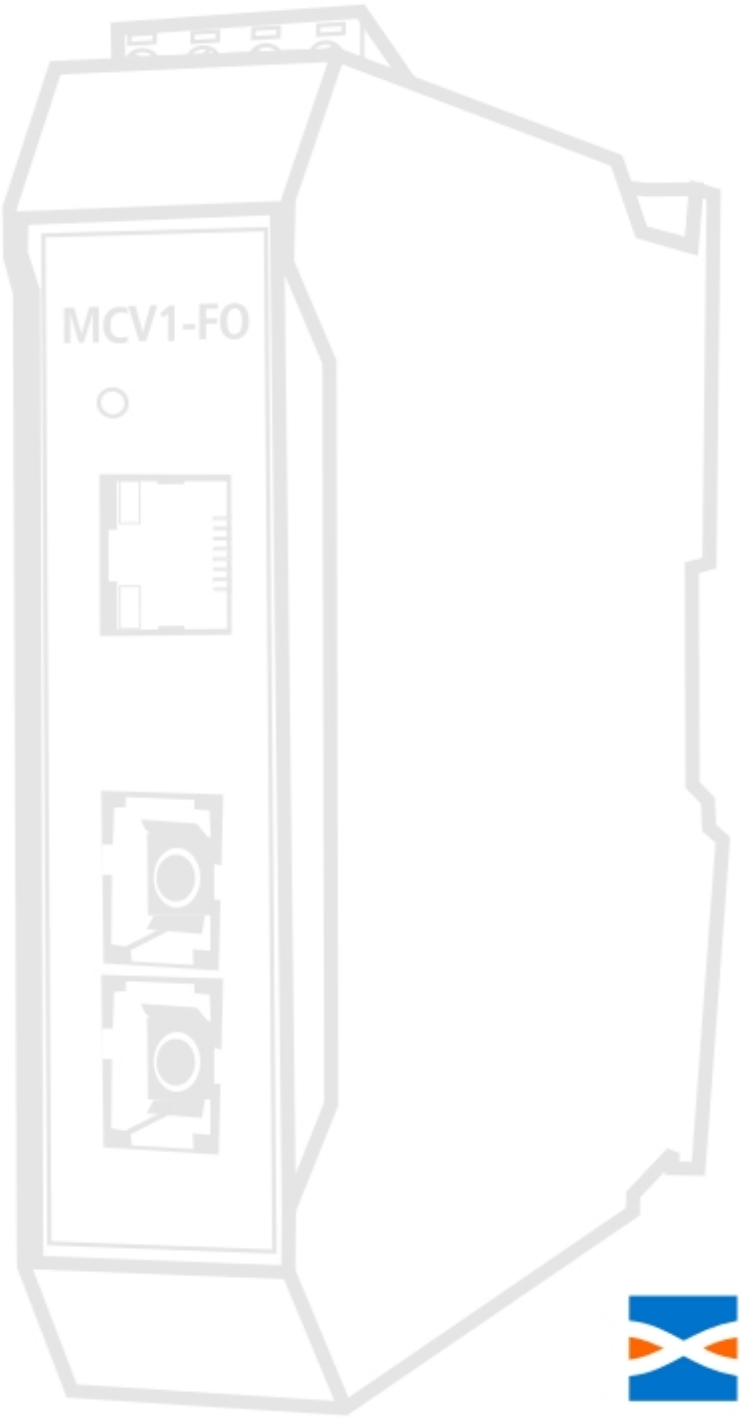
Ethernet to optic fiber converter

MCV1-F0-ETH

User Manual



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1 Introduction

1.1 Purpose of this manual

The purpose of this manual is to provide the instructions to quickly and simple install and operate the Ethernet to Optic Fiber Converters, MCV1-FO-ETH family

