

Network Interface Modules

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

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

Smart Production Sites with IoT

CC-Link IE TSN/Ethernet
network interface modules

CC-Link IE TSN

CC-Link IE Field

CC-Link IE Field Basic

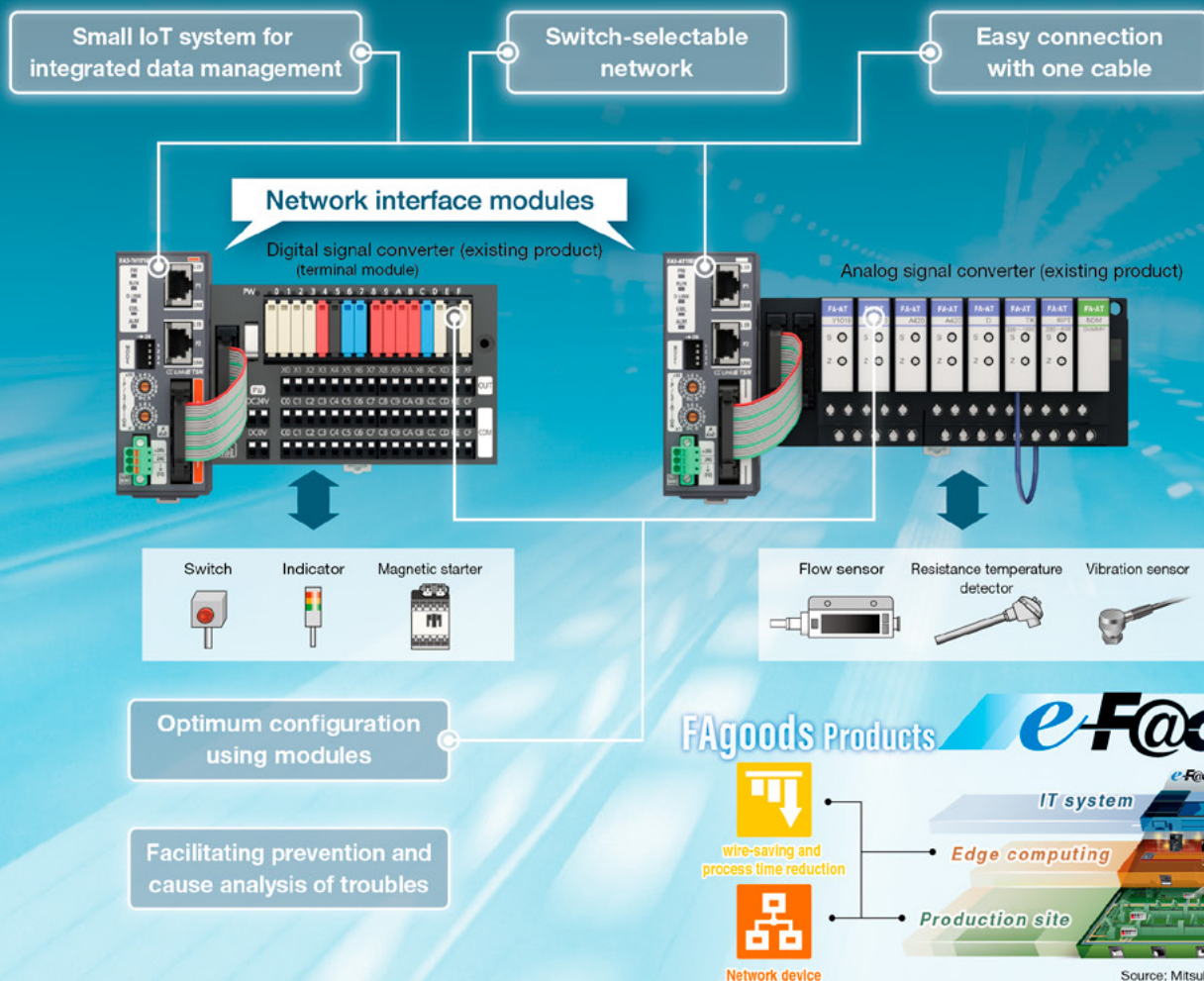
SLMP

(general-purpose Ethernet)

