

CFSFL02

Eaton's Cooper Multi Mode Lon to Fibre Optic Adapter



The multi mode Lon to fiber optic adapter (CFSFL02) allows connection of the Cooper system network (LonWorks) devices through optical fiber, and to allow both point to point or multi drop topology.

Using only single-mode fiber optic, the CFSFL02 adapter allows extension of the Cooper system network LonWorks 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.

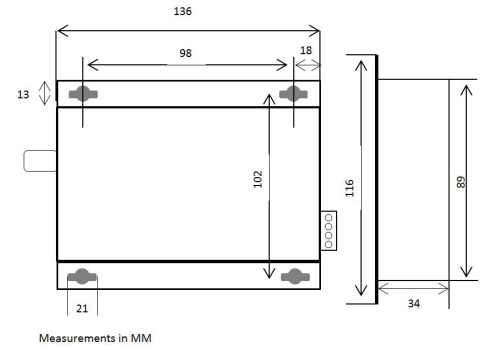
Benefits

- Simple to install
- Easy to use
- Extends Cooper panel network
- Fast response

Technical Specification

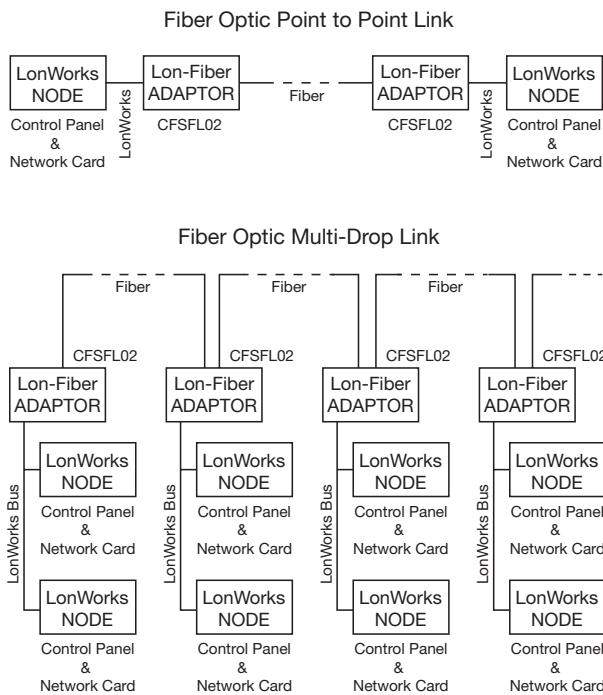
Code	CFSFL02
Description	Multi Mode Lon to Fibre Optic Adaptor
Specification	
Operating Voltage	24V dc
Communication Protocol	LonWorks
LonWorks Connectors	Screw terminal block
LonWorks Rate	78 Kbps / 1.25 Mbps
Bit Error Rate	10e-9
Wavelength	1310nm
Fibre Type	Single mode fibre
Fibre Diameter	9/125 micron
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 136 mm x 34mm

Dimensions



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

Typical System Architecture



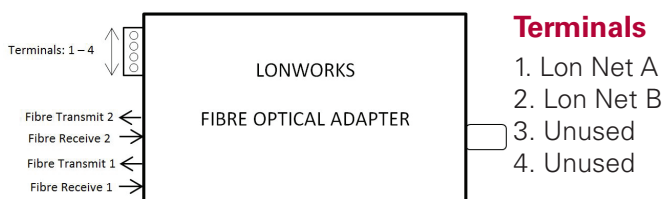
Installation

1. Ensure that the power supply is switched off during installation.
2. Take care when inserting the Fiber Optic connector to avoid damage. Note: FR1 should connect to the previous modules FR2 FT1 should connect to the previous modules FT2 FR2 should connect to the next modules FT1 FT2 should connect to the next modules FR1
3. LONA connects to Net_A of the Lonworks Bus (network card), LONB connects Net_B.

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	'Flashing' means working
FR1	Fiber Port 1 receiving data	'Flashing' means working
FT2	Fiber Port 2 transmitting data	'Flashing' means working
FR2	Fiber Port 2 receiving data	'Flashing' means working

Mechanical Layout and Connections



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

Catalogue numbers

Description	Code
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