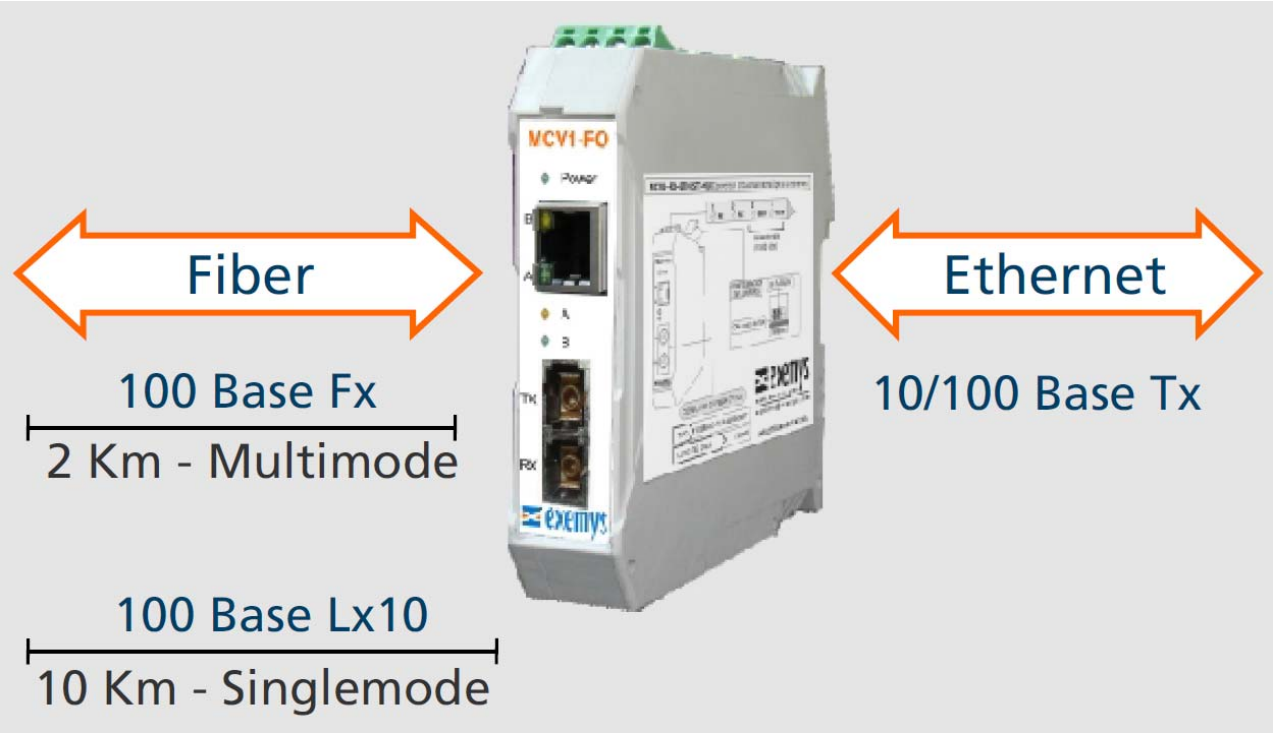
The manual begins with a general description of the product followed by the instructions for the correct hardware installation. Its configuration and operation are described later in detail.

1.2 General Description of the Product

The MCV1-FO-ETH are multi mode and single mode Ethernet to Optic Fiber Converter that allows the extension of communications up to 2 Km (10 Km in single mode) without electric noise interference.

The main features of the device are:

- Power Input: +10 a +30 Vdc / 200mA max
- Industrial DIN rail mountable case
- Multi mode or single mode fiber support
- ST or SC connectors (model depending)
- 100 Base FX / 100 Base LX10 Optic Fiber Port (multi mode / single mode)
- 10/100 Base TX Ethernet Port with auto negotiation



