

HFB Series
DeviceNet Fiber Optic Modem
User Manual

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1. Overview

1.1 Introduction

The HFB DeviceNet 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 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

DeviceNet	
Connectors	Terminal
Standard	CAN1.0, CAN2.0
Data Rate	125K/250K/500K
Extended Distance	0~450m

OPTICAL	
Number of Fibers	2
Wavelength	850/1310nm
Fiber Type	62.5/125μm(MM), 9/125μm(SM)
Distance	0 ~ 900m
Connector Type	ST/PC

GENERAL	
Operating Temperature	-40~ 80°C
Operating Humidity	0 ~ 95% non-condensing
Mean Time Between Failure (MTBF)	> 70,000hrs
Power Supply	DC 24V
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

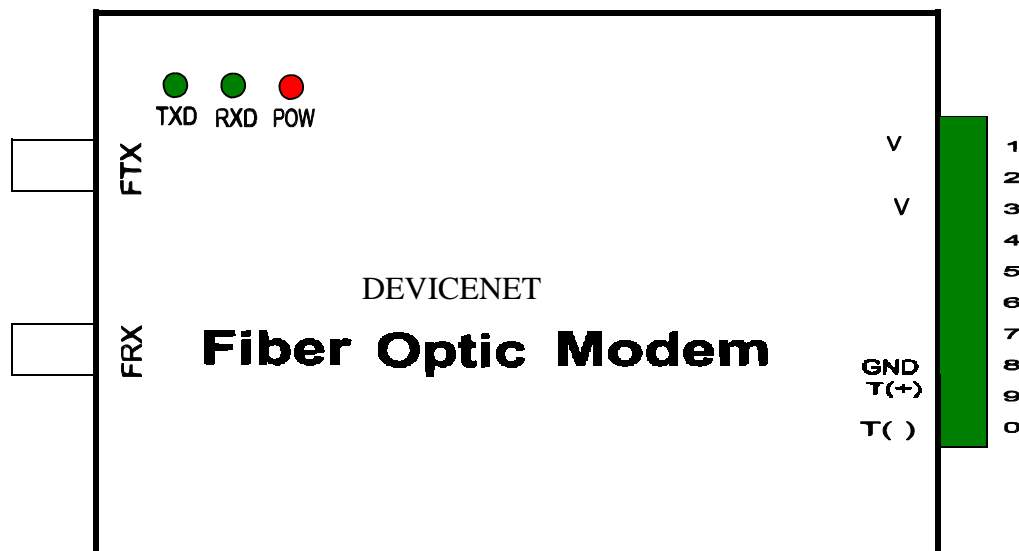
2.1 Package Contents

- 2 DeviceNet Fiber Optic Modems
- 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 power supply”+“(RED)
2	N/A	N/A
3	V-	Connect power supply”-“(GREEN)
4	N/A	N/A
5	N/A	N/A
6	N/A	N/A
7	N/A	N/A
8	GND	GND of CAN(DEV)
9	T(+)	DEV data signal “Higher Voltage”
0	T(-)	DEV data signal “Lower Voltage”

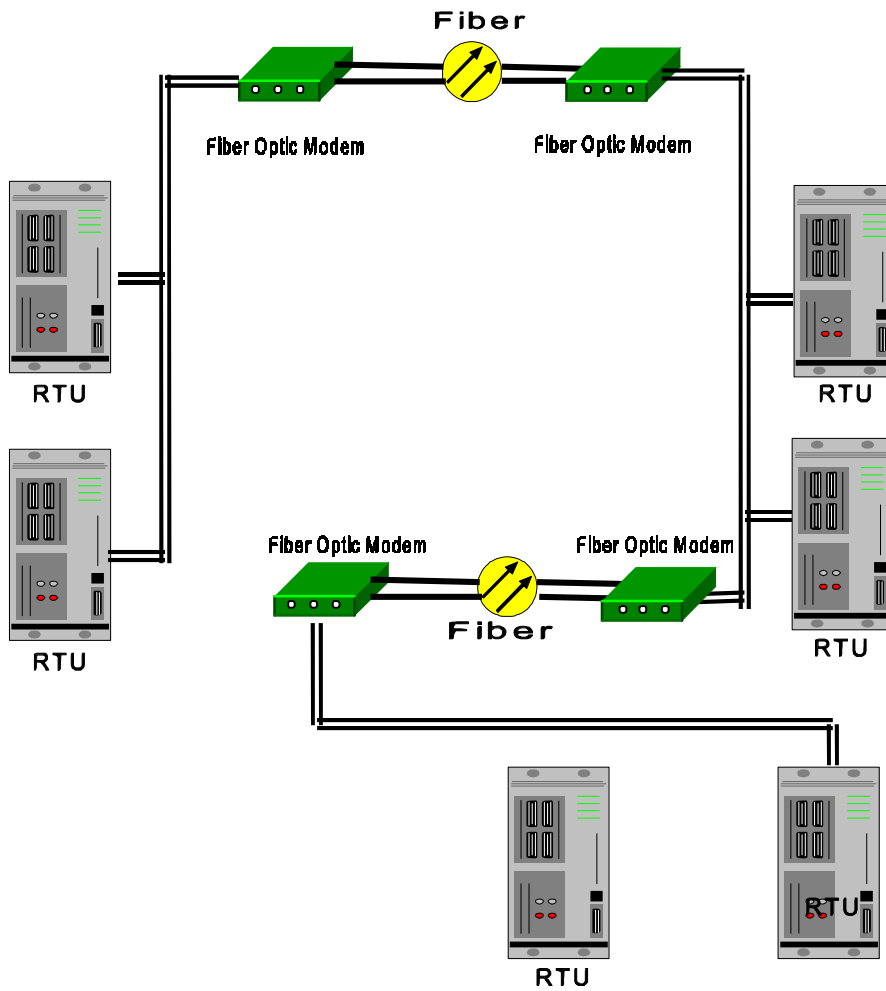
2.3 Install Methods

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 “T+” Data of the modem to the “CANH” of the DeviceNet, and the “T-” Data to the “CANL” of the DeviceNet. Then screw down the bolt.
4. On the bottom of the Modem, there is a DIP Switch.

DIP Switch setup table:

DIP Switch pin name	D1	D2	D3	D4	D5
Setup State	OFF	OFF	OFF	OFF	OFF

2.4 Install Application



Install Application

3 Dimensions (mm)

Wall Mount:

