



HFB-FO-LON-P2S
LONWORKS Fiber Optic Converter(Router)
User Manual



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1. Overview

1.1 Introduction

The LONWORKS Fiber Optic Converter is a multi-master and high performance Field bus Control System (FCS). Our Fiber Optic Converter 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 Converter 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 Converter 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	2
Wavelength	850/1310nm
Fiber Type	62.5/125μm(MM), 9/125μm(SM)
Distance	0 ~ 2Km OR 0-20 Km
Connector Type	ST/PC

GENERAL	
Operating Temperature	-30~ 70°C / -30 ~ +158°F
Operating Humidity	0 ~ 95% non-condensing
Mean Time Between Failure (MTBF)	> 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

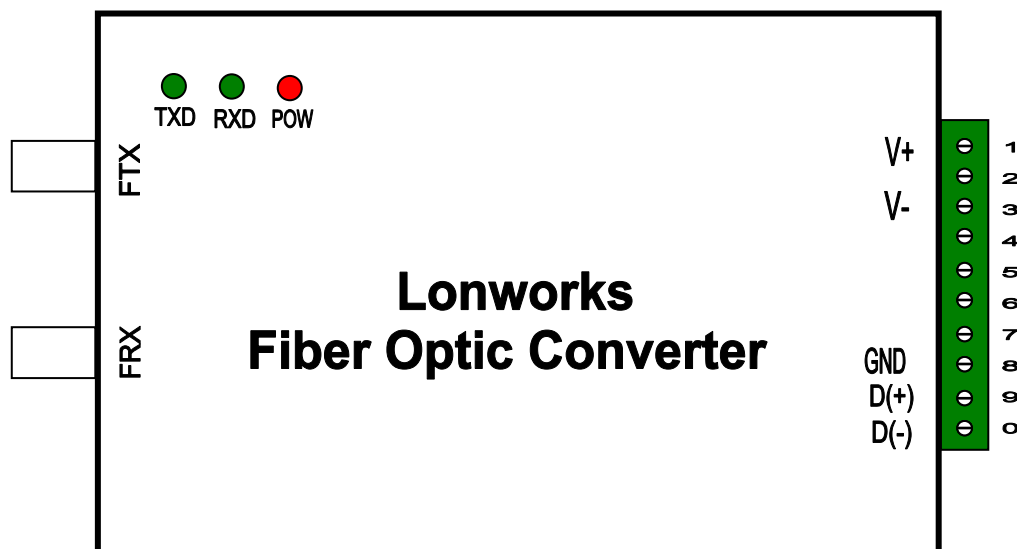
2.1 Package Contents

- One Lonworks Fiber Optic Converter
-
- One User Manual(CD)

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

2.2 Enclosure

Fiber Optic Converter Top View



LED Indicators:

POW:	Power Supply,	On if power input is OK.
TX:	Fiber Link,	Flashing if data transmitting is in OK.
RX:	Fiber Link,	Flashing if data receiving is in OK.

Fiber Optic Connectors:

TX:	Transmitter (Fiber Optic ST)
RX:	Receiver (Fiber Optic ST)



Terminal Definition

Terminal pins assignment:

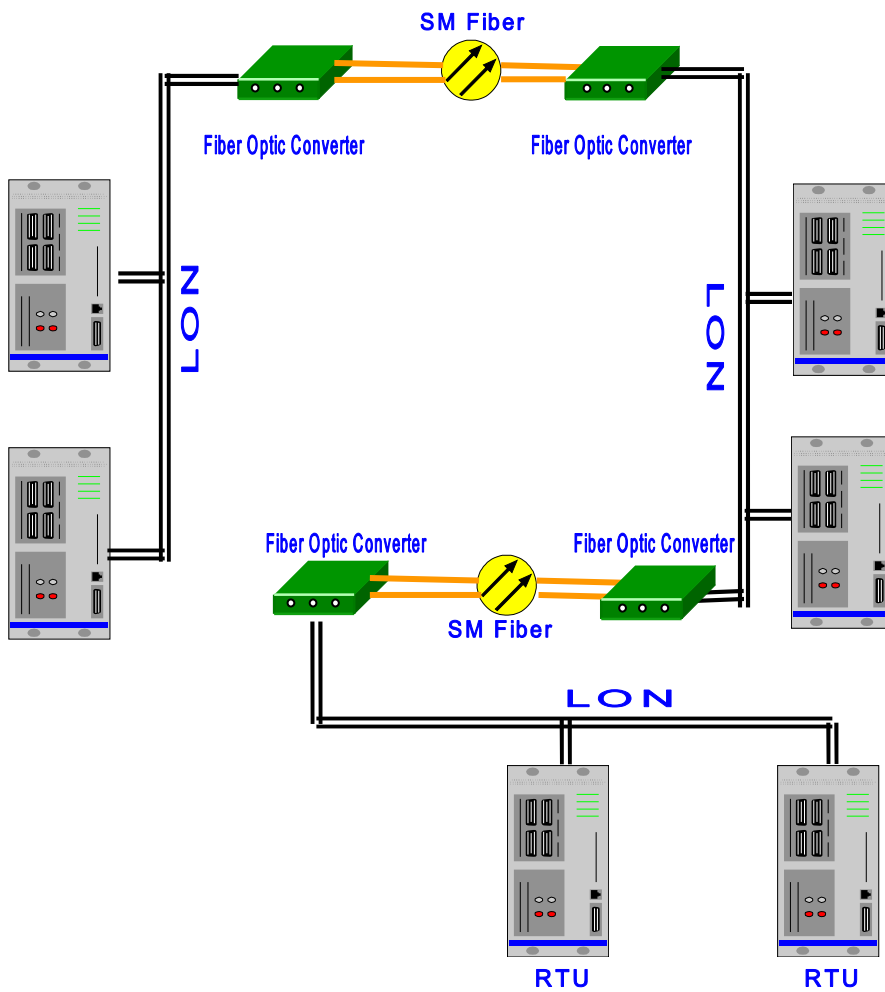
1	_____	V+	Connect 24V power supply”+“
2	_____	N/A	N/A
3	_____	V-	Connect 24V power supply”-“
4	_____	N/A	N/A
5	_____	N/A	N/A
6	_____	N/A	N/A
7	_____	N/A	N/A
8	_____	GND	GND of LON
9	_____	D+	LONA
0	_____	D-	LONB

2.3 Install Methods

1. Switch off all power supply before installation.
2. 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.



2.4 Install Application



Install Application



3 Dimensions (mm)

Wall Mount:

