

EFMDSMLON

LON Fiber Adaptor Multi Drop



The LONWORKS Fiber Optic Adaptor uses the fiber cable as its transmission medium and utilizes Optical Fiber modulation/demodulation technology to change the electric medium into a light medium transmission.

The LONWORKS Fiber Optic Adaptor product eliminates many of the disadvantages of copper cable. Examples of these disadvantages are EMI/RFI, ground loops (electrical isolation with fiber), high attenuation (high signal loss), short transmission distance between nodes of a system, and potential damage caused by lightning. The plug-and-play design ensures ease of installation with no electrical or optical adjustment needed. LED indicators are provided to show the operational status of the unit clearly.

Features and benefits

- Compatible with Eaton LON Network
- Plug and play
- LED indicators provide quick diagnosis of all important system parameters
- Extended distance up to 20km



Powering Business Worldwide

Technical specification

Code	EFMDSMLON
Description	MD SM LON Fiber Adaptor SC
Specification	
Operating Voltage	+24 VDC
Topology	Multi Drop
No. of Fibers	2
Wavelength	850/1310nm
Fiber	Single Mode
Fiber type	62.5/125µm
Max distance	2km
Data rate	78.6Kbps FTT-10A
Connector type	SC
Physical	
Dimensions (H x W x D)	125 x 110 x 36 mm
Weight	500 grams
Installation	Wall mount
Configuration	Plug 'n' play
Environmental	
Operating temperature	-30°C to 70°C
Storage temperature	-40°C to 90°C
Operating humidity	0 - 95% (non-condensing)

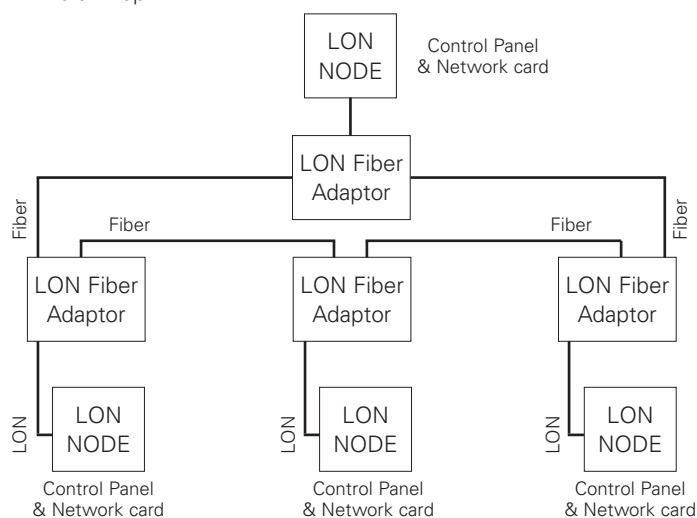
Installation

- Switch off all power supply before installation.
- Connect the local "TX" Fiber Optic to the remote "RX" Fiber Optic, the local "RX" to the remote "TX". And ensure that fiber is properly aligned to the receiving connector.

Note: Installation and commissioning should only be carried out by engineers that have completed Eaton's advanced networking training.

Typical system architecture

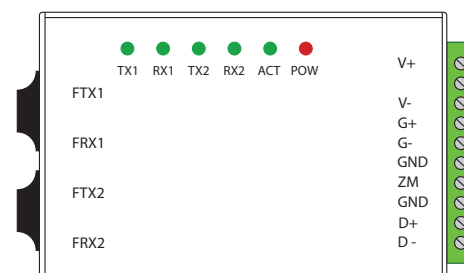
Multi Drop



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Fiber adaptor front view



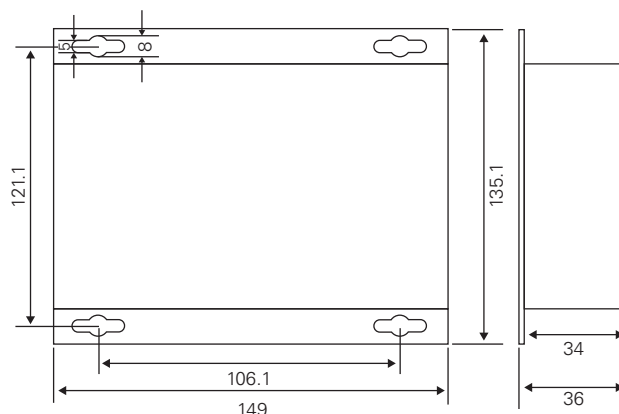
Standard connections

FTX1	Transmitter (Fiber Optic - SC connector)
FRX1	Receiver (Fiber Optic - SC connector)
FTX2	Transmitter (Fiber Optic - SC connector)
FRX2	Receiver (Fiber Optic - SC connector)
V+	24VDC power supply +
Not used	N/A
V-	24VDC power supply -
G+	Not used
G-	Not used
GND	Not used
ZM	Not used
GND	GND of LON
D+	LONA
D-	LONB

LED indication

FTX1	Fiber Link	Flashing if data transmitting is in OK.
FRX1	Fiber Link	Flashing if data receiving is in OK.
FTX2	Fiber Link	Flashing if data transmitting is in OK.
FRX2	Fiber Link	Flashing if data receiving is in OK.
ACT	LON	Flashing if there is activity
POW	Power Supply	On if power input is OK.

Mounting dimensions



Catalogue numbers

Description	Code
MD SM LON Fiber Adaptor SC	EFMDSMLON

Note: All information correct at the time of writing. Eaton reserve the right to make changes to this information. Please contact Eaton if you have any queries.

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