

EIR-G-SFP-T

10/100/1000Base-TX to Gigabit SFP Hardened Media Converter

Features

- ✓ Complies with NEMA TS1 & TS2 Environmental requirements for Traffic control equipment
- ✓ Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- ✓ DIP switch configuration for "Link-Fault-Pass-Through", fiber auto/force mode, link down alarm
- ✓ 1000Mbps-Full-duplex, Auto-Negotiation, Auto-MDI/MDIX
- ✓ SFP socket for Gigabit fiber optic expansion
- ✓ Full wire-speed forwarding rate
- ✓ Alarms for power and port link failure by relay output
- ✓ Redundant power inputs with Terminal Block and DC Jack
- ✓ -40°C to 75°C (-40°F to 167°F) operating temperature range
- ✓ Hardened aluminum case
- ✓ Supports DIN-Rail or Panel Mounting installation



Overview

The EIR-G-SFP-T, Gigabit Ethernet media converters are designed to operate in harsh environments. The EIR-G-SFP-T functions at temperatures ranging from -40°C to 75°C (-40°F to 167°F) and is tested for functional operation @ -40°C to 85°C (-40°F to 185°F). Whether on the factory floor or the street corner, the EIR-G-SFP-T will provide flawless communications when you need it most. EIR-G-SFP-T offers 1000Base SFP socket to support multi-mode/single-mode fiber optics. The RJ-45 port on this unit provides Auto-MDIX and auto-negotiation. The link-fault-pass-through feature allows the network management agent on adjacent equipment to react to a broken link. Flexibility is the main feature of the EIR-G-SFP-T, it may be DIN rail or panel mounted, and comes with power options to match the applications that require a tough, environmentally hardened, Gigabit Ethernet media converter.

Ordering Information

| Model Number | Description |
|---------------------|---|
| EIR-G-SFP-T | Hardened Media Converter 1000Base-T to Gigabit SFP |
| Accessories | |
| SFP-1000SX-M-550M-T | SFP Module, 1000Base-SX, Multi-mode 550m, LC Connector (-40 to 85°C) |
| SFP-1000LX-S-10KM-T | SFP Module, 1000Base-LX, Single-mode 10km, LC Connector (-40 to 85°C) |
| SFP-1000LX-S-20KM-T | SFP Module, 1000Base-LX, Single-mode 20km, LC Connector (-40 to 85°C) |

Specifications

Ethernet Technology

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|--------------------------|---|
| Standards | IEEE802.3 10Base-T IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-SX/1000Base-LX IEEE802.3x |
| Forward & Filtering Rate | 1,488,100pps for 1000Mbps |

Interface

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|----------------|---|
| Ethernet Ports | 1 - 10/100/1000Base-TX 1 - Gigabit SFP |
| LED Indicators | Per Unit: Power Status (Power1, Power2, Power3, Fault), LFPT Per Port: 10/100/1000TX: Link/Activity, Speed, Full-duplex/Collision Gigabit SFP: Link/Activity |
| Alarm Contact | One relay output with current 1A @ 30VDC, 0.5A@120VAC |

Mechanical

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|---------------------------|---|
| Enclosure | Aluminum case, IP30 |
| Dimensions | 5.00cm x 1.10cm x 1.35cm (2.0 x 4.3 x 5.3 inches) |
| Weight | 0.8Kg (1.76lbs.) |
| Installation | DIN-Rail (Top hat type 35mm), Rack Mounting (Optional) |
| Operating Temperature | -40°C to 75°C (-40°F to 167°F) Tested @ -40°C to 85°C (-40°F to 185°F) |
| Storage Temperature | -40°C to 85°C (-40°F to 185°F) |
| Ambient Relative Humidity | 5% to 95% (non-condensing) |
| MTBF | 348,518 Hours |
| MTBF Calc. Method | Parts Count Reliability Prediction |

