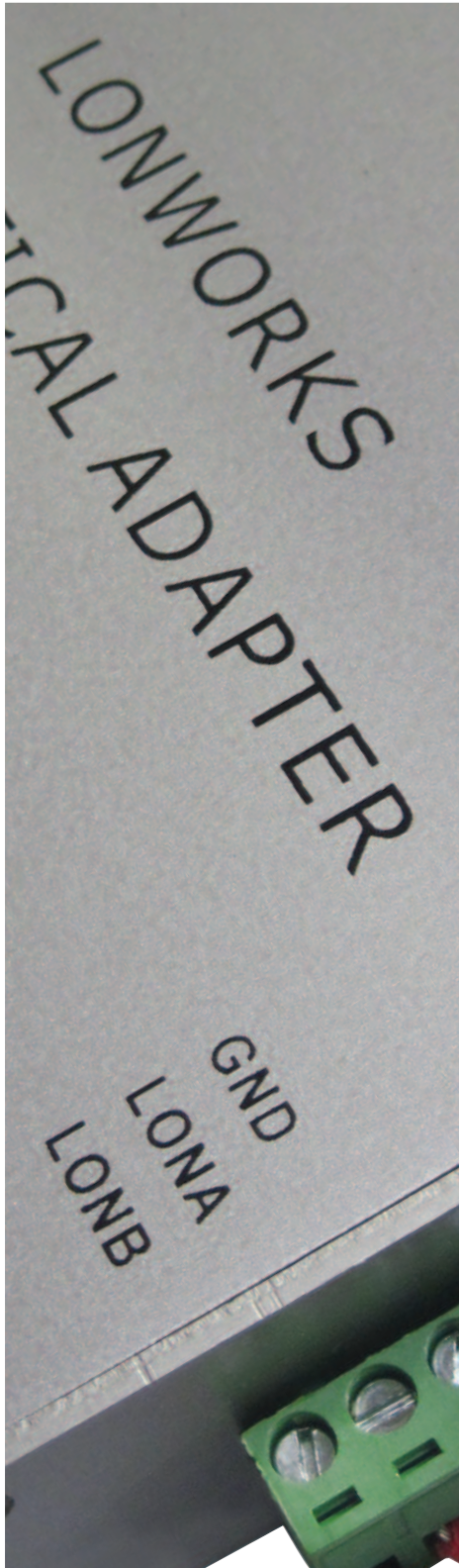


## Multi Mode Lon to Fibre Optic Adaptor



CFSFL02 - Multi Mode Lon to Fibre Optic Adaptor

### Overview

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.

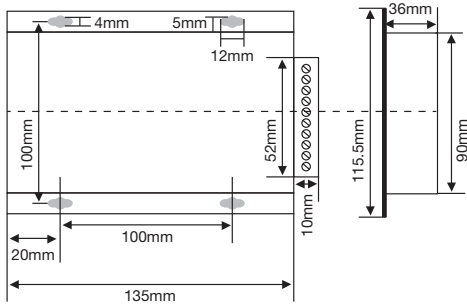
Using only single-mode fiber optic, the (CFSFL02) adapter allows extension of the Cooper system network LonWorks to a maximum distance of 15km with a transmission speed of up to 78Kbit/s or 1.25Mbit/s.

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

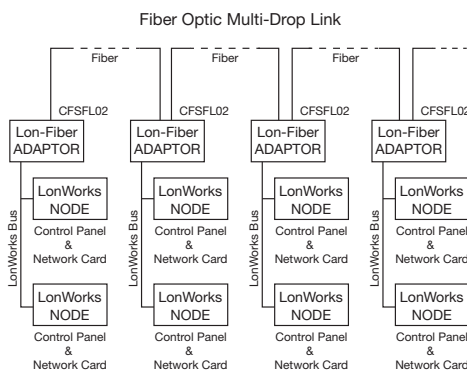
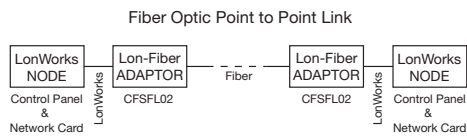
## Dimensions



## Technical Specification

Code	
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
Fiber Type	Single mode fiber
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)	36mm x 116 mm x 135 mm

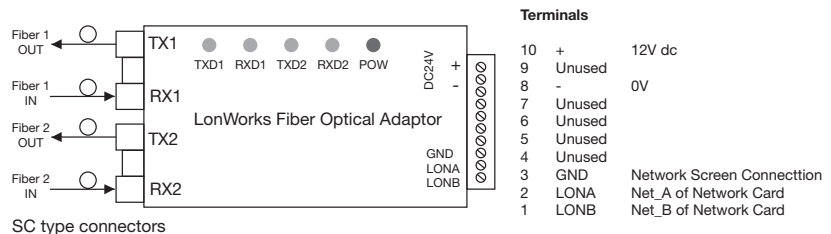
## Typical Application Schematic



## 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:  
 RX1 should connect to the previous modules TX2.  
 TX1 should connect to the previous modules RX2.  
 RX2 should connect to the next modules TX1.  
 TX2 should connect to the next modules RX1.
3. LonA connects to Net\_A of the LonWorks Bus (network card), LonB connects Net\_B.

## Mechanical Layout and Connections



<b>TX</b>	Fiber Transmitting
<b>RX</b>	Fiber Receiving
<b>GND</b>	Network Screen
<b>LonA</b>	Net_A
<b>LonB</b>	Net_B

## LED Indication

<b>POW</b>	Power On Indication	on	Power On
<b>TXD1</b>	Fibre Port 1 Transmitting Data	Flashing	Working
<b>RXD1</b>	Fibre Port 1 Receiving Data	Flashing	Working
<b>TXD2</b>	Fibre Port 2 Transmitting Data	Flashing	Working
<b>RXD2</b>	Fibre Port 2 Receiving Data	Flashing	Working

## Product Codes

Code	Description
CFSFL02	Multi Mode Lon to Fibre Optic Adaptor