## CFSFL02

# Intelligent addressable dual channel LON to fibre optic adapter



The dual channel LON to fibre optic adapter (CFSFL02) allows connection of Eaton's 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 CFSFL02 adapter allows extension of Eaton's 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.

#### **Features and benefits**

- Simple to install, plug and play
- · Easy to use
- Extends Eaton's panel network
- Fast response

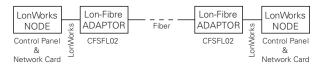


#### **Technical Specification**

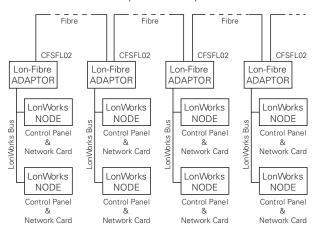
Code	CFSFL02	
Description	Dual channel LON to fibre optic adaptor	
Specification		
Operating voltage	24V dc	
Communication protocol	LonWorks	
LonWorks connectors	Screw terminal block	
LonWorks rate	78 Kbps / 1.25 Mbps	
Bit error rate	10e-9	
Wavelength	1310nm	
Fibre type	Single mode fibre	
Fibre diameter	9/125 micron	
Fibre connector	SC type (optional ST type)	
Link distance	15km	
Environmental		
Operating temperature	erating 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	

### Typical system architecture

Fibre Optic Point to Point Link



#### Fibre Optic Multi-Drop Link



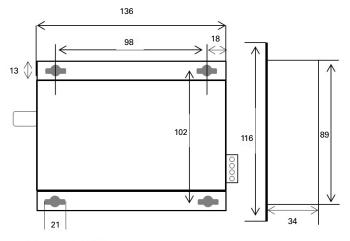
#### **LED Indication**

POW	Power on indication	'On' means power on	
NA	Not Applicable		
DT	Fibre transmitting	'Flashing' means working	
FT1	Fibre Port 1 transmitting data	'Flashing' means working	
FR1	Fibre Port 1 Receiving data	'Flashing' means working	
FT2	Fibre port 2 Transmitting data	'Flashing' means working	
FR2	Fibre port 2 Receiving data	'Flashing' means working	

**Eaton** EMEA Headquarters Route de la Longeraie 7 1110 Morges, Switzerland Eaton.eu

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#### **Dimensions**

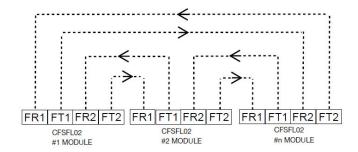


Measurements in MM

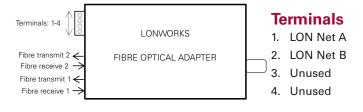
H (mm)	W (mm)	D (mm)
116	136	34

#### Installation

- Ensure that the power supply is switched off during installation.
- Take care when inserting the fibre optic connector to avoid damage.
- - a) FR1 should connect to the previous modules FT2
  - b) FT1 should connect to the previous modules FR2
  - c) FR2 should connect to the next modules FT1
  - d) FT2 should connect to the next modules FR1
- LONA connects to Net\_A of the Lonworks Bus (network card), LONB connects Net\_B.



#### **Mechanical layout and connections**



#### Catalogue numbers

Description	Code
Dual channel LON to fibre optic adaptor	CFSFL02

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