## EL900 Series

Hardened 10/100BASE-TX to 100BASE-FX Media Converter


ISA12.12.01

Value

- Highly qualified for explosive environmental 10/100BASE Ethernet applications and certified by UL with ISA12.12.01 Class I, Division 2 Classified for use in hazardous locations specifications


## Features

- 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 (Applicable to versions with Terminal Block power option)
- DIP switch configuration for "Link-Fault-Pass-Through," link down alarm, speed, duplex mode
- 768 K 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
- $-40^{\circ} \mathrm{C}$ to $+75^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.167^{\circ} \mathrm{F}\right)$ operating temperature range
$\square$ Hardened aluminum case
- Supports DIN-Rail, Panel or Rack Mounting installation


## Ordering Information

EL900-X-Y-I-P Hardened 10/100BASE-TX to 100BASE-FX Media Converter

10/100TX Options :
(X) = A : 10/100BASE-TX (for Port 1 only)

100FX Fiber Options :
(Y) = B : Multi Mode (SC)

C : Multi Mode (ST)
Q : Single Mode (SC) WDM -TX:1310nm/RX:1550nm - 20Km
D : Multi Mode (SC) WDM -TX:1310nm/RX:1550nm - 2Km E : Multi Mode (SC) WDM -TX:1550nm/RX:1310nm - 2Km F : Multi Mode (SC) WDM -TX:1310nm/RX:1550nm - 5Km G : Multi Mode (SC) WDM -TX:1550nm/RX:1310nm - 5 Km *More 100FX Fiber options also available upon request

Installation Type :
( 1 ) = 1 : DIN-Rail (mounting kit is included)
Optional Panel mount kit, part number: KP-AA96-480

Power Connector Options :
( P ) = A : Terminal Block* / B : DC Jack**
*Option A - The Terminal Block type external power supply are not included. Please order the following part numbers: DR-30-24, DR-60-24, DR-75-24, DR-120-24 or 41-136046-X (X)=1: US, 2: EU, 3: UK, 4: AU, 5: JP
**Option B - The external power adapter and power cord are not included. Please order the following part numbers: 41-136044-X (X)=1: US, 2: EU, 3: UK, 4: AU, 5: JP

## Specifications

| Technology |  |
| :---: | :---: |
| Standards | IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/100Base-FX, IEEE802.3x |
| Forward and | 14,880pps for 10Mbps |
| Filtering Rate | 148,810pps for 100Mbps |
| Packet Buffer | 768 K bits |
| Memory |  |
| Processing | Store-and-Forward |
| Type | Half-duplex back-pressure and IEEE802.3x full-duplex |
| flow control |  |
| Power |  |
| Input | Input Voltage: 10 to 48VDC (Terminal Block); 12VDC (DC Jack) |
| Power | 4.32 W MAX. 0.36 A @ 12VDC, 0.09 A @ 48VDC |
| Consumption : |  |
| Overload | Present |
| Current |  |
| Protection |  |
| Reverse | Present |
| Polarity |  |
| Protection |  |
| Mechanical |  |
| Casing | Aluminum case |
|  | IP30 |
| Dimensions | $\begin{aligned} & 50 \mathrm{~mm}(\mathrm{~W}) \times 110 \mathrm{~mm}(\mathrm{D}) \times 135 \mathrm{~mm}(\mathrm{H}) \\ & \left(1.97^{\prime \prime}(\mathrm{W}) \times 4.33^{\prime \prime}(\mathrm{D}) \times 5.31^{\prime \prime}(\mathrm{H})\right) \end{aligned}$ |
| Weight | 0.8 Kg (1.76lbs.) |
| Installation | DIN-Rail (Top hat type 35mm), Panel, Rack Mounting |
| Interface |  |
| Ethernet Port | 10/100BASE-TX: 1 port |
|  | 100BASE-FX: 1 port |
| LED Indicators | Per Unit: Power Status (Power 1, Power 2, Fault), Link-Fault-Pass-Through |
|  | Per Port: 10/100TX: Link/Activity, Full-duplex/Collision, Speed |
|  | 100FX: Link/Activity, Full-duplex/Collision |
| Relay Contact | Relay contact rating with current 1A @ 30VDC, 0.5 A @ 120VAC |
| Environment |  |
| Operating Temperature | $-40^{\circ} \mathrm{C}$ to $+75^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.167^{\circ} \mathrm{F}\right)$ |
|  | Tested @ $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right)$ |
| Storage Temperature | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right)$ |
|  |  |
| Ambient | 5\% to 95\% (non-condensing) |
| Relative |  |
| Humidity |  |

## Regulatory Approvals

ISO
Safety Hazardous locations: Class 1, Division 2 group A,B,C\&D
UL60950-1, EN60950-1, IEC60950-1
*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; Criteria B
Air: + / - 8KV; Criteria B

- EN61000-4-3 (Radiated RFI Standards)
$10 \mathrm{~V} / \mathrm{m}$, 80 to 1000 MHz ; $80 \%$ 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: 10 Vrms @ 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 @ $50,60 \mathrm{~Hz}$; Criteria A
Environmental
Test
Compliance
(Operation/Storage Transort)
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.)
NEMA TS1/2 Environmental requirements for traffic control equipment


## Dimensions

DC JACK


TERMINAL BLOCK

Bottom


Front


Side


Back


