EL1032
Industrial 10/100BASE-TX to 100BASE-FX Media Converter with PoE/PSE
Fast Ethernet

Overview

The EL1032 is positioned as a Fast Ethernet Media Converter to meet the requirements of fibre networking applications. The EL1032 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 EL1032 has switching capabilities that are able to filter traffic and record MAC addresses. The EL1032 uses PoE technology to transmit electrical power, along with data, to remote devices over standard twisted-pair cables such as CAT5. It can be used in applications where it is inconvenient or not possible to supply power separately.

Features

- Complied with 802.3af PoE/PSE 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

EL1032-X0Z   Industrial 10/100BASE-TX to 100BASE-FX Media converter with PoE/PSE

100FX Fibre Options:

(X) =   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
          *More 100FX Fibre Options also available upon request

          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
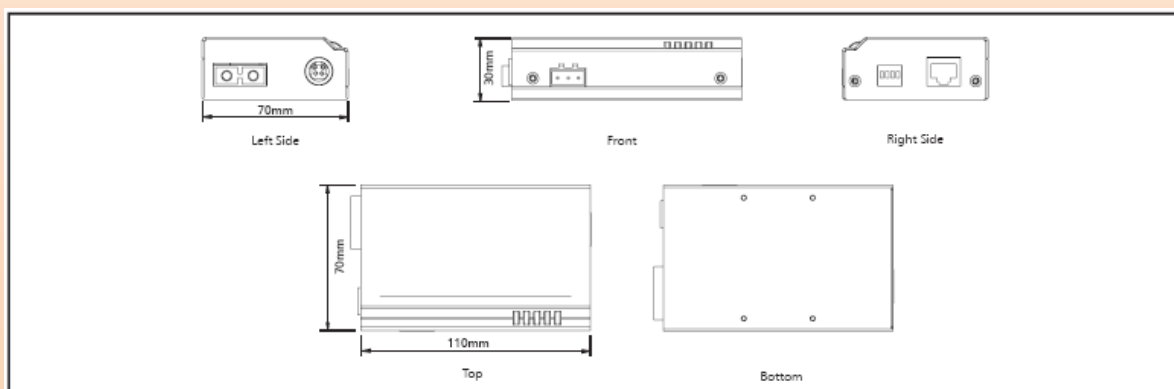   S: Single Mode (SC) WDM -TX: 1550nm/RX: 1310nm -40Km

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

Left Side   Front   Right Side

Top   Bottom

Specifications

Technology

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
- 19.2W, 0.4A@48VDC when PoE link on PD Class 0

Overload Current Protection:

- Present

Reverse Polarity Protection:

- Present

Mechanical

Casing:

- Aluminum 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, Speed
  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)

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 @ 10~150KHz, 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.)

DIN-Rail Kits, Optional Wall Mounting Kits