2: Multi Mode (ST) A: Single Mode (SC) -20Km B: Single Mode (SC) -40Km H: Single Mode (ST) -20Km 6: Multi Mode (SC) WDM -TX: 1310nm/RX: 1550nm -2Km 7: Multi Mode (SC) WDM -TX: 1550nm/RX: 1310nm -2Km <p>*More 100FX Fibre Options also available upon request</p> | <ul style="list-style-type: none"> 8: Multi Mode (SC) WDM -TX: 1310nm/RX: 1550nm -5Km 9: Multi Mode (SC) WDM -TX: 1550nm/RX: 1310nm -5Km P: Single Mode (SC) WDM -TX: 1310nm/RX: 1550nm -20Km Q: Single Mode (SC) WDM -TX: 1550nm/RX: 1310nm -20Km R: Single Mode (SC) WDM -TX: 1310nm/RX: 1550nm -40Km S: Single Mode (SC) WDM -TX: 1550nm/RX: 1310nm -40Km |
|---|--|

Power Input Interface:

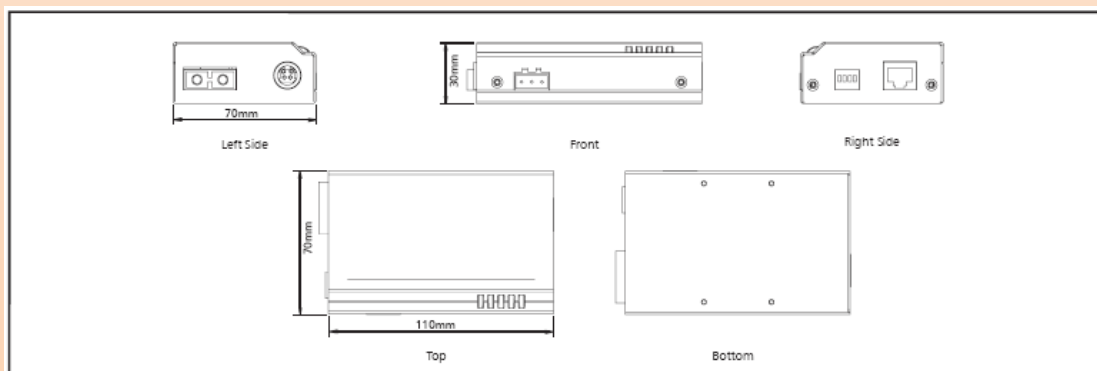
(Z) = B: Terminal Block & DC Jack

Power Supply: (Optional)

*Option A - The Terminal Block type external power supply are not included. Please order the following part numbers, as required: [DR-75-48](#)

**Option B - The external power adapter and power cord are not included. Please order the following part numbers, recommend for indoor use, as required: [AS-120P-48](#)

Diagrams



Specifications

Standards:

- IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/FX, IEEE802.3af PoE

Forward and Filtering Rate:

- 14,880pps for 10Mbps
- 148,810pps for 100Mbps

Packet Buffer Memory:

- 2.25M bits

Processing Type:

- Store-and-Forward
- Half-duplex back-pressure and IEEE802.3x full-duplex flow control

Power

Input:

- Input Voltage: 48VDC

Power Consumption:

- 3.6W Max. 0.075A@48VDC

Overload Current Protection:

- Present

Reverse Polarity Protection:

- Present

Mechanical

Casing:

- Aluminium case

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, Speed100FX: Link/Activity
- PoE: PSE connect/PSE 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)

Regulatory Approvals:

ISO:

- Manufactured in an ISO9001 facility

Safety:

- UL508

EMI:

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

EMS:

- EN61000-6-2
- EN61000-4-2 (ESD Standards)
Contact: + / - 4KV; Criteria B
Air: + / - 8KV; Criteria B
- EN61000-4-3 (Radiated RFI Standards)
10V/m, 80 to 1000MHz; 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:

- IEC60068-2-6 Fc (Vibration Resistance)
5g @ 10~150 KHz, 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.)

Power inputs

Power Input Assignment						
Power 1	+	12~48VDC	Terminal Block			
	-	Power Ground				
Power 2	+	12~48VDC				
	-	Power Ground				
		Earth Ground				
		Relay				
Power 3		12VDC	DC Jack			
DIP Switch Assignment						
DIP-ON 1 2 3 4 5 6 0	LFPT	TX		FX	LINK DOWN	
	Enable	F. Mode	10M	H. Duplex	H. Duplex	ON
	Disable	Auto Mode	100M	F. Duplex	F. Duplex	OFF

