

# Ci-MF110/120 Modbus Plus Serial Data to Fiber Optic Converter



- Provide 1-channel Modbus Plus fieldbus, communication rate 1Mbps
- Support 1~2 Fiber Optic Ports, ST connector ( SC, FC Optional)
- Support Optical Fiber link failure and power error alarm LED indication
- DC (18~36V) dual redundant power input (can be customized with 9~18VDC), With DC1500V voltage isolation and reverse connect protection
- IP40 protection, Metal case (wave grain aluminum reinforce case option), 35mmDIN-Rail Installation
- Operating Temperature: -40℃ to 75℃ suitable to various Industrial work situation

## Summary

This series of products is an industrial grade Modbus Plus fieldbus fiber converter, support for Modbus Plus protocol, 1Mbps communication rate, single / double optical port network support. Ci-MF110 support 1-channel optical fiber interface, one channel bus data interface, Ci-MF120 supports two cascaded optical fiber interface, one bus data interface. This product is an industrial grade design, IP40 protection grade, wavy aluminum strengthening shell, 35mmDIN rail installation, DC (18~36V) wide power input (9~18VDC power model customizable), with relay alarm output, power supply redundancy and isolation protection etc.. -40~75 working temperature range, can meet the requirements of a variety of industrial sites, providing convenient optical fiber communication solutions.

## Specification

### Bus data interface

- Compatible with Modbus Plus DB9-F connector
- Accord with Modbus Plus field bus protocol, communication rate is 1Mbps
- constant voltage 1000V
- Resistor: the unit has 120 ohms, use corresponding switch to make it to be enable

### Optical Interface

- Wave length: multi-mode 850nm、1310 nm; single mode 1310 nm、1550nm
- Fiber type: multi-mode 50/125um、62.5/125um、100/140um;single mode 8.3/125 um、9/125um、10/125um
- Transmission distance: multi-mode 2km, single mode 20km.
- Fiber interface type: ST/SC/FC (optional); ST (standard configuration).
- Single Fiber wavelength: A: Transmit wavelength is single mode 1310nm, then Receive wavelength is 1550nm; B: Transmit wavelength is single mode 1550nm, then Receive wavelength is 1310nm

### Power

- DC (18~36V) dual redundant power input (can be customized with 9~18VDC), industrial standard voltage

DC24V, consumption is less than 1.5W, With DC1500V voltage isolation and reverse connect protection, adopt 5 cores 5.08mm industrial terminal port (please use industrial standard power, otherwise it will occur unit error or damage).

### Protection

- Relay: Fiber link fault alarm
- Contact rating: 1A @24V DC, Industrial Terminal port

### Mechanical

- Dimensions (HxDxW): 136mmx104.8mmx52.8mm
- Weight:800g
- Casing: IP40 protection, wave grain aluminum reinforce case option
- Installation: Wall mounting or DIN rail mounting

### Environmental

- Operating Temperature:-40 ℃ ~75 ℃ (-40 ℃ ~85 ℃ optional)
- Storage Temperature: -40℃~85℃
- Ambient Relative Humidity: 5%~95%(non-condensing)

### Warranty

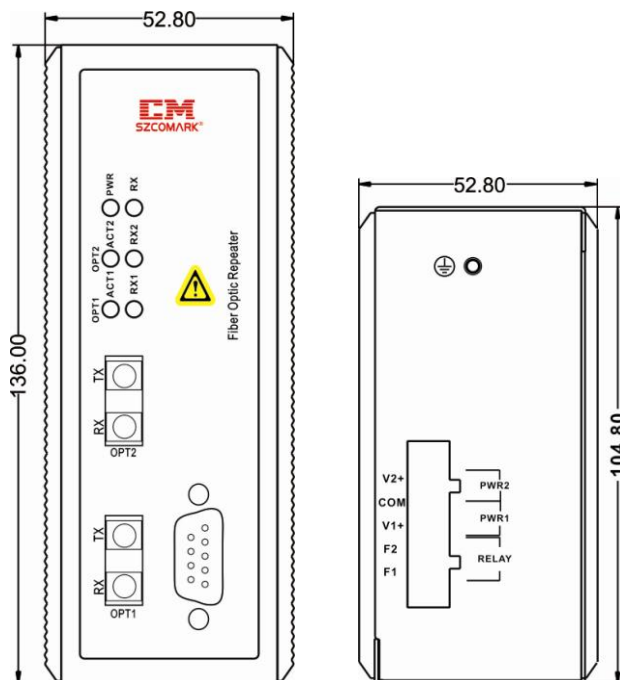
- Warranty Period: 5 years

## Certification

- IEC61000-4-2(ESD): Power ±8KV Contact, ±15KV Air; Relay ±8KV Contact, ±15KV Air; Data Cable ±15KV Air
- IEC61000-4-4(EFT):Power ±4KV, Data Cable ±4KV
- IEC61000-4-5(Surge):Power ±2KV CM/ ±1KV DM,

- Relay±2KV CM/ ±1KV DM
- IEC60068-2-27(Shock)
- IEC60068-2-32(Free Fall)
- IEC61000-6-2(General Industrial Standard)
- EN50121-4 (rail transit)

## Dimensions (mm)



## Models

Part No.	Description
Ci-MF110	1 Modbus Plus bus port, 1 Fiber Optic port, (single mode / multi-mode, single fiber / double fiber optional), ST/SC/FC optional, communication rate is 1Mbps, 9~18vdc power supply customizable
Ci-MF120	1 Modbus Plus bus port, 2 Fiber Optic ports, (single mode / multi-mode, single fiber / double fiber optional), ST/SC/FC optional, communication rate is 1Mbps, 9~18vdc power supply customizable

## Package List

- Modbus Plus data fiber optic converter (with industrial terminal block for power equipment)
- Product specification
- Product warranty card