MITSUBISHI ELECTRIC ENGINEERING

Network Interface Modules

For digital signal converters (terminal modules) and analog signal converters

New Product Release | No. 22-01E

Flexible connection between your facility's network and sensors and other devices

Smart Production Sites with IoT

Now available

CC-Link IE TSN/Ethernet network interface modules

CC-Link IE TSN
SLMP
CC-Link IE Field Basic
New
CC-Link IE Field
MODBUS/TCP

CC-Link network interface modules

CC-Link

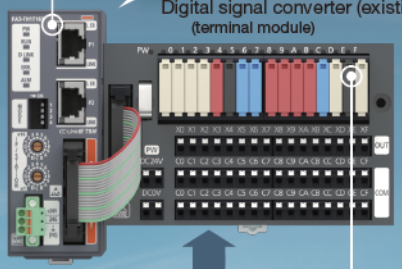
Small IoT system for integrated data management

Switch-selectable network

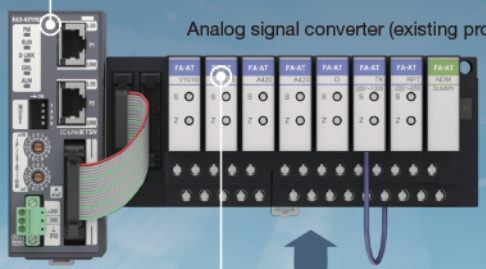
Easy connection with one cable

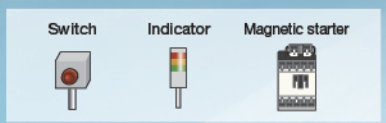
Network interface modules

Digital signal converter (existing product) (terminal module)



Analog signal converter (existing product)

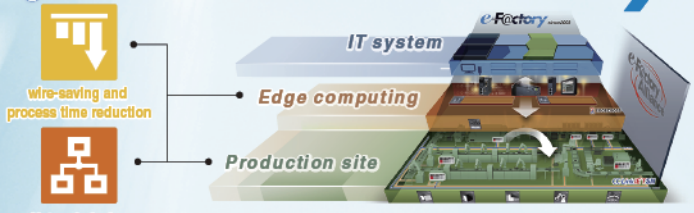




Optimum configuration using modules

Facilitating prevention and cause analysis of troubles

FAgoods Products e-F@ctory



Source: Mitsubishi Electric Corporation

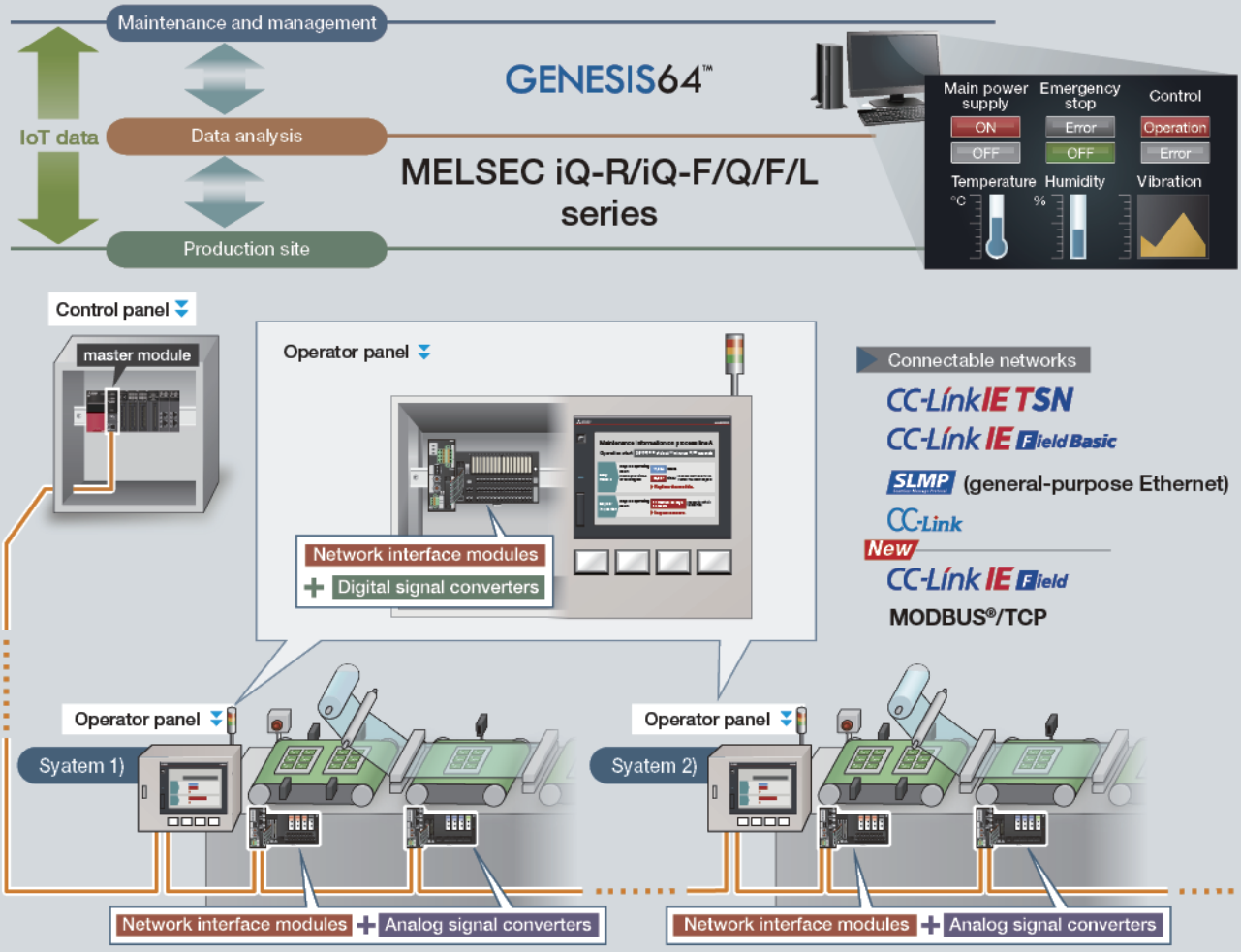
MITSUBISHI ELECTRIC ENGINEERING COMPANY LIMITED

Do you have any concerns or requests?