MODBUS/TCP

CC-Link network
interface modules

CC-Link



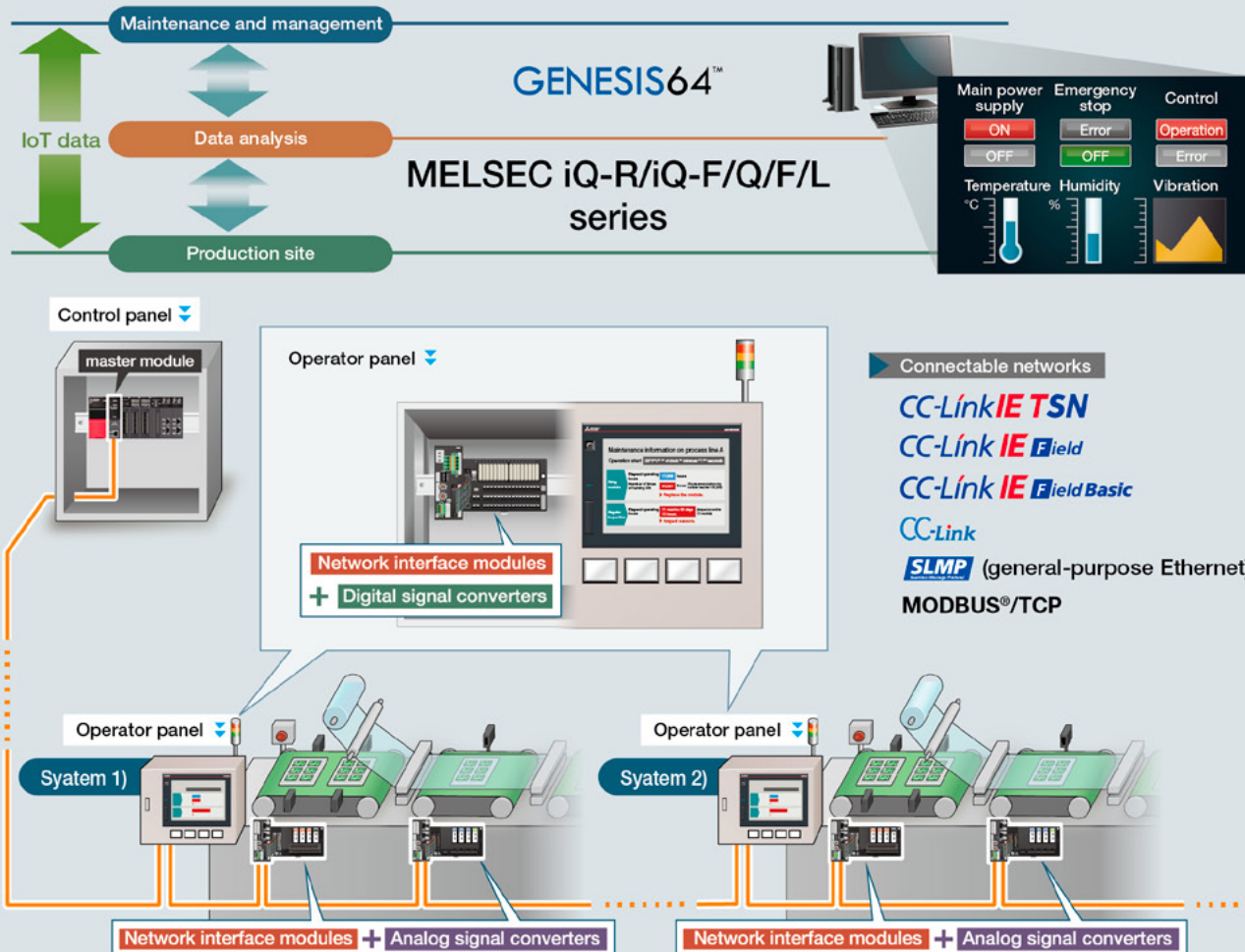
Do you have any concerns or requests?

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.

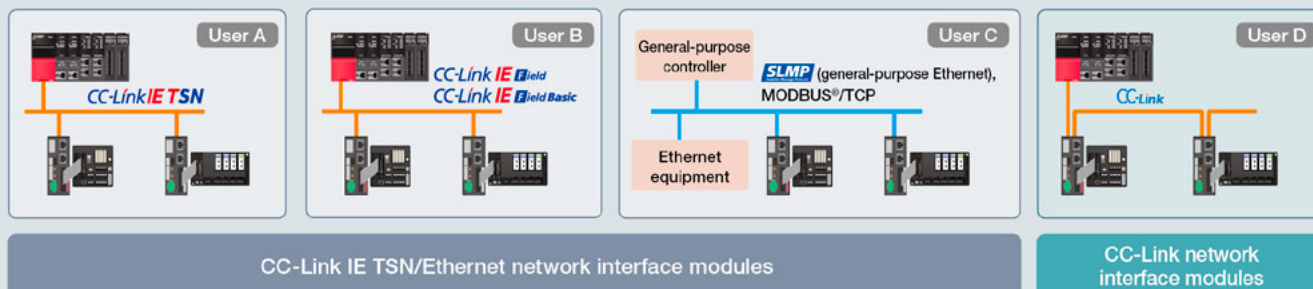
Networks are used to connect devices and upper hierarchical levels for data transmission. On-site operation data are collected, stored, visualized, and analyzed to be used for device control.



case 02 Meeting user-selected network specifications

Switching connection to various types of network

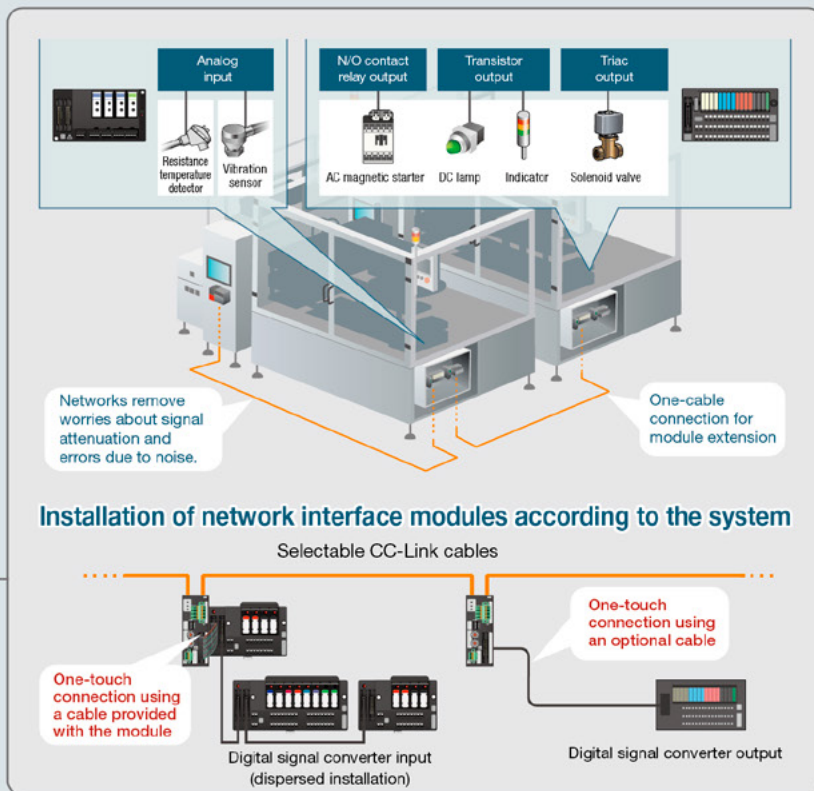
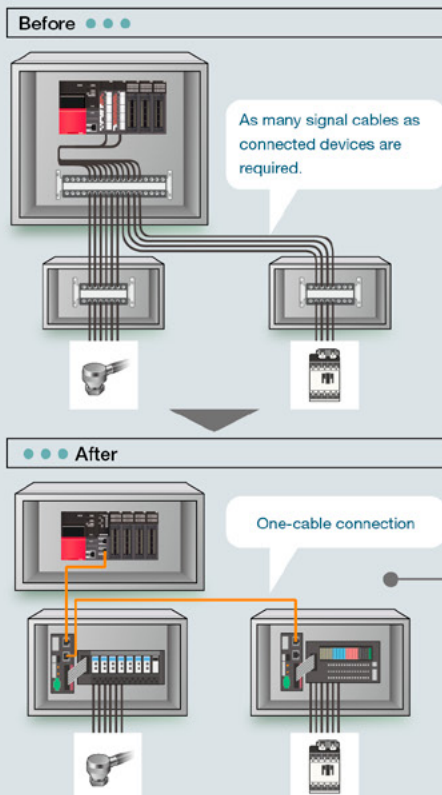
Using the switches on the network interface module allows you to select and set up a connection to CC-Link IE TSN, CC-Link IE Field, CC-Link IE Field Basic, SLMP¹ (general-purpose Ethernet), or MODBUS/TCP. (CC-Link-compatible products also available)



