

CLR-MB-xx

Modbus to Fiber Optical Converters for Industrial Serial Networks



Overview

CLR-MB-xxx series Modbus fiber optic converters are designed for industrial grade applications. They support RS232/485/422 general serial networks, also support Modbus, CS31, CC-Link, Interbus, BACnet, ARCnet, MPI, PPI etc based on RS232/485 serial networks. CLR-MB-xxx can work as single/dual optical daisy network.

CLR-MB-xxx series converters' strong aluminum casing provides IP30 level protection. Installation method is 35mm DIN rail mounting. They have wide voltage input range as (9V~30VDC). They have output alarm relay, dual redundant power input and isolation protection function.

CLR-MB-xxx series converters support one fiber interface and one data bus interface, two way cascade fiber interface and one data bus interface, according to various model numbers which are listed in Ordering Info below.

Features

- Supports Modbus protocol
- Supports RS232/485/422 general serial networks
- Supports CS31, CC-Link, Interbus, BACnet, ARCnet, MPI, PPI etc based on RS232/485 serial networks.
- Installation type is DIN-Rail
- Industrial grade design
- Output alarm relay, dual redundant power input and isolation protection function
- IP30 protection

Specifications

Bus data interface

Protocols	Modbus, CS31, CC-Link, Interbus, BACnet, ARCnet, MPI, PPI etc based on RS232/485 serial networks
RS232 Baud rate	0~115.2Kbps, support RXD, TXD, GND three line works
RS422	RX-, RX +, TX-, TX + full-duplex mode
RS485	A, B half-duplex mode
RS422/485 Baud rate	0~10Mbps optional
Isolation voltage	Instantaneous voltage 5000V, constant voltage 1000V
Resistor	without terminal resistor, connect external when necessary

Optical Interface

Wavelength	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).

Power and protection

Power	DC (9~30V) dual redundant power input, 24VDC typical, power consumption less than 1.5W
Protection	DC1000V voltage isolation and reverse connect protection
Relay	Fiber link fault alarm, Contact rating: DC48V/1A Max.
Power connector	Industrial Pluggable Screw Terminal

Mechanical

Dimension	136mm x 54mm x 106mm (H x W x D)
Housing	IP30 protection, Metal case (wave grain aluminum reinforce case option)
Installation	35mm DIN-Rail, Wall Mounting
Weight	800g

Environmental

Operating Temperature	-10°C ~ 70°C (-40°C ~ 85°C optional)
Storage Temperature	-40°C ~ 85°C
Relative Humidity	≤90% (non-condensing)

Ordering Info

CLR-MB-11M	Modbus to Fiber Optic Converter ST MM
CLR-MB-12M	Modbus to 2 Port Fiber Optic Converter ST MM
CLR-MB-11S	Modbus to Fiber Optic Converter ST SM
CLR-MB-12S	Modbus to 2 Port Fiber Optic Converter ST SM
CLR-MB-11M+	Modbus Plus to Fiber Optic Converter ST MM 1Mbps
CLR-MB-12M+	Modbus Plus to 2 Port Fiber Optic Converter ST MM 1Mbps
CLR-MB-11S+	Modbus Plus to Fiber Optic Converter ST SM 1Mbps
CLR-MB-12S+	Modbus Plus to 2 Port Fiber Optic Converter ST SM 1Mbps