case 01 Monitoring on-site operating conditions

Small IoT system for integrated management of device data

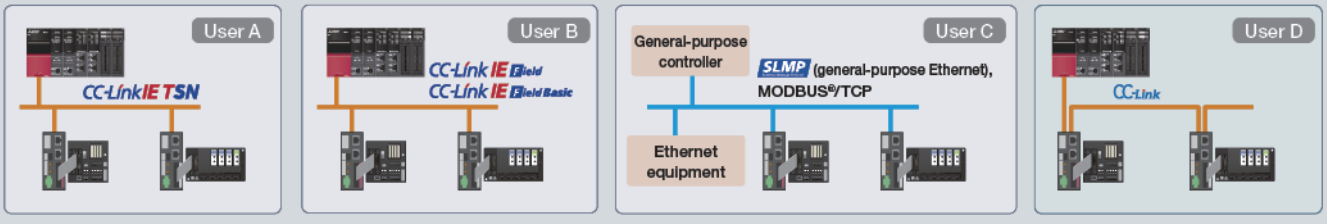
Using network interface modules enables dispersed installation of digital signal converters (terminal modules) and analog signal converters near devices such as sensors.
Networks are used to connect devices and upper hierarchical levels for data transmission. On-site operation data are collected, stored, visualized, and analyzed to be used for device control.



case 02 Meeting user-selected network specifications + Now available

Switching connection to various types of network

Using the switches on the network interface module allows you to select and set up a connection to CC-Link IE TSN, CC-Link IE Field, CC-Link IE Field Basic, SLMP*1 (general-purpose Ethernet), or MODBUS/TCP. (CC-Link-compatible products also available)

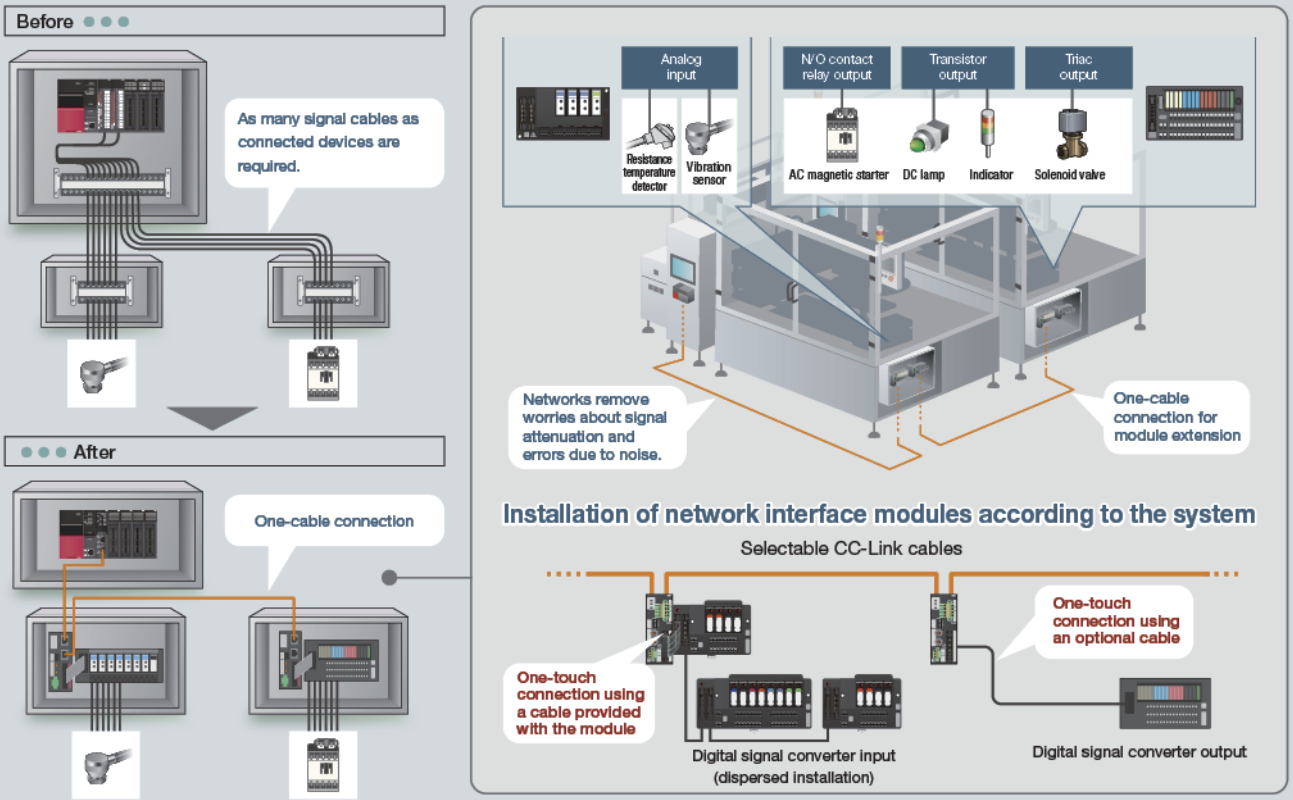


*1: Seamless Message Protocol

case 03 Facilitating wiring from the control panel to the system

Easy wiring from the control panel to the system

The module and the programmable controller are connected with one general-purpose Ethernet cable or CC-Link cable. The module can be installed near the devices used. When devices are added to the system, it is easy to support the extended system. When a dedicated cable is used, one-touch connection is possible for the module and a digital signal converter (terminal module) or analog signal converter.

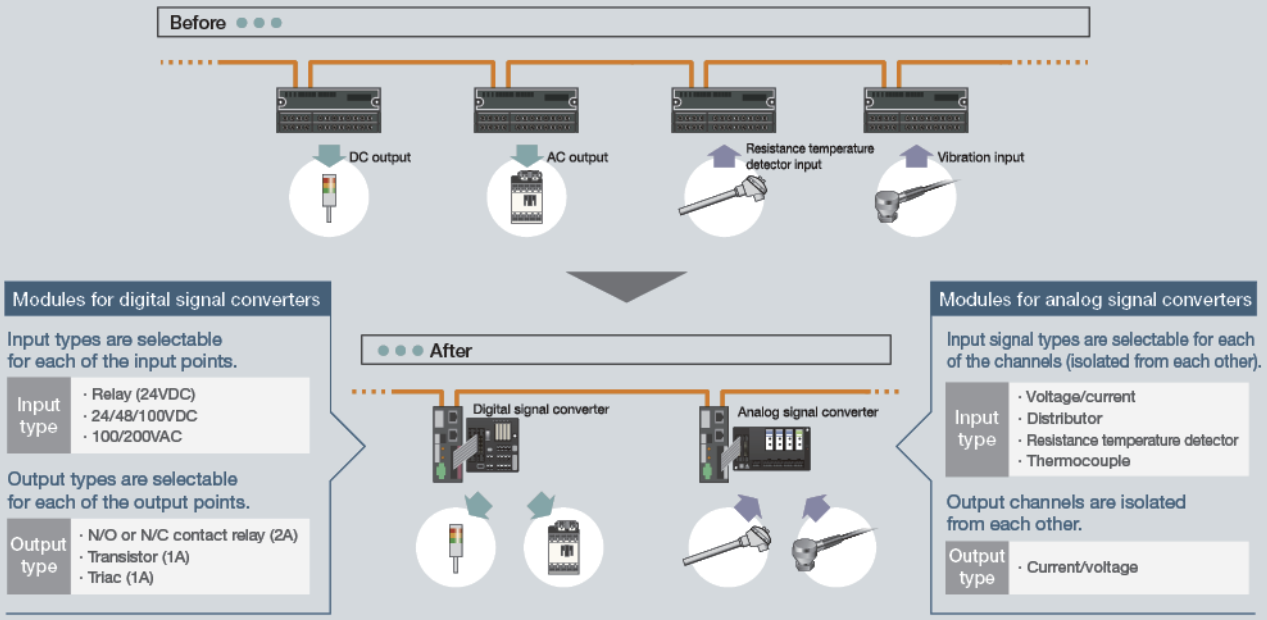


For information on cables, refer to the back cover.

case 04 Reducing initial cost and maintenance cost

Optimum system configuration using modules

Users can select modules to control devices one by one to establish optimum system configuration, which contributes to cost reduction and space saving. Digital and analog signal converters are useful even for control methods that are not supported by remote modules.