¹: Seamless Message Protocol

Easy wiring from the control panel to the system

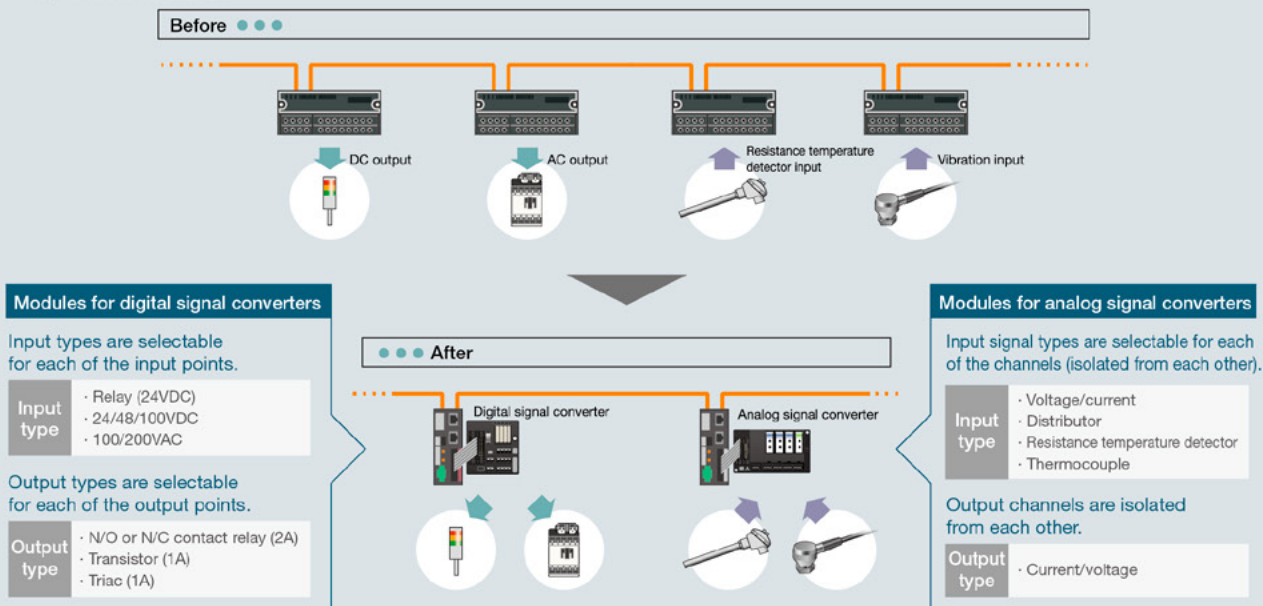
The module and the programmable controller are connected with one general-purpose Ethernet cable or CC-Link cable. The module can be installed near the devices used. When devices are added to the system, it is easy to support the extended system. When a dedicated cable is used, one-touch connection is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



For information on cables, refer to the back cover.

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.



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.