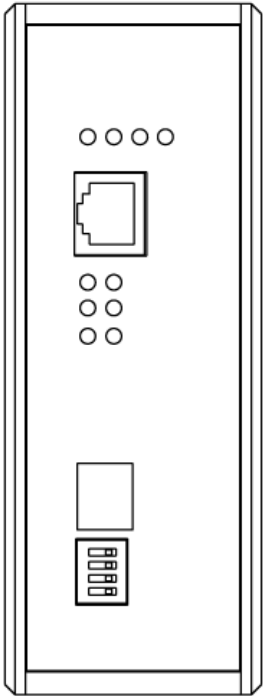
Power

| | |
|-----------------------------|---|
| Input Voltage | Dual 12 to 48VDC (Terminal Block); 12VDC (DC Jack) |
| Power Consumption | 10.56W, 0.88A @ 12VDC, 0.44A @ 24VDC, 0.22A @ 48VDC |
| Overload Current Protection | Present |
| Reverse Polarity Protection | Present |

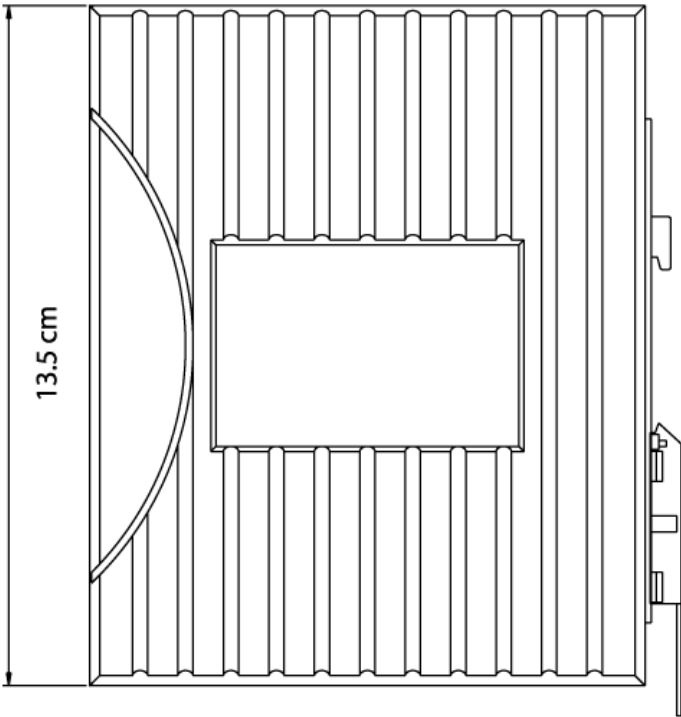
Regulatory Approvals

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|-------------------------------|---|
| Safety | EN60950-1, IEC60950-1 |
| EMI | FCC Part 15, Class A VCCI, 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) 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.) |
| NEMA | NEMA TS1/2 Environmental requirements for Traffic control equipment |

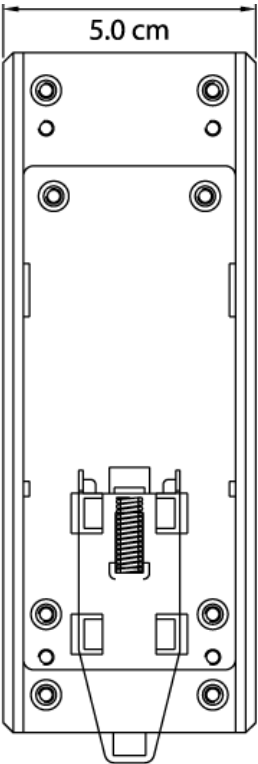
Diagrams



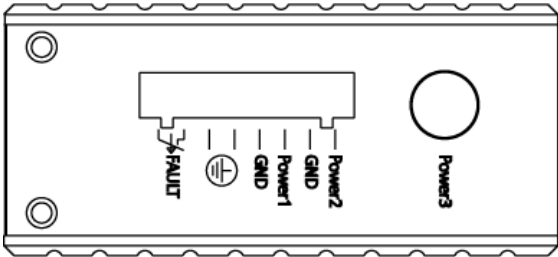
Front



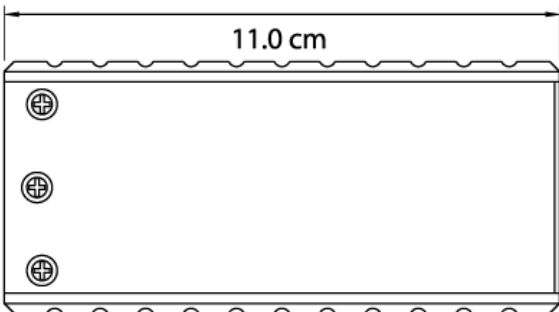
Side



Back



Top



Bottom