HFB

TTL Fiber Optic Modem

User Manual

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1. Overview

1.1 Introduction

The HFB TTL Fiber Optic Modem is a multi-master and high performance Field bus Control System (FCS). Our FMC Fiber Optic Modem uses the fiber cable as its transmission medium and utilizes Optical Fiber modulation/demodulation technology to changes the electric medium into a light medium transmission.

The 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 HFB 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

TTL	
Connectors	Terminal
Standard	Transparent TTL any data format
Data Rate	DC-2Mbps
Extended Distance	0~20Km

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

GENERAL	
Operating Temperature	-30~ 70˚C / -30 ~ +158ºF
Operating Humidity	0 ~ 95% non-condensing
Mean Time Between Failure (MTBF)	> 70,000hrs
Power Supply Adaptor	AC/DC220/110V.DC24,DC12
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

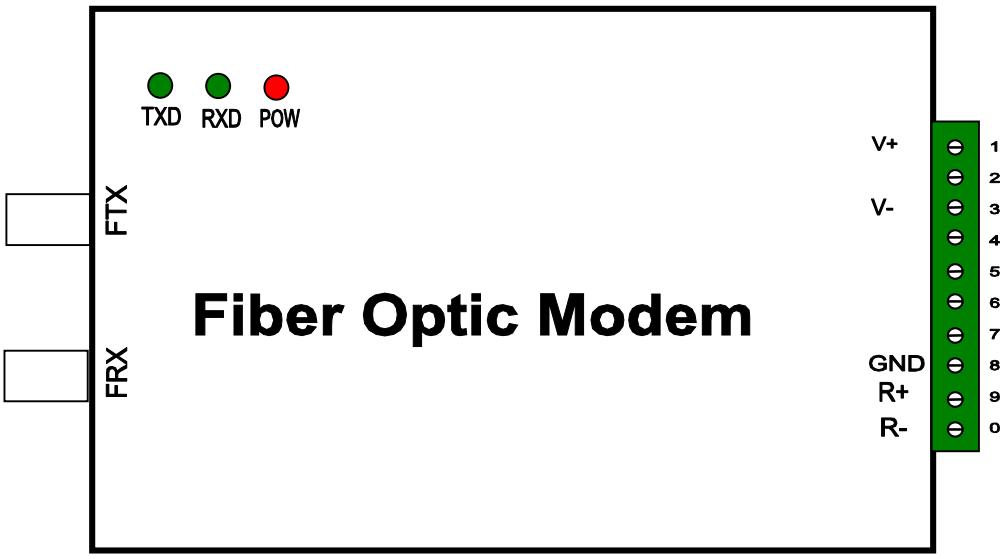
2.1 Package Contents

- TWO TTL Fiber Optic Modem
- One User Manual

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

2.2 Enclosure

Fiber Optic Modem Top View



LED Indicators:

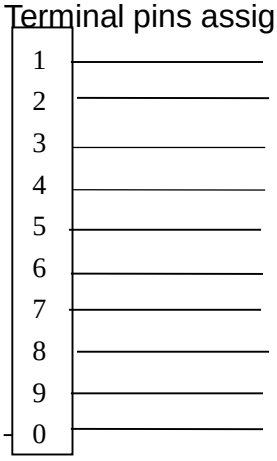
POW:	Power Supply,	On if power input is OK.
TX:	Fiber Link,	Flashing if data transmitting is in OK.
RX:	Fiber Link,	Flashing if data receiving is in OK.

Fiber Optic Connectors:

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

Terminal Definition

Terminal pins assignment:

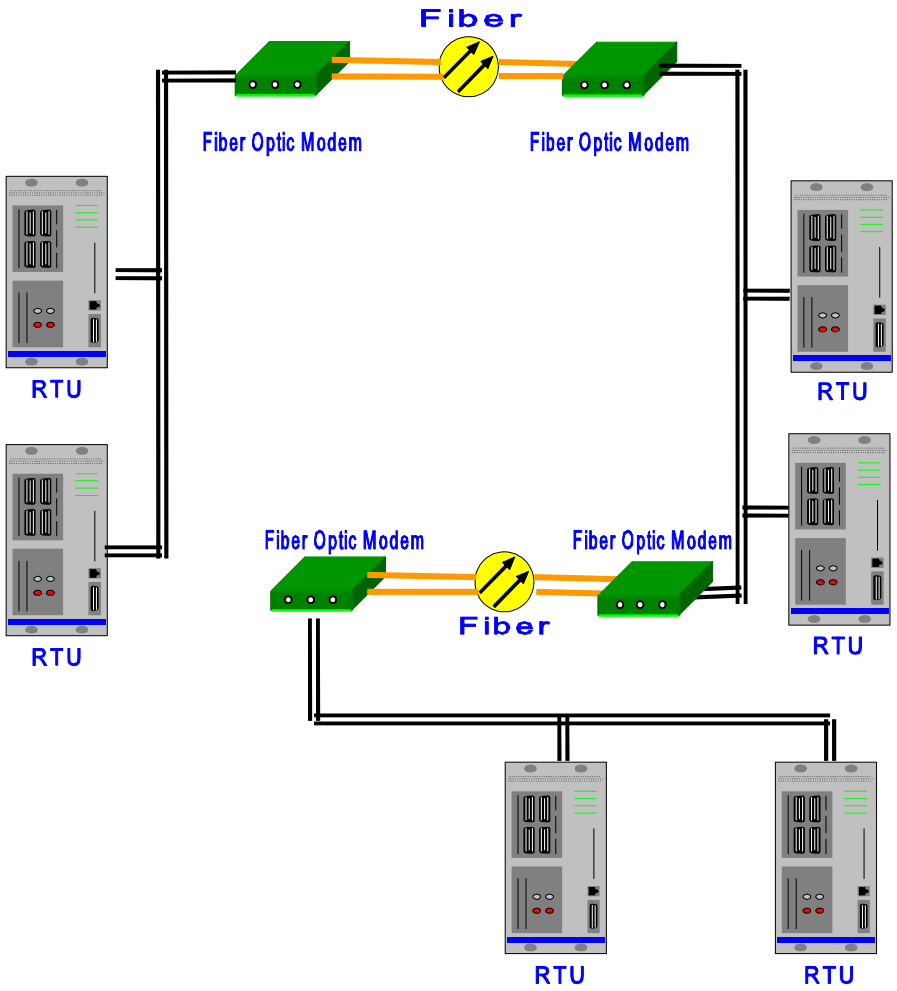


1	**V+**	**Connect DC24V+**
2	N/A	N/A
3	**V-**	**Connect DC24V-**
4	N/A	N/A
5	N/A	N/A
6	N/A	
7	N/A	
8	GND	GND of TTL
9	R+	**TTL data transmit**
0	R-	TTL data receive

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.
3. Connect the “R**+”** Data of the modem to the “ transmit” of the TTL, and the “R**-**” Data to the “ receive” of the TTL Then screw down the bolt.

2.4 Install Application



Install Application

3 Dimensions (mm)

Wall Mount: