

# AGENT-2 C37D



## Hardened 10/100/1000BASE-TX to Gigabit SFP Media Converters

### Overview

This Line of Media Converters operates at temperatures ranging from -40°C to 75°C (-40°F to 167°F), and it 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 products in this Line will provide flawless communications when you most need it. This Line of Media Converters has been built with a SFP socket to allow for Gigabit optical fibre expansions. The RJ-45 port on this Line 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 this Line of products, which may be DIN rail or panel mounted, and come with power options to match the applications that require a tough environmentally hardened Fast 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
- Specific design for industrial communication applications with UL508 safety certification
- DIP switch configuration for "Link-Fault-Pass-Through"
- Link down alarm, speed, duplex mode
- 1000Mbps-Full-duplex,
- IEEE 802.3x Auto-Negotiation for 10/100/1000BASE-TX port
- Auto-MDI/MDIX
- SFP socket offers Gigabit fibre optic selection flexibility
- Full wire-speed forwarding rate
- Alarms for power and port link failure by relay output
- Specifically designed for harsh environments
- Redundant power inputs with Terminal Block or DC Jack interfaces
- Operating temperature range from -40°C to 75°C (-40°F to 167°F)
- Tested for functional operation @ -40°C to 85°C (-40°F to 185°F)
- Hardened aluminium case
- Supports DIN-Rail, Panel or Rack Mounting installation

# Technical specifications

## Technology

### Standards

IEEE802.3 10BASE-T, IEEE802.3u 100BaseTX,  
IEEE802.3ab 1000BASE-TX, IEEE802.3x  
1000BASE-SX/LX, IEEE802.3x

### Forward and Filtering Rate

▶ 1,488,100pps for 1000Mbps

### Processing Type

- ▶ Store-and-Forward
- ▶ Half-duplex back-pressure and IEEE802.3x full-duplex flow control

## Power

**Input:** Input Voltage: 12 to 48VDC (Terminal Block);  
12VDC (DC Jack)

### Power Consumption

7.68W MAX. 0.16A@48VDC

**Overload Current Protection:** Present

**Reverse Polarity Protection:** Present

## Mechanical

**Casing:** Aluminium 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 (Top hat type 35mm), Panel, Rack Mounting

## Interface

### Ethernet Port

- ▶ 10/100/1000BASE-TX: 1 port
- ▶ Gigabit SFP: 1 port

### LED Indicators

- ▶ Per Unit: Power Status (Power 1, Power 2, Power3, Fault),  
Link-Fault-Pass-Through
- ▶ Per Port: 10/100/1000TX: Link/Activity, Speed, Full duplex/Collision  
Gigabit SFP: Link/Activity

**Relay Contact:** Relay contact rating with current  
1A@30VDC, 0.5A@120VAC

## 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

### 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
- ▶ **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 Crit. 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/ Trans-  
port)
- ▶ IEC60068-2-32 Ed (Free Fall)1M (3.281ft.)

**NEMA TS1/2 Environmental requirements for Traffic control equipment**