



## 10/100/1000TX to Gigabit SFP extended temperature industrial Media Converter

### OVERVIEW:

The MUJ-A0101EZ, Gigabit Ethernet media converters are designed to operate in harsh environments. The MUJ-A0101EZ 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 MUJ-A0101EZ will provide flawless communications when you need it most. MUJ-A0101EZ offers 1000Base SFP socket to support multi-mode / single-mode / WDM single-mode fiber optics. The RJ-45 port on this unit provides Auto-MDIX and auto-negotiation. The link fault pass through (LFP) feature allows the network management agent on adjacent equipment to react to a broken link. Flexibility is the main feature of the MUJ-A0101EZ, 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.

### 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-Auto/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 or DC Jack
- -40°C to 75°C (-40°F to 167°F) operating temperature range
- Hardened metal case
- Supports DIN-Rail, Panel or Rack Mounting installation

### SPECIFICATIONS:

#### Technology

#### Standards:

- IEEE802.3ab 1000Base-T, IEEE802.3z  
1000Base-SX/1000Base-LX, IEEE802.3x

#### Forward and Filtering Rate:

- 1,488,100pps for 1000Mbps

#### Power

#### Input:

- Input Voltage: 12 to 48VDC (Terminal

Block); 12VDC (DC Jack)

#### Power Consumption:

- 9.12W, 0.76A @ 12VDC, 0.38A @ 24VDC,  
0.19A @ 48VDC

#### Power Supply References:

- Terminal Block: 12 to 24VDC, 1.5A
- DC Jack: 12VDC, 3A

#### Overload Current Protection:

- Present

## Reverse Polarity Protection:

- Present

## Mechanical

### Casing:

- Metal case
- IP30

### Dimensions:

- 50mm (W) x 110mm (D) x 135mm (H)
- (1.97" (W) x 4.33" (D) x 5.31" (H))

### Weight:

- 0.8Kg (1.76lbs.)

### Installation:

- DIN-Rail, Panel, Rack Mounting

### Interface

- Ethernet Port: 10/100/1000TX: 1 port
- Gigabit SFP: 1 port

### 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 @ 24VDC

## Environment

### 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)

## Regulatory Approvals:

### ISO:

- Manufactured in an ISO9001 facility

### Safety:

- UL508, EN60950-1, IEC60950-1

### EMI:

- 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)

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

A.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

A.C. Power Ports: + / - 2KV; 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

A.C. Power Ports: 10Vrms @ 0.15~80MHz;

80% AM Criteria A

- EN61000-4-8 (Magnetic Field Standards)

30A/m @ 50, 60Hz; Criteria A

- EN61000-4-11 (Voltage Dip Standards)

A.C. Power Ports: 30% Reduction for 0.5 period; Criteria B

### Environmental Test Compliance:

- IEC60068-2-6 Fc (Vibration Resistance)

5g @ 10~150KHz, Amplitude 0.35mm (Operation/Storage/Transport)

- IEC60068-2-27 Ea (Shock)

25 g @ 11ms (Half-Sine Shock Pulse; Operation)

50 g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)

- IEC60068-2-32 Ed (Free Fall)

1M (3.281ft.)

## ORDERING INFORMATION:

MUJ-A0101EZ	10/100/1000TX to Gigabit SFP extended temperature Media Converter
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SFP industrial grade Gigabit Fiber Transceiver: (Optional)

4260-001	1.25Gb SFP, Multi-mode, 850nm, LC, -20~85°C (mini-GBIC-SX/ 550m) 1000Base-SX
4260-003	1.25Gb SFP, Multi-mode, 1310nm, LC, -40~85°C (mini-GBIC-SX+/ 2Km) 1000Base-SX+
4260-005	1.25Gb SFP, Single-mode, 1310nm, LC, -40~85°C (mini-GBIC-LX/ 10Km) 1000Base-LX
4260-007	1.25Gb SFP, Single-mode, 1310nm, LC, -40~85°C (mini-GBIC-LHX/ 20Km)
4260-009	1.25Gb SFP, Single-mode, 1550nm, LC, -40~85°C (mini-GBIC-ZX/ 70Km) 1005Base-ZX
4260-011	1.25Gb SFP, Single-mode, 1550nm, LC, -40~85°C (mini-GBIC-EZX/ 110Km)
4260-013	1.25Gb SFP-BIDI, Single-mode, TX1310/RX1490nm, LC, -40~85°C 1000Base-BX10-U
4260-015	1.25Gb SFP-BIDI, Single-mode, TX1490/RX1310nm, LC, -40~85°C 1000Base-BX10-D

## **POWER INPUT INTERFACE:**

Terminal Block & DC Jack

## **INSTALLATION TYPE:**

DIN Rail (mounting kit is included)