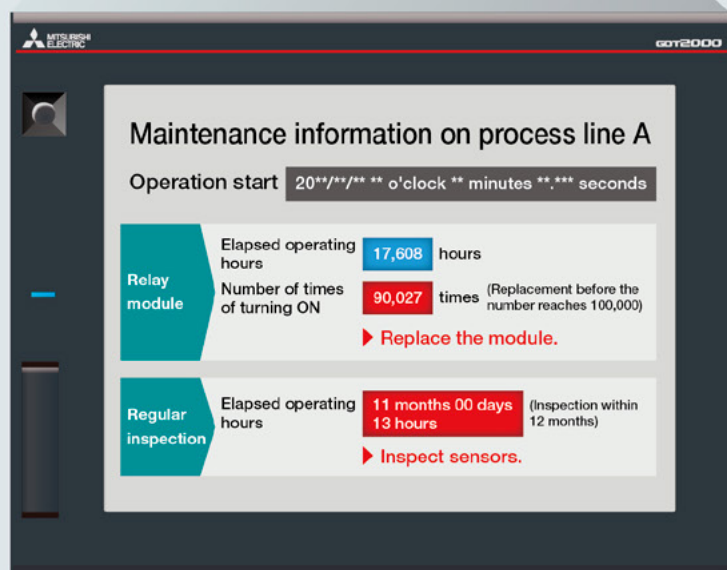
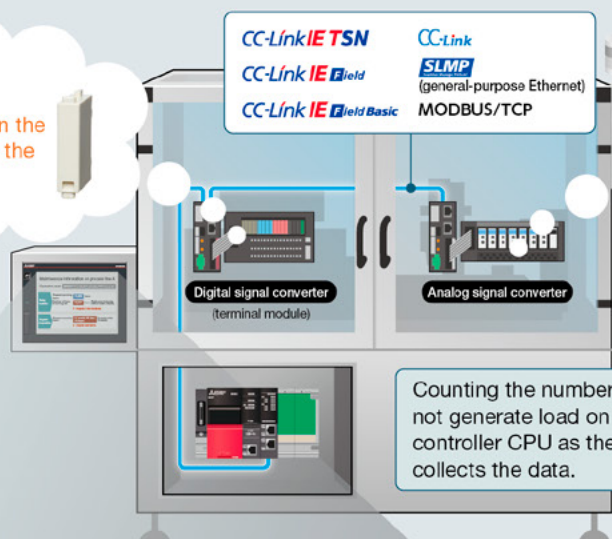
Maintenance alarm function

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.

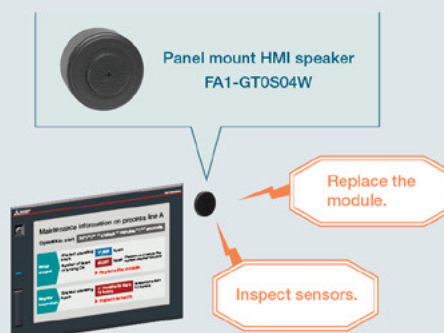
Life of the relay module based on the number of times the relay turns ON



- Regular inspection on sensors
- Battery replacement
- Filter cleaning
- Material replenishment or other purposes



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.

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

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

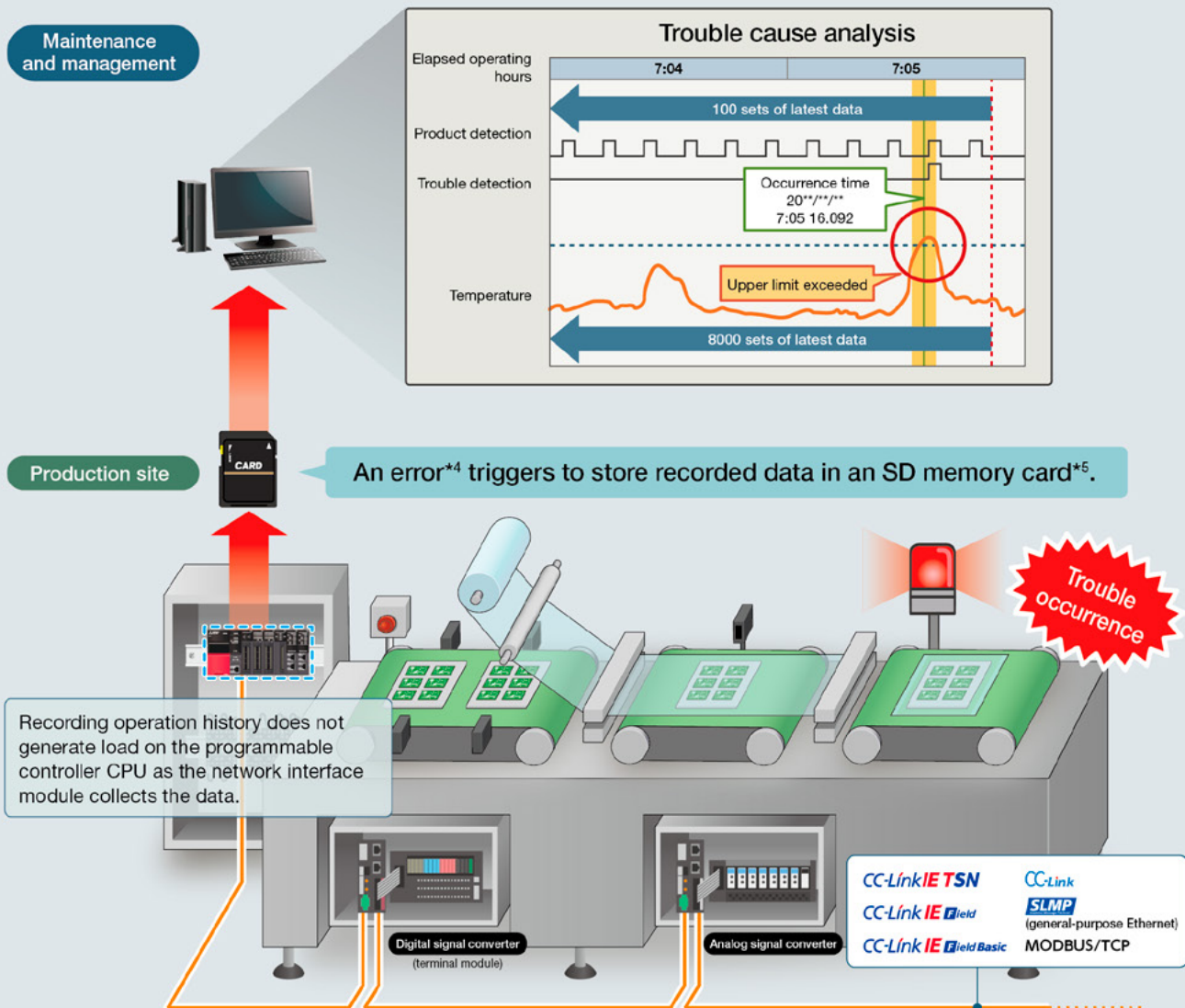
Recording the status history of digital and analog signals allows you to investigate the cause of troubles.

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	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			
			Module pre-mounted unit	24VDC (N/O contact)	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			
						16 points, independent (positive)	Spring clamp type	FA1-TH16X24RA1L20S1E		
								16 points, independent (negative)	FA1-TH16X24RA1H20S1E	
			Module built-in unit	24VDC	16 points, independent		Screw type (M3)	FA-TH16XRA20S		
					16 points/common, 2-wire type	Screw type (M3.5)	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	
						16 points/common, 2-wire type		Screw type (M3.5)	FA-TH16X100A31L	
					200VAC		16 points/common, 2-wire type		Screw type (M3)	FA-TH16X200A31
		16 points/common, 2-wire type		Screw type (M3.5)	FA-TH16X200A31L					
CC-Link IE Field master station ● MELIPC ● MELSEC iQ-R ● MELSEC iQ-F ● MELSEC-Q ● MELSEC-L ● MELSEC-F	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		
							Screw type (M3.5)	FA-TH16YRA20		
					16 points/common, 1-wire type		Screw type (M3)	FA-TH16YRA20SL		
							Screw type (M3)	FA-TH16YRA11S		
							Screw type (M3)	FA-TH16YRA11		
				16 points/common, 2-wire type			Screw type (M3)	FA-TH16YRA21S		
							Screw type (M3)	FA-TH16YRA21		
							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						
	16 points, independent, 2A (sink/source common)		Screw type (M3)	FA-TH16Y2TR20						
CC-Link master station ● MELSEC iQ-R ● MELSEC iQ-F ● MELSEC-Q ● MELSEC-L ● MELSEC-F	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		
					16 points, independent (source)		Spring clamp type	FA1-TH1E16Y1TR20S1E		
				Transistor (source)	16 points, independent (sink/source common)		Screw type (M3)	FA-THE16YTR20S		
					16 points/common, 1-wire type (source)		Screw type (M3)	FA-THE16YTH11S		
							Screw type (M3)	FA-THE16YTH11S		
							Screw type (M3)	FA-THE16YTH11S		
							Screw type (M3)	FA-THE16YTH11S		
			General-purpose controller (general-purpose Ethernet)	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
16 points, independent (source)		Screw type (M3)						FA1-TH1E16Y2RA20S		
Triac	16 points, independent (source)						Spring clamp type	FA1-TH1E16Y1SR20S1E		
	16 points, independent (source)						Spring clamp type	FA1-TH1E16Y1TR20S1E		
Transistor (source)	16 points, independent (sink/source common)						Screw type (M3)	FA-THE16YTR20S		
	16 points/common, 1-wire type (source)						Screw type (M3)	FA-THE16YTH11S		
							Screw type (M3)	FA-THE16YTH11S		
							Screw type (M3)	FA-THE16YTH11S		
							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	2 pcs	FA-NYP24WK*
			N/C contact relay (sky blue)	Output: 24VDC, 100 to 240VAC, 2A	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 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)			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.

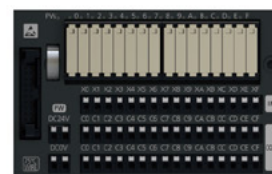
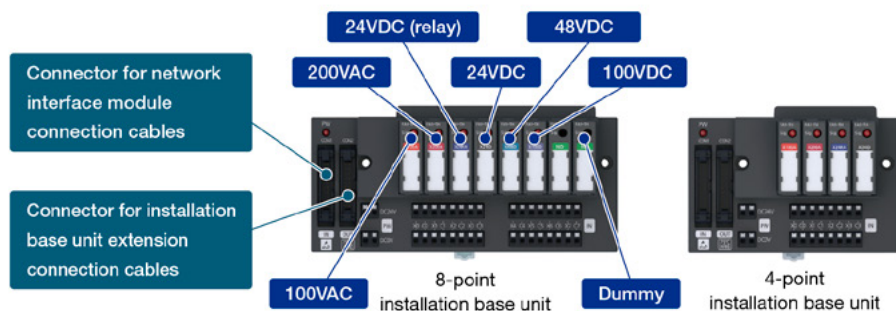
Digital signal converter (terminal module)

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

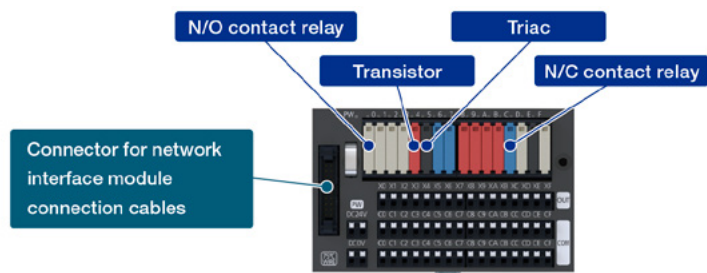
Different input voltages (24VDC, 48VDC, 100VDC, 100VAC, 200VAC) can be specified for each terminal according to the device type.



Unit with a 16-point relay module
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
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	+	Connectable module (Pass-through modules are not supported.)				
			Model		Specifications			Model	
<div>CC-Link IE TSN master station</div> <div>● MELSEC iQ-R</div> <div>● MELSEC iQ-F</div> <div>CC-Link IE Field master station</div> <div>● MELIPC</div> <div>● MELSEC iQ-R</div> <div>● MELSEC iQ-F</div> <div>● MELSEC-Q</div> <div>● MELSEC-L</div> <div>● MELSEC-F</div> <div>CC-Link IE Field Basic master station</div> <div>● MELIPC</div> <div>● MELSEC iQ-R</div> <div>● MELSEC iQ-F</div> <div>● MELSEC-Q</div> <div>● MELSEC-L</div> <div>SLMPclient</div> <div>● MELIPC</div> <div>● MELSEC iQ-R</div> <div>● MELSEC iQ-F</div> <div>● MELSEC-Q</div> <div>● MELSEC-L</div> <div>● MELSEC-F</div> <div>MODBUS/TCP</div> <div>● MELSEC iQ-R</div> <div>● MELSEC-Q</div> <div>● MELSEC-L</div> <div>CC-Link master station</div> <div>● MELSEC iQ-R</div> <div>● MELSEC iQ-F</div> <div>● MELSEC-Q</div> <div>● MELSEC-L</div> <div>● MELSEC-F</div> <div>General-purpose controller (general-purpose Ethernet)</div>	Analog signal converter Input model	Dedicated cable included FA3-AT1□8X-01C Dedicated cable not included FA3-AT1□8X	4-channel		+	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					
Analog signal converter Output model	Dedicated cable included FA3-AT1□8Y-01C Dedicated cable not included FA3-AT1□8Y	4-channel	+	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			

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

Analog signal converter

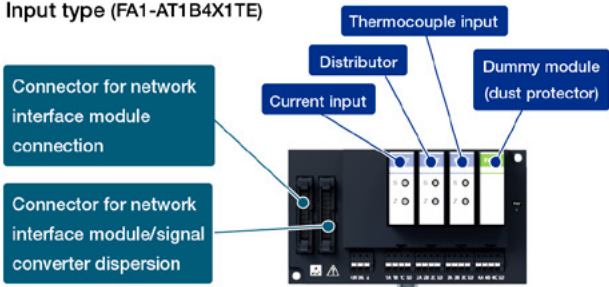
This converter is used to convert analog signals sent between the network interface module and temperature sensors or other devices. Channels are isolated from each other.

