

General Specification

FA-M3
F3LN01-0N
EtherNet/IP Interface Module

FA-M3

GS 34M06H36-01E

General

The EtherNet/IP Interface Module is an EtherNet/IP scanner / adapter module to be installed in an I/O slot of the Range Free Multi-controller FA-M3.

EtherNet/IP is an open field network used in manufacturing equipment and production line lines. In a multi-vendor environment, it is possible to connect a wide range of devices from simple I / O devices such as sensors and actuators to complex control devices such as PLCs and various controllers.

Features

- It has an originator / target function and can be used as a scanner device or as an adapter device.
- I / O communication can handle 16,384 bytes of data in total.
- Up to 504 bytes of message communication can be performed.
- The IO communication data is refreshed with the link register of the sequence CPU and can exchange data between the EtherNet/IP interface module and the sequence CPU.

Specifications

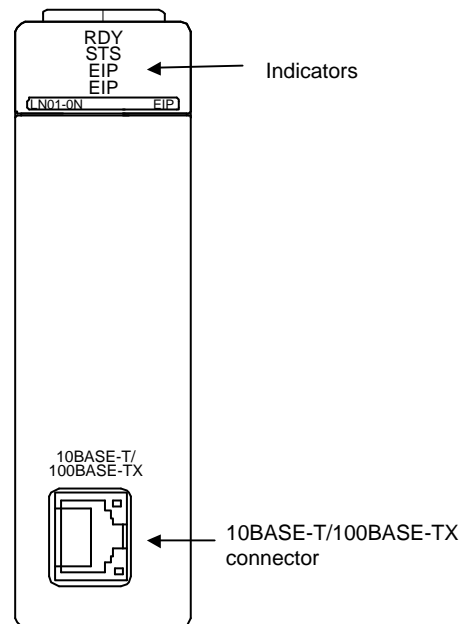
Item	Specifications	
Protocol	CIP Protocol	
Physical layer	10BASE-T / 100BASE-TX	
Transmission speed	10 / 100Mbps	
Maximum segment length	100m ^{(*)1}	
Number of sessions / connections	128	
IO communication	Transmission trigger	Cyclic / COS
	Connection type	O→T : Point to point T→O : Point to point or Multi cast
	Maximum data size	16,384 bytes
	Maximum connection size	1,444 bytes ^{(*)2}
	Communication speed	6000 pps (for 504-byte communication) 3000 pps (for 1444-byte communication)
	RPI	1ms ~ 10,000ms
Message communication	Message type	Class3 UCMM
	Maximum message length	504bytes ^{(*)3}
Number of Installed Modules (for each CPU module)	F3SP22-0S, F3SP71-4S : Up to 1 for each CPU module F3SP76-7S, F3RP71-1R, F3RP71-2L : Up to 2 for each CPU module	
Current consumption	330mA max (5V DC)	
External dimensions	28.9(W) × 100(H) × 83.2(D) mm ^{(*)4}	
Weight	100g	
Surrounding air temperature range	Operating : 0 to 55°C	
	Storage : -20°C to 75°C	
Surrounding humidity range	Operating : 10 to 90% RH (non-condensing)	
	Storage : 10 to 90% RH (non-condensing)	
Surrounding atmosphere	Must be free of corrosive gases, flammable gases or heavy dust.	

*1: Maximum distance between the module and a hub.
*2: Large Forward Open compatible
*3: Large Forward Open Not supported
*4: Excluding protrusions (see External Dimensions for details)



Components and Functions

Front view



LED Indicators

The communication status and fault status are displayed on the front upper part of this module.

LED	Display meaning	
RDY (READY) Green	Lighting up	Normal
	Lights off	Hardware failure
STS (STATUS) Green	Lighting up	Normal
	Flashing	Writing into the flash memory
	Lights off	Error
EIP Green EIP Red (NETWORK STATUS)	Lights off	Offline
	Green	Online,
	Flashing	EtherNet/IP is not enabled.
	Green	Online,
	Lighting up	EtherNet/IP is enabled.
	Red	Communication error
Red	Flashing	
	Lighting up	Module error Initialization mode

Operating Environment

This module is compatible with all sequence CPU module types.

Model	Specification
F3SP22-0S	10K ladder steps, basic instruction 0.045 μs minimum, with memory
F3SP71-4S	60K ladder steps, basic instruction 0.00375 μs minimum, with network functions (USB 2.0 and Ethernet)
F3SP76-7S	260K ladder steps, basic instruction 0.00375 μs minimum, with network functions (USB 2.0 and Ethernet)
F3RP71-1R	CPU module for Linux, ROM: 128 MB, RAM: 256 MB
F3RP71-2L	CPU module for Linux, ROM: 256 MB, RAM: 1 GB, SRAM: 4 MB

When using this module, the program development / setting tool is as follows.

Model	Rev.
SF630-MCW	FA-M3 Programing Tool WideField3
SF673-MDW	FA-M3 Configuration Tool EtherNet/IP Interface Module

Model and Suffix Codes

Model	Suffix Code	Style Code	Option Code	Description
F3LN01	-0N	10 / 100Mbps 10BASE-T/100Base-TX, EtherNet/IP scanner / adapter

External Dimensions

