

HFB-FO-LON Series

Lonworks Multi-drop BUS Fiber Optic Modem

User Manual

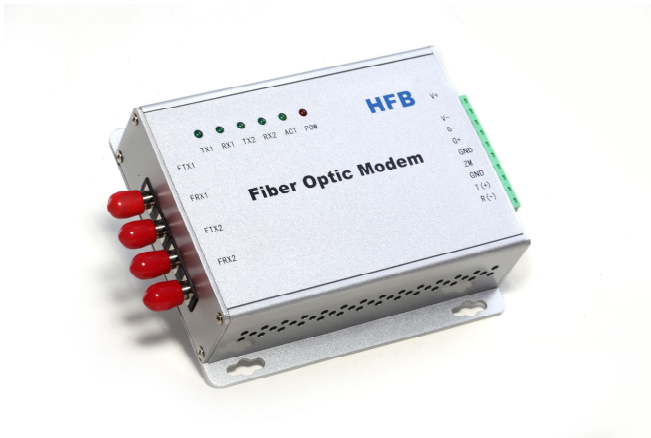


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1. Overview

1.1 Introduction

The LONWORKS Fiber Optic Modem is a multi-master and high performance Field bus Control System (FCS). Our Fiber Optic Modem 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 Modem 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 lightning damage.

The LONWORKS Fiber Optic Modem can be widely used, such as Industrial Controls, Intelligent Transportation Systems (ITS), Industrial Networking, Supervisory Control and Data (SCADA) and so on

1.2 Technical Specification

CAN BUS	
Connectors	Terminal
Standard	LONWORKS(LonTalk)
Data Rate	78.6Kbps
Extended Distance	0~20Km

OPTICAL	
Number of Fibers	4 or 2
Wavelength	850/1310nm
Fiber Type	62.5/125µm(MM), 9/125µm(SM)
Distance	0 ~ 2Km OR 0-20 Km
Connector Type	SC/ST/FC

GENERAL	
Operating Temperature	-30~ 70°C / -30 ~ +158°F
Operating Humidity	0 ~ 95% non-condensing
Mean Time Between Failure (MTB)	> 70,000hrs
Power Supply Adaptor	DC24V
Dimensions (H × L × W)	125(L)×110(W)×36(H)

1.3 Warranty

- Repair
 - Please contact your local distributors when product is defective. Please apply RA in advance and prepay shipping cost when returning the defective product to us. We will pay the cost for sending it back to you.
 - Please attach a statement clearly describing the problem.
- We will repair defective product under warranty free of charge to our customer.
- 5 years warranty for product only.
- Any unauthorized modification of hardware and software voids the warranty.
- Warranty does not cover mishandling and/or abuse of the product.

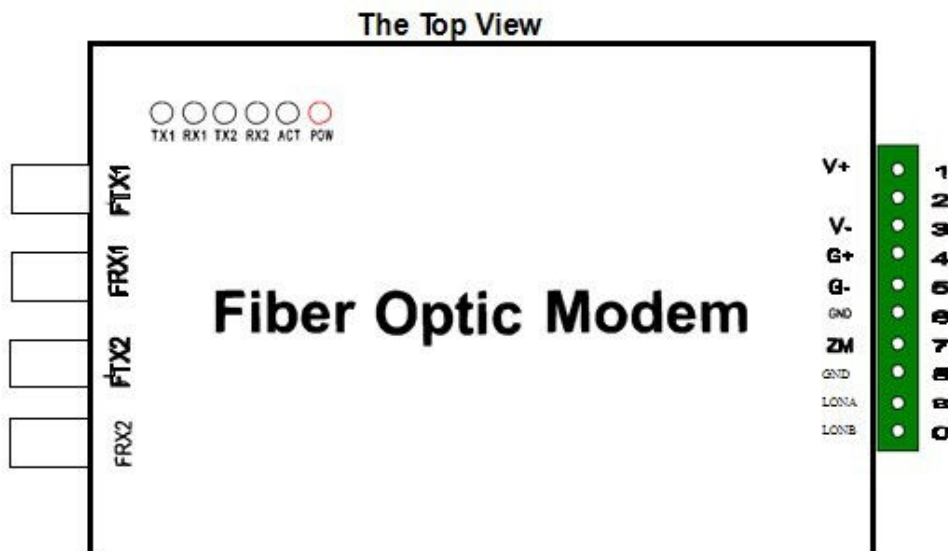
2 Installation

2.1 Package Contents

- One Lonworks Fiber Optic Modem
- One power supply adaptor
- One User Manual

Please contact dealer or distributor if part is missing or damaged.

2.2 Wall Mount Enclosure



LED Indicators:

POW	Power Supply	On if power input is OK.
ACT :	LON Data transmit/receive.	Flashing if there is activity.
TX1:	The FTX1 Transmit Fiber Link	Flashing if there is
RX1:	The FRX1 Receive Fiber Link	Flashing if there is
TX2:	The FTX2 Transmit Fiber Link	Flashing if there is
RX2:	The FRX2 Receive Fiber Link	Flashing if there is

Connectors:

Terminal (10 pins) assignment:

1	←→	V+	24VDC+
1	←→	NC	Power Ground
2		V-	24VDC-
3		G+	None
4		G-	None
5		GND	None
6		ZM	None
7		GND	GND of LON
8		LONA(D+)	
		LONB(D-)	

FTX1: Fiber Optical ST of the secondary channel (transmit)

FRX1: Fiber Optical ST of the secondary channel (receive)

FTX2: Fiber Optical ST of the primary channel (transmit)

FRX2: Fiber Optical ST of the primary channel (receive)

2.3 Caution

- Switch off all power supply before installation
- Ensure fiber is properly aligned to the receiving connector
- Do NOT stare at the fiber core
- On the bottom of the product, there is a DIP Switch, the users should setup the DIP Switch according to the selecting mode.

DIP Switch setup

table: **The Primary**

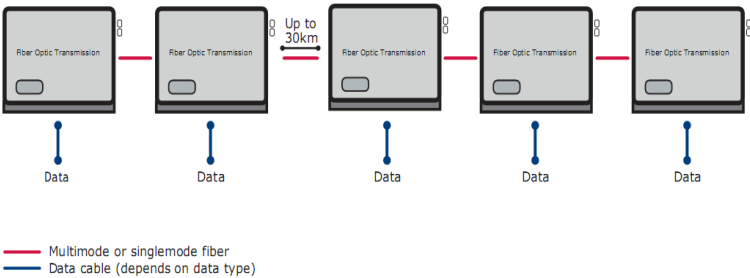
mode:

DIP	D	D	D	D	D
STATE	OFF	Terminal Resistance	OFF	OFF	OFF

The Secondary mode:

DIP	D	D	D	D	D
STATE	OFF	Terminal Resistance	OFF	ON	OFF

2.4 Install Application



3 Dimensions (mm)

Wall Mount:

