# MBs-CM55E

Ethernet Interface Module

Introduction

MBs-CM55E is an Ethernet interface module of MBs-PLC series. It enables the capability of MBs-PLC to access the other controllers or devices thru the Ethernet network actively(client) or passively(server). Besides the MBs MA model CPU, all MC, MN CPU can be remotely monitored and diagnosed thru Internet by using this module. While operation, this module uses the port4 of CPU to communicate with Internet. This module also provides a generic RS485 Port3 for peripheral application. While installation, the module can be mounted on DIN-Rail or securely be fastened by screw.

Dimension
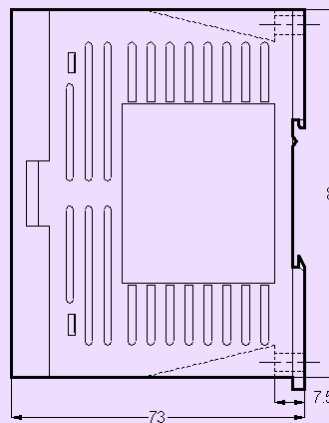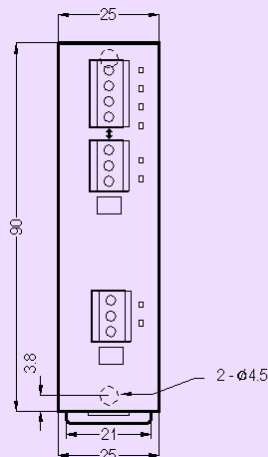
Features

■ Support multiple clients access

■ Support server or client mode

■ Support MERITEKor Modbus-TCP protocol

■ IP based access control

■ 230.4 Kbps high speed baud rate for serial interface

■ Network on line configuration

Specifications

Network Interface- 10BaseT
Network Protocol- TCP/IP
Application Protocol- MERITEK, Modbus-TCP
Operation Principle- Serial to Ethernet conversion **PLC interface**- Port4 RS485 interface
Generic Port- Port3, RS485 interface
PLC Communication Speed- 230.4 Kbps (Max.)
Working Mode- Server or client
Application IP Port number-
    Modbus-TCP – 502
    MERITEK – 500 or defined by user
Max. TCP Connection – 10 sessions
Security Protection- IP based access control
Configuration - On line network configuration
Indicators- RX, TX and LINK LED indicator
Power Consumption- 5V, 200mA
Operating Temperature- 0 ~ 60 ℃
Storage Temperature - -20 ~ 80 ℃
Dimension- 25(W)x90(H)x73(D) mm

MBs-CM55E

Ethernet Interface Module

Indicators

Module Working Status Indicator

RUN: Fast blink when works normally. Slow blink when on line configuration is proceed.

Network Indicators

LINK: When lit means connection OK.

TX: When lit means a message is being transmitted by this module

RX: When lit means network exist a message
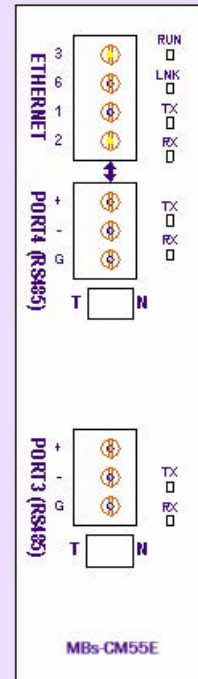
Port4 indicators

TX: When lit means a message is being transmitted by port4.

RX: When lit means a message is being observed in the port4 lines.

Port3 indicators

TX: When lit means a message is being transmitted by port4.

RX: When lit means a message is being observed in the port4 lines.

Switches and Connectors

Ethernet Connector

To reinforce the resistance for the machine vibration, instead of using conventional RJ-45 connector, this module use an 4 pin Euro connector for network connection. The labels 3,6,1,2 near this connector correspond to the standard RJ-45 signal. that means 3 for RX+(WHITE+GREEN), 6 for RX-(GREEN), 1 for TX+(WHITE+ORANGE) and 2 for TX-(Orange).
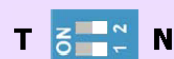
Port4 Connector

RS485 interface. +,- connected to the positive and negative polarity signal of RS485 interface. G is signal ground.

Port4 Terminator Switch

Its position is beneath the Port4 connector, use this switch to determine if the built in terminator for Port4 is engaged or not.

No Terminator(OFF)   With Terminator(ON)

Port3 Connector

RS485 interface. +,- connected to the positive and negative polarity signal of RS485 interface. G is signal ground.

Port3 Terminator Switch

Its position is beneath the Port3 connector, use this switch to determine if the built in terminator for Port3 is engaged or not.
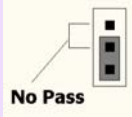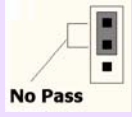
No Terminator(OFF)   With Terminator(ON)

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Ethernet Interface Module

Jumper Setting
Password Protection

When the password has been entered (enabled), the user will be requested to enter a matched password each time when perform the configuration via configuration utility 'ether_cfg.exe'. In other words, in case the user forget the password then he/she no longer can modify the module's configuration. To prevent this situation from occurring, there provides a jumper JP1 to disable the password protection temporary.

Password Protection	JP1 Setup
Enabled	No Pass
Disabled	No Pass

The default factory setting of MBs-CM55E is
Terminator- Port3, Port4 all install
Password protection- Enable

For those applications that require the setting differ than the above default setting should make some modification according to the tables listed above.