The CFSFL01 Single Channel LON to Fibre Optic Adapter allows connection of Cooper Fire system network (LonWorks) devices through optical fibre, and to allow both Point-to-Point or Multi drop topology.

Using only Single-Mode Fibre Optic, the CFSFL01 adapter allows extension of the Cooper Fire system network to a maximum distance of 15km with a transmission speed of up to 78kbit/s or 1.25Mbit/s.

Connection is made using SC type Fibre Optic connectors. In comparison with conventional twisted pair cable, the Fibre Optic usage in a LonWorks network has many advantages: it is reliable and fast in long-distance network transmission even in difficult industrial environments (with transients, surges or electromagnetic interference etc.) without requiring any additional transient protection.

**Benefits**
- Simple to install
- Easy to use
- Extends Cooper panel network
- Fast response
Eaton Product Datasheet
Addressable Fire Products

Technical Specification

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<td>Description</td>
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Specifications

- Operating Voltage: 24V dc
- Communication Protocol: LonWorks
- LonWorks Connectors: Screw terminal block
- LonWorks Rate: 78 Kbps / 1.25 Mbps
- Bit Error Rate: 10e-9
- Wavelength: 1310nm
- Fibre Type: Single mode fibre
- Fibre Diameter: 9/125 micron
- Fibre Connector: SC type (optional ST type)
- Link Distance: 15km

Environmental

- Operating Temperature: -30°C to +70°C
- Humidity (Non Condensing): 20 to 90% RH

Physical

- Dimensions (H x W x D): 116mm x 136mm x 34mm

Dimensions

- H (mm): 116
- W (mm): 136
- D (mm): 34

Typical System Architecture

Fiber Optic Point to Point Link

- LonWorks NODE
- LonNet A
- LonNet B
- Unused

Fiber Optic Star Topology Link

- LonWorks NODE
- LonNet A
- LonNet B
- Unused

Installation

1. Ensure that the power supply is switched off during installation.
2. Take care when inserting the Fibre Optic connector to avoid damage. Note that the ‘FR1’ connector in the local module’s port should connect to the ‘FT1’ connector in the far end module’s port and vice versa.
3. LonA connects to Net_A of the Lonworks Bus (network card), LonB connects Net_B.

Mechanical Layout and Connections

Terminals

- 1. Lon Net A
- 2. Lon Net B
- 3. Unused
- 4. Unused

LED Indication

- POW: Power on indication ‘On’ means power on
- NA: Not Applicable
- DT: Fibre Transmitting ‘Flashing’ means working
- FT1: Fiber Port 1 transmitting data
- FR1: Fiber Port 1 receiving data

Catalogue numbers

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