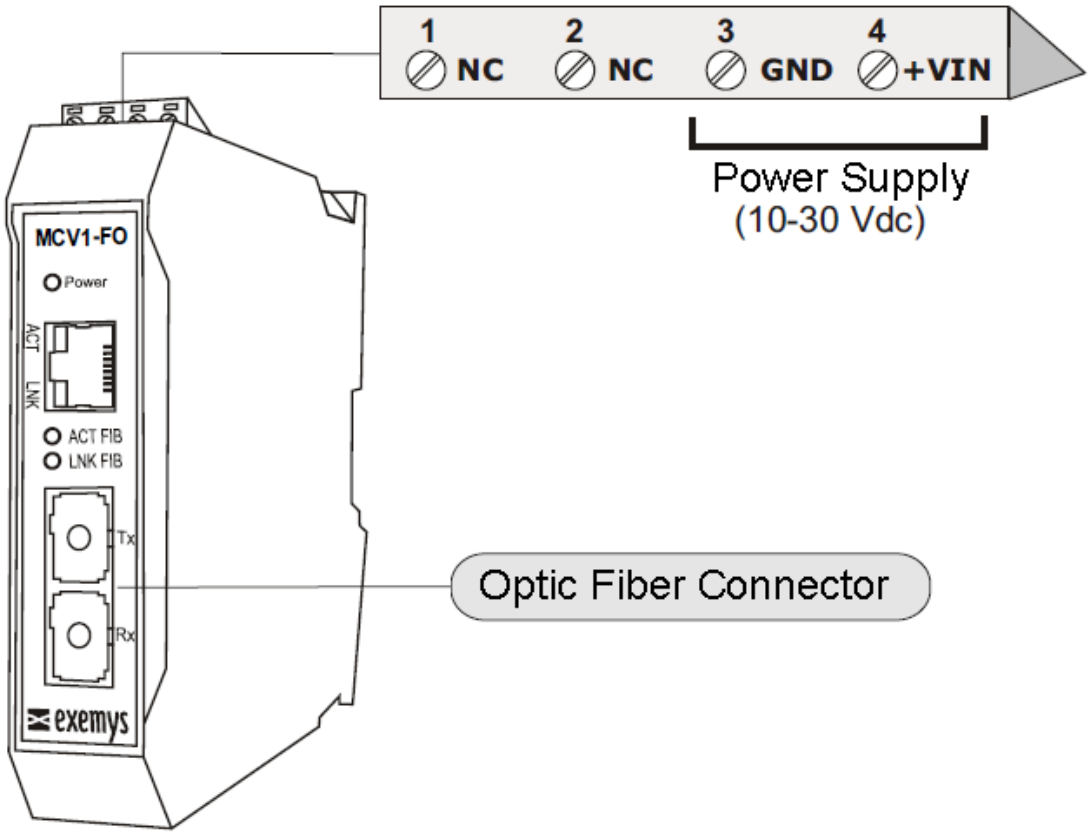
2 Wiring

1.3 General Wiring

MCV1 -FO-ETH wiring is very simple and intuitive. There are three different connectors.

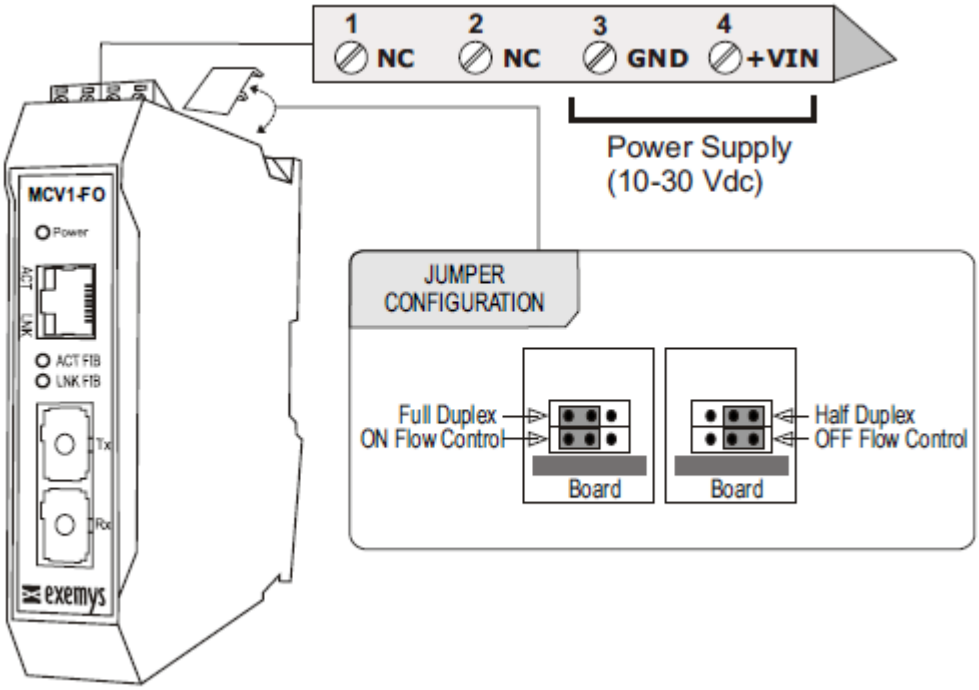
- Ethernet port connector in RJ45 connector
- Optic fiber port connector in ST or SC connector according to device model.
- Power supply terminal block (+10 to +30 Vdc)

First connect your power supply to device, then the Ethernet port and lastly the two Optic Fiber connectors (TX Transmitter and RX Receiver)



3 Configuration

The configuration of the converter is very simple and is made by means of jumper switches located in the top side of the device as shown in the following figure.



There are two configuration jumper switches, both to configure the converter's operation, from the optic fiber side:

Flow Control: This can be activated or deactivated.

Communications mode: Full duplex or Half-Duplex

LEDS

A – Activity Ethernet
B – Ethernet Link
C – Fiber Activity
D – Fiber Link

4 Technical Specifications

- Multimode or Singlemode operation
- Ethernet: 10/100 Base TX
- Fiber: 100 Base FX (Multimode)
  100 Base LX10 (Singlemode)
- Power Input: +10 a +30 Vdc
- Ignifuge industrial enclosure
- Distance: 2 Km Multimode
  10 Km Singlemode
- Wave Lenght: 1300nm
- Protocols: CSMA/CD, Autocross over

5 Ordering codes

MCV1-FO-ETH-ST-MU (ST Connector)

MCV1-FO-ETH-SC-MU (SC Connector)

MCV1-FO-ETH-SC-SI (SC Connector)

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