Modules for digital signal converters

Input types are selectable for each of the input points.

Input type	· Relay (24VDC) · 24/48/100VDC · 100/200VAC

Output types are selectable for each of the output points.

Output type	· N/O or N/C contact relay (2A) · Transistor (1A) · Triac (1A)

Modules for analog signal converters

Input signal types are selectable for each of the channels (isolated from each other).

Input type	· Voltage/current · Distributor · Resistance temperature detector · Thermocouple

Output channels are isolated from each other.

Output type	· Current/voltage

Do you have any concerns or requests?

case 05 Constructing a system that incorporates a function to prevent troubles and identify the cause

Operation data recording function for preventing and solving troubles

Preventive maintenance is possible because information such as the life of relays can be visualized.

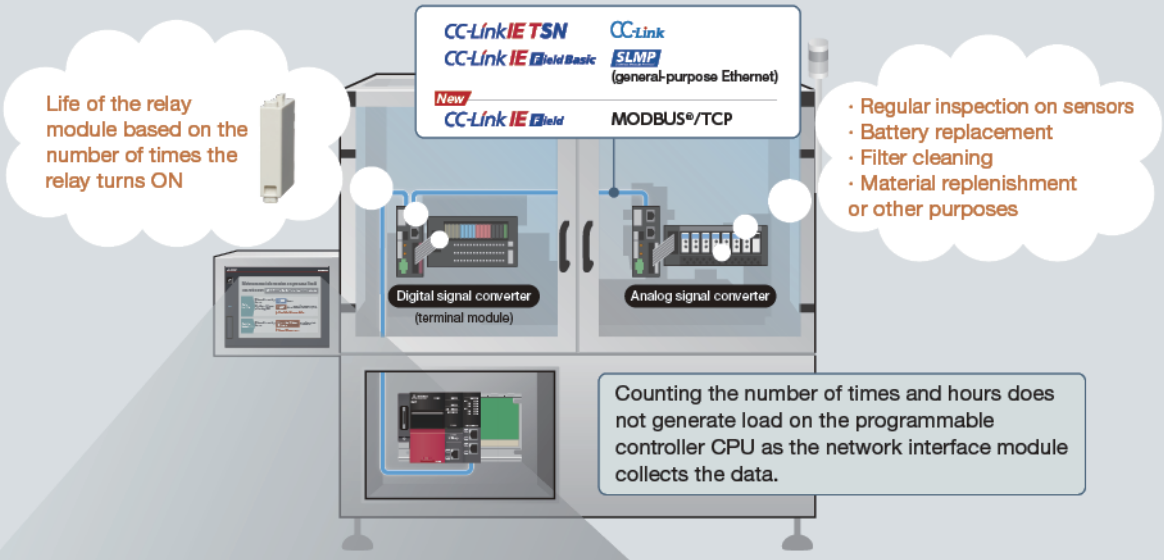
Maintenance time notification is based on how many times relay signals turn ON and operating hours. This helps prevent troubles.

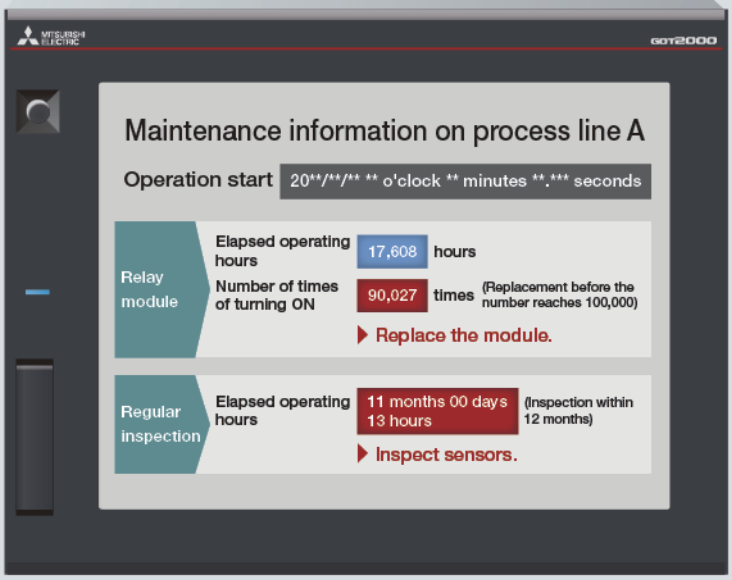
Maintenance information recording function

This function records the operation start date*1 and elapsed operating hours*1 of the network interface module and the number of times I/O signal relays of the digital signal converter turn ON*2.

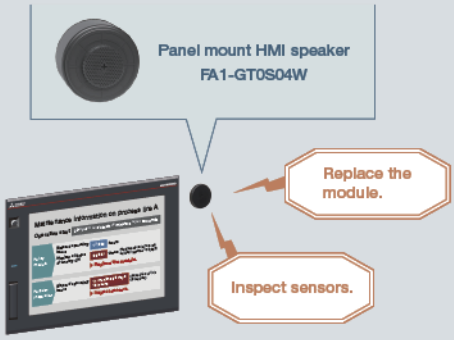
Maintenance alarm function

This function outputs an alarm signal to the master station when the specified operating hours*1 have elapsed or the number of times a relay turns ON*2 has exceeded the preset value.





Using the panel mount HMI speaker allows you to hear important information accurately in addition to visual information.



*1: Recording of the operation start date (year, month, and day) and elapsed operating hours is available when the modules are used in the CC-Link IE TSN, CC-Link IE Field Network, or CC-Link IE Field Network Basic.
*2: Available for network interface modules for digital signal converters.

Now available

(A function dedicated for CC-Link IE TSN/Ethernet network interface modules)

The cause of troubles can be investigated through analysis of operation history.

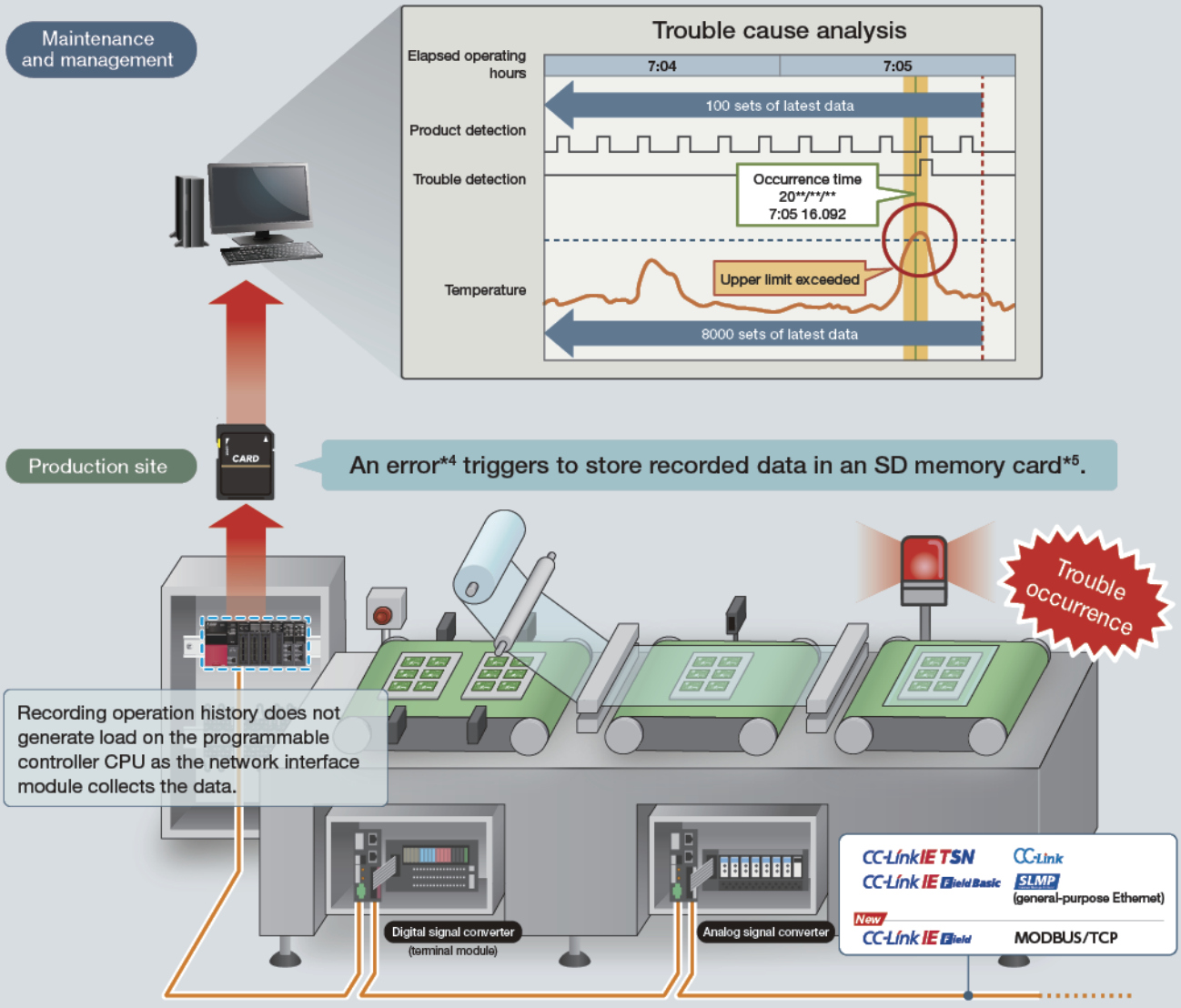
Recording the status history of digital and analog signals allows you to investigate the cause of troubles.

Operation history recording function
(digital signal converters)

This function records the times at which I/O signals turn ON or OFF*1 (up to 100 data sets per signal).

Logging function*2
(analog signal converters)

For analog input, this function records digital values at intervals specified with a digital conversion value*3 (1 ms to 3600 s) and occurrence times. For analog output, it records the digital value settings and occurrence times*1 (a total of 8000 data sets in all I/O channels).



*1: Recording of occurrence times is available when the modules are used in the CC-Link IE TSN, CC-Link IE Field Network, or CC-Link IE Field Network Basic.
*2: The logging function is available when the modules are used in the CC-Link IE TSN or CC-Link IE Field Network Basic.
*3: Numerical data digitally converted by the network interface module
*4: Configure your system so that it detects errors.
*5: The sequence program (function block) saves data in the SD memory card inserted into the programmable controller CPU as a CSV file.

■ Products and combinations

When a digital signal converter (terminal module) is used

Ensure compliance with required international standards also for other products used in combination.

Programmable controller IPC	Network interface module		Digital signal converter (terminal module)				
	Name	Model	Control method			Terminal block type	Model
CC-Link IE TSN master station • MELSEC iQ-R • MELSEC iQ-F CC-Link IE Field Basic master station • MELIPC • MELSEC iQ-R • MELSEC iQ-F • MELSEC-Q • MELSEC-L CC-Link IE Field master station • MELIPC • MELSEC iQ-R • MELSEC iQ-F • MELSEC-Q • MELSEC-L • MELSEC-F SLMP client • MELIPC • MELSEC iQ-R • MELSEC iQ-F • MELSEC-Q • MELSEC-L • MELSEC-F MODBUS/TCP • MELSEC iQ-R • MELSEC-Q • MELSEC-L CC-Link master station • MELSEC iQ-R • MELSEC iQ-F • MELSEC-Q • MELSEC-L • MELSEC-F General-purpose controller (general-purpose Ethernet)	Digital signal converter Input model	Dedicated cable included FA3-TH1□16XC-01C Dedicated cable not included FA3-TH1□16XC	Installation base unit (module selectable type)		4 points, independent	Spring clamp type	FA1-TH4X2SC20S1E
					8 points, independent		FA1-TH8X2SC20S1E
				With a N/O contact relay	4 points, independent (positive)	Spring clamp type	FA1-TH4X24RA1L20S1E
					4 points, independent (negative)		FA1-TH4X24RA1H20S1E
					8 points, independent (positive)	Spring clamp type	FA1-TH8X24RA1L20S1E
					8 points, independent (negative)		FA1-TH8X24RA1H20S1E
			Module pre-mounted unit	24VDC (N/O contact)	16 points, independent (positive)	Spring clamp type	FA1-TH16X24RA1L20S1E
					16 points, independent (negative)		FA1-TH16X24RA1H20S1E
					16 points, independent	Screw type (M3)	FA-TH16XRA20S
			Module built-in unit	24VDC	16 points/common, 2-wire type	Screw type (M3)	FA-TH16X24D31
						Screw type (M3.5)	FA-TH16X24D31L
				48VDC	16 points/common, 2-wire type	Screw type (M3.5)	FA-TH16X48D31L
				100VDC	16 points/common, 2-wire type	Screw type (M3.5)	FA-TH16X100D31L
				100VAC	16 points/common, 2-wire type	Screw type (M3)	FA-TH16X100A31
						Screw type (M3.5)	FA-TH16X100A31L
				200VAC	16 points/common, 2-wire type	Screw type (M3)	FA-TH16X200A31
						Screw type (M3.5)	FA-TH16X200A31L
	Digital signal converter Output model (sink)	Dedicated cable included FA3-TH1□16Y-01C Dedicated cable not included FA3-TH1□16Y	Installation base unit (module selectable type)		4 points, independent (sink)	Spring clamp type	FA1-TH4Y2SC20S1E
					8 points, independent (sink)		FA1-TH8Y2SC20S1E
					16 points, independent (sink)		FA1-TH16Y2SC20S1E
			Module pre-mounted unit	N/O contact relay	16 points, independent	Spring clamp type	FA1-TH16Y2RA20S1E
						Screw type (M3)	FA-TH16YRA20S
							FA-TH16YRA20
						Screw type (M3.5)	FA-TH16YRA20SL
					16 points/common, 1-wire type	Screw type (M3)	FA-TH16YRA11S
							FA-TH16YRA11
					16 points/common, 2-wire type	Screw type (M3)	FA-TH16YRA21S
							FA-TH16YRA21
				N/C contact relay	16 points, independent	Screw type (M3.5)	FA-TH16YRAB20SL
				C/O contact relay	16 points, independent	Screw type (M3)	FA-TH16YRAC20S
				Triac	16 points, independent	Spring clamp type	FA1-TH16Y1SR20S1E
						Screw type (M3)	FA-TH16YSR20S
					16 points/common, 1-wire type	Screw type (M3)	FA-TH16YSR11S
					16 points/common, 2-wire type	Screw type (M3)	FA-TH16YSR21S
				Transistor (sink)	16 points, independent (sink)	Spring clamp type	FA1-TH16Y1TR20S1E
					16 points/common, 1-wire type (sink)	Screw type (M3)	FA-TH16YTL11S
					16 points/common, 2-wire type (sink)	Screw type (M3)	FA-TH16YTL21S
					16 points/common, 1-wire type (source)	Screw type (M3)	FA-TH16YTH11S
					16 points, independent (sink/source common)	Screw type (M3)	FA-TH16YTR20S
			Module built-in unit		16 points, independent, 2A (sink/source common)	Screw type (M3)	FA-TH16Y2TR20
	Digital signal converter Output model (source)	Dedicated cable included FA3-TH1□16YE-01C Dedicated cable not included FA3-TH1□16YE	Installation base unit (module selectable type)		4 points, independent (sink)	Spring clamp type	FA1-TH1E4Y2SC20S1E
					8 points, independent (sink)		FA1-TH1E8Y2SC20S1E
					16 points, independent (source)		FA1-TH1E16Y2SC20S1E
			Module pre-mounted unit	N/O contact relay	16 points, independent (source)	Spring clamp type	FA1-TH1E16Y2RA20S1E
					16 points, independent (source)	Screw type (M3)	FA1-TH1E16Y2RA20S
				Triac	16 points, independent (source)	Spring clamp type	FA1-TH1E16Y1SR20S1E
				Transistor (source)	16 points, independent (source)	Spring clamp type	FA1-TH1E16Y1TR20S1E
					16 points, independent (sink/source common)	Screw type (M3)	FA-THE16YTR20S
					16 points/common, 1-wire type (source)	Screw type (M3)	FA-THE16YTH11S

Available networks

□ = M	CC-Link IE TSN, CC-Link IE Field, CC-Link IE Field Basic, SLMP (general-purpose Ethernet), MODBUS/TCP
□ = T	CC-Link IE TSN, CC-Link IE Field, CC-Link IE Field Basic, SLMP (general-purpose Ethernet)
□ = C	CC-Link

Module						
Specifications (Signal pass-through modules are not supported.)						Model
	Slim module	Input/output model	N/O contact relay (beige)	Input: 24VDC Output: 24VDC, 100 to 240VAC, 2A	2 pcs	FA-NYP24WK*
			N/C contact relay (sky blue)		4 pcs	FA-NYBP24WK*
		Output model	C/O contact relay (white)	24VDC, 100 to 240VAC, 6A	4 pcs	FA-LYCA024VSK4
			Triac (black)	30 to 240VAC, 1A	2 pcs	FA-SN24A01FS*
			Transistor (red)	3 to 30VDC, 1A	4 pcs	FA-SN24D01HZS*
	Functional module	Input model	24VDC relay isolation (navy blue)		1 pce 2 pcs 4 pcs	FA1-TM1X24RA-*
			24VDC photocoupler isolation (black)			FA1-TM1X24D-*
			48VDC photocoupler isolation (sky blue)			FA1-TM1X48D-*
			100VDC photocoupler isolation (purple)			FA1-TM1X100D-*
			100VAC photocoupler isolation (orange)			FA1-TM1X100A-*
			200VAC photocoupler isolation (red)			FA1-TM1X200A-*
			Dummy module (dust protector) (green)		4 pcs	FA1-TM1ND4

* is replaced with a number that corresponds to the number of modules.
It is replaced with "2" when two modules are included and "4" when four modules are included.

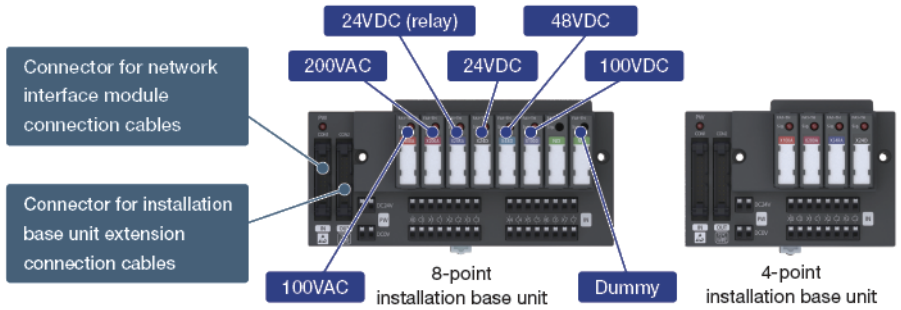
Digital signal converter (terminal module)

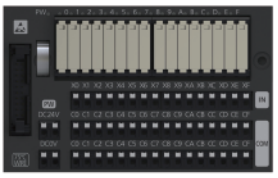
This converter is used to convert digital signals sent between the network interface module and sensors or other devices.

There are two types of terminal blocks: spring clamp type and screw type.

● Input | Spring clamp terminal type | Screw terminal type

Different input voltages (24VDC, 48VDC, 100VDC, 100VAC, 200VAC) can be specified for each terminal according to the device type.





Unit with a 16-point relay module

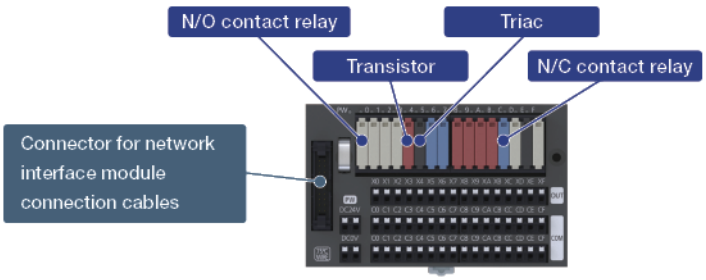
New

Unit with a 8-point relay module

Unit with a 4-point relay module

● Output | Spring clamp terminal type | Screw terminal type

Different control methods (relay, triac, transistor) can be specified for each terminal according to the device type.



Unit with a 16-point relay module selectable type (installation base unit)

Unit with a 16-point relay module

New

Unit with a 8-point relay module selectable type (installation base unit)

Unit with a 4-point relay module selectable type (installation base unit)

When an analog signal converter is used

Ensure compliance with required international standards also for other products used in combination.

Programmable controller IPC	Network interface module		Analog signal converter					
	Name	Model	Installation base Model		Connectable module (Pass-through modules are not supported.) Specifications			Model
CC-Link IE TSN master station • MELSEC iQ-R • MELSEC iQ-F CC-Link IE Field Basic master station • MELIPC • MELSEC iQ-R • MELSEC iQ-F • MELSEC-Q • MELSEC-L CC-Link IE Field master station • MELIPC • MELSEC iQ-R • MELSEC iQ-F • MELSEC-Q • MELSEC-L • MELSEC-F SLMPclient • MELIPC • MELSEC iQ-R • MELSEC iQ-F • MELSEC-Q • MELSEC-L • MELSEC-F MODBUS/TCP • MELSEC iQ-R • MELSEC-Q • MELSEC-L	Analog signal converter Input model	Dedicated cable included FA3-AT1□8X-01C Dedicated cable not included FA3-AT1□8X	4-channel spring clamp terminal block FA1-AT1B4X1TE 4-channel screw terminal block FA1-AT1B4X1TB 8-channel screw terminal block FA-ATB8XTB	+	Voltage input	0 to 5V		FA-ATSVM1XV05
						1 to 5V		FA-ATSVM1XV15
						-10 to 10V		FA-ATSVM1XV1010
					Current input	4 to 20mA		FA-ATSVM1XA420
					Distributor (2-wire transmitter)	4 to 20mA		FA-ATSVM1XD
					RTD input	Pt100	-200 to +650°C	FA-ATSVM1XRPT
						Pt100	0 to +100°C	FA-ATSVM1XRPT0010
						Pt100	0 to +200°C	FA-ATSVM1XRPT0020
						JPt100	-200 to +600°C	FA-ATSVM1XRJPT
					Thermocouple input	Type B thermocouple	+600 to +1700°C	FA-ATSVM1XTB
						Type R thermocouple	0 to +1600°C	FA-ATSVM1XTR
						Type S thermocouple	0 to +1600°C	FA-ATSVM1XTS
						Type K thermocouple	-200 to +1200°C	FA-ATSVM1XTK
							0 to +400°C	FA-ATSVM1XTK0040
							0 to +600°C	FA-ATSVM1XTK0060
							0 to +800°C	FA-ATSVM1XTK0080
						Type E thermocouple	-200 to +900°C	FA-ATSVM1XTE
						Type J thermocouple	-40 to +750°C	FA-ATSVM1XTJ
						Type T thermocouple	-200 to +350°C	FA-ATSVM1XTT
						Type N thermocouple	-200 to +1250°C	FA-ATSVM1XTN
					Dummy	5 pcs		FA-ATNDM5
CC-Link master station • MELSEC iQ-R • MELSEC iQ-F • MELSEC-Q • MELSEC-L • MELSEC-F General-purpose controller (general-purpose Ethernet)	Analog signal converter Output model	Dedicated cable included FA3-AT1□8Y-01C Dedicated cable not included FA3-AT1□8Y	4-channel spring clamp terminal block FA1-AT1B4Y1TE 4-channel screw terminal block FA1-AT1B4Y1TB 8-channel screw terminal block FA-ATB8YTB	+	Voltage output	0 to 5V		FA-ATSVM1YV05
						1 to 5V		FA-ATSVM1YV15
						0 to 10V		FA-ATSVM1YV010
						-10 to 10V		FA-ATSVM1YV1010
					Current output	0 to 20mA		FA-ATSVM1YA020
						4 to 20mA		FA-ATSVM1YA420
					Dummy	5 pcs		FA-ATNDM5

Available networks

□ = M	CC-Link IE TSN, CC-Link IE Field, CC-Link IE Field Basic, SLMP (general-purpose Ethernet), MODBUS/TCP
□ = T	CC-Link IE TSN, CC-Link IE Field, CC-Link IE Field Basic, SLMP (general-purpose Ethernet)
□ = C	CC-Link

Analog signal converter

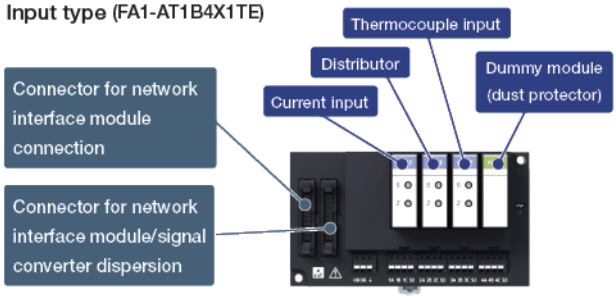
This converter is used to convert analog signals sent between the network interface module and temperature sensors or other devices. Channels are isolated from each other.

Spring clamp terminal type **New** | Screw terminal type

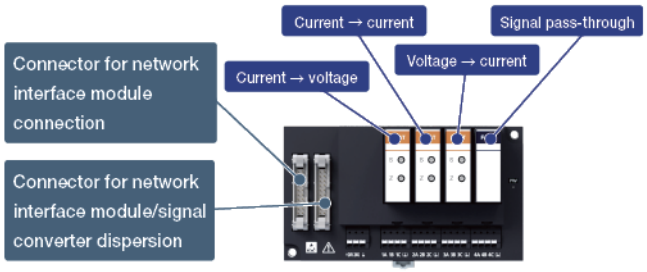
For input models, different types of analog inputs (voltage, current, distributor, thermocouple, resistance temperature detector) can be specified for each channel.

For output models, different types of analog outputs (voltage, current) can be specified for each channel.

Input type (FA1-AT1B4X1TE)



Output type (FA1-AT1B4Y1TE)



■ Product specifications

CC-Link IE TSN/Ethernet network interface modules

● Individual specifications

For digital signal converters (terminal modules)

Input model

Item		FA3-TH1M16XC FA3-TH1T16XC
Input type		Positive/negative common shared type
Number of input points		16
Input response time	OFF → ON	0.1/0.2/1/1.5/5/10/20/70ms or less*1
	ON → OFF	0.4/0.5/1/1.5/5/10/20/70ms or less*1
Current consumption		0.11A
Weight		160g

*1: The module response time is not included.

Output model

Item		FA3-TH1M16Y FA3-TH1T16Y	FA3-TH1M16YE FA3-TH1T16YE
Output type		Sink type	Source type
Number of output points		16	
Response time	OFF → ON	0.5ms or less*2	
	ON → OFF	1.5ms or less*2	
Current consumption		0.12A	
Weight		160g	

*2: The module response time is not included.

For analog signal converters

Input model

Item		FA3-AT1M8X FA3-AT1T8X
Number of analog input points		8 channels/module
I/O characteristics	Analog input range	1 to 5V
	Digital output value	0 to 16000
Accuracy (accuracy for the maximum digital output value)	Ambient temperature: 0 to 55°C	±0.3% (±48 digits)*3
	Ambient temperature: 25 ±5°C	±0.1% (±16 digits)*3
	Maximum resolution	0.25mV
Maximum conversion speed		1ms/channel*4
Current consumption		0.14A
Weight		160g

*3: The module's accuracy is not taken into account.

*4: The module response time is not included.

Output model

Item		FA3-AT1M8Y FA3-AT1T8Y
Number of analog output points		8 channels/module
I/O characteristics	Digital input value	0 to 16000
	Analog output range	1 to 5V
Accuracy	Ambient temperature: 0 to 55°C	±0.3% (±12mV)*5
	Ambient temperature: 25 ±5°C	±0.1% (±4mV)*5
	Maximum resolution	0.25mV
Maximum conversion speed		1ms/channel*6
Current consumption		0.14A
Weight		160g

*5: The module's accuracy is not taken into account.

*6: The module response time is not included.

●Common specifications

Item		CC-Link IE TSN	CC-Link IE Field	CC-Link IE Field Basic	SLMP (general-purpose Ethernet)	MODBUS/TCP*8
Ambient operating temperature		0 to 55°C				
Ambient operating humidity		5 to 95%RH, non-condensing				
Network specifications	Communication speed	1Gbps/100Mbps	1Gbps	100Mbps	100Mbps	100Mbps/10Mbps
	Station type	Remote station	Remote device station	Remote station	Server	Remote station
	Certification class	Class B	-	-	-	-
	Topology	• Line/star topology • Mixture of star and line topologies	• Line/star topology • Mixture of star and line topologies • Ring topology	Star topology	Star topology	Star topology
External connection method	Communication section	RJ45 connector				
	Module power supply section	Two-piece spring clamp terminal block				
Module installation		DIN rail installation or screw mounting with the supplied bracket				
Communication cable	1Gbps	Ethernet cable that meets the 1000BASE-T standard Category 5e or higher (double shielded, STP), straight cable				
	100Mbps	Ethernet cable that meets the 100BASE-TX standard Category 5 or higher (double shielded, STP), straight cable				
	10Mbps	Ethernet cable that meets the 10BASE-T standard Category 3 or higher (shielded, STP), straight cable				
Module power supply	Voltage	24VDC (ripple rate within 5%) (permissible voltage: 20.4 to 28.8VDC)				
	Current	Refer to the individual specifications.*7				
External dimensions		105 (H) × 40 (W) × 70 (D) mm (not including the projections)				
Conformity standards*9		UL, CE, UKCA, KC				

*7: Both the digital signal converter and analog signal converter require a 24VDC power supply. For details on the specifications, refer to the manual of each module.

*8: MODBUS/TCP is supported by FA3-TH1M16** and FA3-AT1M8** only.

*9: Ensure compliance with required international standards also for other products used in combination.

CC-Link network interface module

• Individual specifications

For digital signal converters (terminal modules)

Input model

Item		FA3-TH1C16XC
Input type		Positive/negative common shared type
CC-Link station type		Remote I/O station
Number of occupied stations		32 points are assigned to a station. (16 points are used.)
Number of input points		16
Input response time	OFF → ON	1.5ms or less*1
	ON → OFF	
Current consumption		90mA
Weight		160g

*1: The module response time is not included.

Output model

Item		FA3-TH1C16Y	FA3-TH1C16YE
Output type		Sink type	Source type
CC-Link station type		Remote I/O station	
Number of occupied stations		32 points are assigned to a station. (16 points are used.)	
Number of output points		16	
Response time	OFF → ON	0.5ms or less*2	
	ON → OFF	1.5ms or less*2	
Current consumption		100mA	90mA
Weight		160g	160g

*2: The module response time is not included.

For analog signal converters

Input model

Item		FA3-AT1C8X
Number of analog input points		8 channels/module
CC-Link station type		Remote device station
CC-Link version		Ver.1.10
Number of occupied stations		2
I/O characteristics	Analog input range	1 to 5V
	Digital output value	0 to 16000
Accuracy (accuracy for the maximum digital output value)	Ambient temperature: 0 to 55°C	±0.3% (±48 digits)*3
	Ambient temperature: 25 ±5°C	±0.1% (±16 digits)*3
	Maximum resolution	0.25mV
Maximum conversion speed		1ms/channel*4
Current consumption		120mA
Weight		170g

*3: The module's accuracy is not taken into account.
*4: The module response time is not included.

Output model

Item		FA3-AT1C8Y
Number of analog output points		8 channels/module
CC-Link station type		Remote device station
CC-Link version		Ver.1.10
Number of occupied stations		2
I/O characteristics	Digital input value	0 to 16000
	Analog output range	1 to 5V
Accuracy	Ambient temperature: 0 to 55°C	±0.3% (±12mV)*5
	Ambient temperature: 25 ±5°C	±0.1% (±4mV)*5
	Maximum resolution	0.25mV
Maximum conversion speed		1ms/channel*6
Current consumption		120mA
Weight		170g

*5: The module's accuracy is not taken into account.
*6: The module response time is not included.

• Common specifications

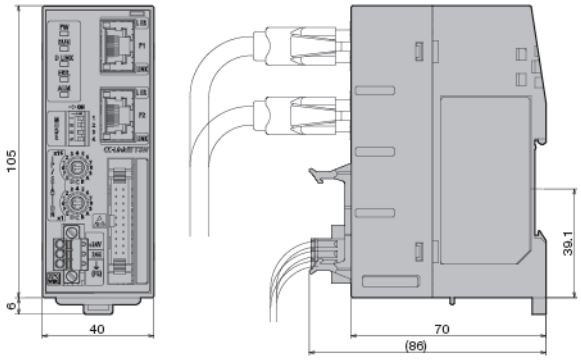
Item		Specifications
Ambient operating temperature		0 to 55°C
Ambient operating humidity		5 to 95%RH, non-condensing
Network specifications	Communication speed	10M/5M/2.5M/625k/156kbps
	Transmission path type	Bus type (EIA RS485 compliant)
External connection method	Communication section	Two-piece spring clamp terminal block
	Module power supply section	
Module installation		DIN rail installation or screw mounting with the supplied bracket
Module power supply	Voltage	24VDC (ripple rate within 5%) (permissible voltage: 20.4 to 28.8VDC)
	Current	Refer to the individual specifications.*7
External dimensions		105 (H) × 40 (W) × 70 (D) mm (not including the projections)
Conformity standards*8		UL, CE, UKCA, KC

*7: Both the digital signal converter and analog signal converter require a 24VDC power supply. For details on the specifications, refer to the manual of each module.
*8: Ensure compliance with required international standards also for other products used in combination.

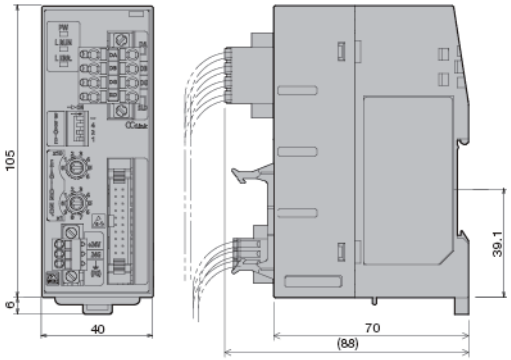
■ External dimensions

Unit: mm

CC-Link IE TSN/Ethernet network interface module



CC-Link network interface module



■ Function list

CC-Link IE TSN/Ethernet network interface modules have the following functions.

○: Available, –: Not available

Function	Digital		Analog		Description
	Input	Output	Input	Output	
Operation history recording function	○		–		Records the ON/OFF history of I/O signals (100 data sets per signal).
Logging function	–		○		Records the history of digital conversion values (analog input) and digital setting values (analog output) (8000 data sets in all channels).
Maintenance information recording function	○		○		Records the operation start date (year, month, and day), operating hours, and the number of times relays turn ON*1.
Maintenance alarm function	○		○		Outputs an alarm when the specified operating hours have elapsed or the number of times relays turn ON*1. has exceeded the preset value.

*1: Number of times relays turn ON is a function available for network interface modules for digital signal converters.

■ Product line

Available networks	Specifications		Dedicated cable	Model
CC-Link IE TSN CC-Link IE Field CC-Link IE Field Basic SLMP (general-purpose Ethernet) MODBUS/TCP	For digital signal converters	Input type	Included	FA3-TH1M16XC-01C
		Output type (sink)		FA3-TH1M16Y-01C
		Output type (source)		FA3-TH1M16YE-01C
		Input type	Not included Use an optional cable.	FA3-TH1M16XC
		Output type (sink)		FA3-TH1M16Y
		Output type (source)		FA3-TH1M16YE
	For analog signal converters	Input type	Included	FA3-AT1M8X-01C
		Output type		FA3-AT1M8Y-01C
		Input type	Not included Use an optional cable.	FA3-AT1M8X
		Output type		FA3-AT1M8Y
CC-Link IE TSN CC-Link IE Field CC-Link IE Field Basic SLMP (general-purpose Ethernet)	For digital signal converters	Input type	Included	FA3-TH1T16XC-01C
		Output type (sink)		FA3-TH1T16Y-01C
		Output type (source)		FA3-TH1T16YE-01C
		Input type	Not included Use an optional cable.	FA3-TH1T16XC
		Output type (sink)		FA3-TH1T16Y
		Output type (source)		FA3-TH1T16YE
	For analog signal converters	Input type	Included	FA3-AT1T8X-01C
		Output type		FA3-AT1T8Y-01C
		Input type	Not included Use an optional cable.	FA3-AT1T8X
		Output type		FA3-AT1T8Y
CC-Link	For digital signal converters	Input type	Included	FA3-TH1C16XC-01C
		Output type (sink)		FA3-TH1C16Y-01C
		Output type (source)		FA3-TH1C16YE-01C
		Input type	Not included Use an optional cable.	FA3-TH1C16XC
		Output type (sink)		FA3-TH1C16Y
		Output type (source)		FA3-TH1C16YE
	For analog signal converters	Input type	Included	FA3-AT1C8X-01C
		Output type		FA3-AT1C8Y-01C
		Input type	Not included Use an optional cable.	FA3-AT1C8X
		Output type		FA3-AT1C8Y

■ Connection cables

Network interface module connection cable

Name	Length	Model	Remarks
Dedicated cable	0.1m	-	Included with the product (FA3-□□-01C)
Extension cable for connection with signal converter	1m	FA3-CB2L10MM1H20	Optional cables for CC-Link network interface modules for which dedicated cables are not provided with modules.
	2m	FA3-CB2L20MM1H20	
	3m	FA3-CB2L30MM1H20	

CC-Link cables

CC-Link related products including CC-Link cables with or without end treatment and waterproof connectors are also available.

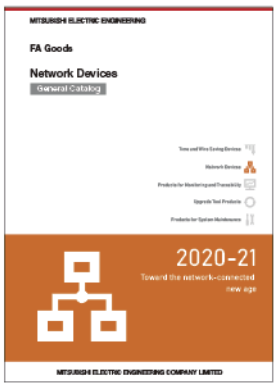
Name	Length	Model
CC-Link cable	200m*1	FA-CBL200SB
High-performance CC-Link cable	200m*1	FA-CBL200SBH
Vibration-resistant CC-Link cable for moving parts	200m*1	FA-CBL200SBZ
Ver.1.10-compatible CC-Link cable	200m*1	FA-CBL200PSBH
Ver.1.10-compatible vibration-resistant CC-Link cable for moving parts	200m*1	FA-CBL200PSBZ
Ver.1.10-compatible cold-resistant CC-Link cable	200m*1	FA-CBL200LTPSBH
Coaxial CC-Link cable with 24VDC power cable	100m*2	FA-CBL100PWSB
Ver.1.10-compatible coaxial CC-Link cable with 24VDC power cable	100m*2	FA-CBL100PWPSBH

*1: Custom lengths are not available, but a 1000-meter option is available.
*2: Custom lengths are not available, but a 500-meter option is available.

■ Related catalogs

Time and Wire Saving Devices

Network Devices



■ Related leaflets

Analog Signal Converters (MEIC220E·21Y)

Digital Signal Converters (Terminal Modules) (MEIC208E·20Y)

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