



FEATURE HIGHLIGHTS

- Cut-Through Forwarding Mode
- Available in both SC and SFP Fiber Connectors
- Redundant Power Input
- Jumbo packets up to 9K bytes
- Link Fault Pass-Through (LFP) and Link Loss Carry Forward
- Operating Temperature : -10°C ~ 70°C
- Works in Media Converter Mode or Fiber Repeater Mode

PRODUCT DESCRIPTION

EF24 Series Industrial Gigabit Ethernet to Fiber Converter and Repeater Combo provide media conversion between 10/100/1000 BASE-T(X) and 100/1000 BASE-(F)X (available in both SC and SFP fiber connectors) or media extension in 100/1000 BASE-(F)X.

EF24 Series comes with a DIP switch to configure or enable the more advanced functions including the fiber speed, fiber auto negotiation, link fail pass-through, terminal/center device, power saving, jumbo frame, and cut-through forwarding to reach the maximum flexibility.

SPECIFICATIONS

| Technical Specifications | | |
|------------------------------|--|-------------------|
| Model Name | EF24 | |
| Technology | | |
| Standards | IEEE 802.3 for 10BASE-T IEEE 802.3u for 100BASE-T(X) and 100BASE-FX IEEE 802.3ab for 1000BASE-T IEEE 802.3z for 1000BASE-X | |
| Interface | | |
| RJ45 Ports | 10/100/1000BASE-T(X) auto negotiation speed | |
| Fiber Ports | 100/1000BASE-(F)X or SFP Slot | |
| LED Indicators | PWR1, PWR2, CT-TML, Fx1_Link, Fx2_Link, Fx1_OAM, FP/MC, Fx_LLCF, Tx_LLCF | |
| DIP Switch | Media Converter / Repeater mode, Fiber Speed mode, Link Transparency, TS-1000 Terminal / Center mode, Power Save, Fiber Auto Negotiation, Jumbo Frame, Cut-through | |
| Power Management | | |
| Input Voltage | 9-48 VDC | |
| Input Current | Max. 0.3A @ 9VDC | |
| Connector | Removable 5-pin Terminal Block | |
| Reverse Polarity Protection | Present | |
| Physical Characteristics | | |
| Housing | Metal, IP30 protection | |
| Dimensions(W x H x D) | 32mm x 90mm x 110mm (1.26 x 3.54 x 4.33 in) | |
| Weight | EF24-1G-2Fm-SC-550M / EF24-1G-2Fs-SC-10 : 330g EF24-1G-2SFP : 340g | |
| Installation | DIN-Rail, Wall-Mount (optional kit) | |
| Environmental Limits | | |
| Operating Temperature | -10°C ~ 70°C (14°F ~ 158°F) | |
| Storage Temperature | -40°C ~ 85°C (-40°F ~ 185°F) | |
| Ambient Relative Humidity | 5 ~ 95%, 55°C (non-condensing) | |
| Optical Fiber Specifications | | |
| Mode | Multi-mode | Single-mode |
| Distance | 550M | 10KM |
| Bit Rate | 1250Mbps | 1250Mbps |
| Wavelength (nm) | 850 | 1310 |
| Application | 1000Base-SX | 1000Base-LX |
| Tx Power (dBm) | -9.5~-4 | -9.5~-3 |
| Rx Sensitivity (dBm) | < -18 | < -20 |
| Remark | EF24-1G-2Fm-SC-550M | EF24-1G-2Fs-SC-10 |

REGULATORY APPROVALS

| Regulatory Approvals | | | | |
|----------------------|---|----------------------|---------------------|---|
| Safety | CB (IEC62368-1/EN62368-1) | | | |
| EMC | FCC Part 15, Subpart B, Class A EN55032 EN61000-6-4 EN 61000-3-2 EN 61000-3-3 EN 55024 EN 61000-6-2 | | | |
| Test Item | Item | Value | Level | |
| IEC 61000-4-2 | ESD | Contact Discharge | ±6KV | 3 |
| | | Air Discharge | ±8KV | 3 |
| IEC 61000-4-3 | RS | 80-1000MHz | 10 V/m | 3 |
| IEC 61000-4-4 | EFT | AC Power Port | ±2.0KV | 3 |
| | | DC Power Port | ±2.0KV | 3 |
| | | Signal Port | ±1.0KV | 3 |
| IEC 61000-4-5 | Surge | AC Power Port | Line-to Line±1.0KV | 3 |
| | | AC Power Port | Line-to Earth±2.0KV | 3 |
| | | DC Power Port | Line-to Line±1.0KV | 3 |
| | | Signal Port | Line-to Earth±1.0KV | 2 |
| IEC 61000-4-6 | CS | Conducted(Enclosure) | 10 Vrms | 3 |
| IEC 61000-4-8 | PFMF | (Enclosure) | AC 50/60 Hz 30 A/m | 4 |
| IEC 61000-4-11 | DIP | AC Power Port | - | - |
| Shock | MIL-STD-810F Method 516.5 | | | |
| Drop | MIL-STD-810F Method 516.5 | | | |
| Vibration | MIL-STD-810F Method 514.5 C-1 & C-2 | | | |
| RoHS | Yes | | | |
| MTBF | 372,537.84 hrs / 42.52 years (25°C) | | | |
| Warranty | 5 years | | | |

ORDERING INFORMATION

| Ordering information | |
|----------------------|--|
| Model name | Enclosure |
| EF24-1G-2Fm-SC-550M | Industrial Gigabit Ethernet-to-Fiber Media Converter and Repeater, multimode, SC connector, Link Fault Pass-Through, Auto Speed, 550 M |
| EF24-1G-2Fs-SC-10 | Industrial Gigabit Ethernet-to-Fiber Media Converter and Repeater, single-mode, SC connector, Link Fault Pass-Through, Auto Speed, 10 KM |
| EF24-1G-2SFP | Industrial Gigabit Fast Ethernet-to-Fiber Media Converter and Repeater, Link Fault Pass-Through, Auto Speed, SFP |

Optional Accessories

| | |
|--------------------|--|
| UN315-1212 (US-Y) | Y-Type power adaptor, 100~240VAC input, 1.25A @ 12VDC output, US plug, LV6 |
| UNE315-1212 (EU-Y) | Y-Type power adaptor, 100~240VAC input, 1.25A @ 12VDC output, EU plug, LV6 |
| WMK-315-Black | Aluminum Wall Mount Kit, Black |
| LM28-C3S-TI-N | SFP Transceiver, 1250Mbps, 850nmVCSEL, Multi-mode, 550m, 3.3V, -20~85°C |
| LM38-C3S-TI-N | SFP Transceiver, 1250Mbps, 1310nmFP, Multi-mode, 2km, 3.3V, -40~85°C |
| LS38-C3S-TI-N | SFP Transceiver, 1250Mbps, 1310nmFP, Single-mode, 10km, 3.3V, -40~85°C |
| LS38-C3L-TI-N | SFP Transceiver, 1250Mbps, 1310nmDFB, Single-mode, 30km, 3.3V, -40~85°C |
| LM38-A3S-TI-N | SFP Transceiver, 155Mbps, 1310nmLED, Multi-mode, 2km, 3.3V, -40~85°C |
| LS38-A3S-TI-N | SFP Transceiver, 155Mbps, 1310nmFP, Single-mode, 30km, 3.3V, -40~85°C |

DIMENSIONS & LAYOUT