- Spring clamp terminal type
- Screw terminal type

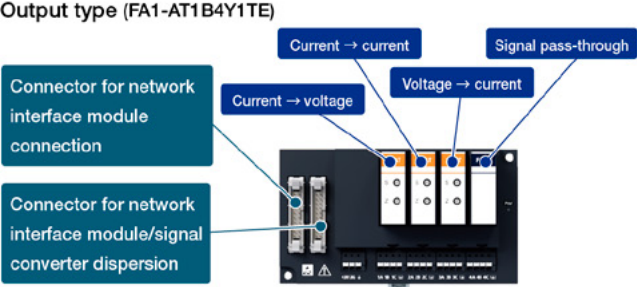
For input models, different types of analog inputs (voltage, current, distributor, thermocouple, resistance temperature detector) can be specified for each channel.

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 ON → OFF
	0.1/0.2/1/1.5/5/10/20/70ms or less ^{*1}
	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 ON → OFF	
	0.5ms or less ^{*2}	
	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 Digital output value
	1 to 5V 0 to 16000
Accuracy (accuracy for the maximum digital output value)	Ambient temperature: 0 to 55°C Ambient temperature: 25 ±5°C Maximum resolution
	±0.3% (±48 digits) ^{*3} ±0.1% (±16 digits) ^{*3} 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 Analog output range
	0 to 16000 1 to 5V
Accuracy	Ambient temperature: 0 to 55°C Ambient temperature: 25 ±5°C Maximum resolution
	±0.3% (±12mV) ^{*5} ±0.1% (±4mV) ^{*5} 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
	Station type	Remote station	Remote device station	Remote station	Server
	Certification class	Class B	-	-	-
	Topology	<ul style="list-style-type: none"> Line/star topology Mixture of star and line topologies 	<ul style="list-style-type: none"> Line/star topology Mixture of star and line topologies Ring 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 ON → OFF
	1.5ms or less ^{*1}
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 ON → OFF	
	0.5ms or less ^{*2} 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 Digital output value
	1 to 5V 0 to 16000
Accuracy (accuracy for the maximum digital output value)	Ambient temperature: 0 to 55°C Ambient temperature: 25 ±5°C Maximum resolution
	±0.3% (±48 digits) ^{*3} ±0.1% (±16 digits) ^{*3} 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 Analog output range
	0 to 16000 1 to 5V
Accuracy	Ambient temperature: 0 to 55°C Ambient temperature: 25 ±5°C Maximum resolution
	±0.3% (±12mV) ^{*5} ±0.1% (±4mV) ^{*5} 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 Transmission path type
	10M/5M/2.5M/625k/156kbps Bus type (EIA RS485 compliant)
External connection method	Communication section Module power supply section
	Two-piece spring clamp terminal block
Module installation	DIN rail installation or screw mounting with the supplied bracket
Module power supply	Voltage Current
	24VDC (ripple rate within 5%) (permissible voltage: 20.4 to 28.8VDC) Refer to the individual specifications. ^{*7}
External dimensions	105 (H) × 40 (W) × 70 (D) mm (not including the projections)
Conformity standards ^{*8}	UL, CE, KC

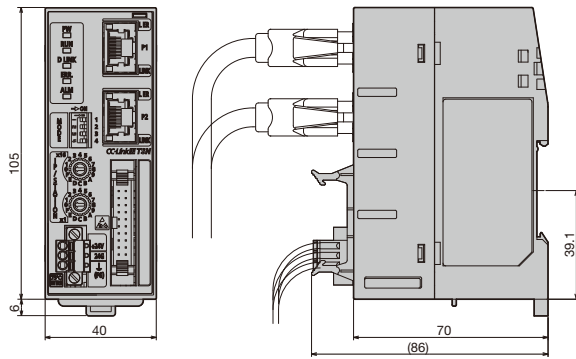
*7: Both the digital signal converter and analog signal converter require a 24VDC power supply. For details on the specifications, refer to the manual of each module.

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

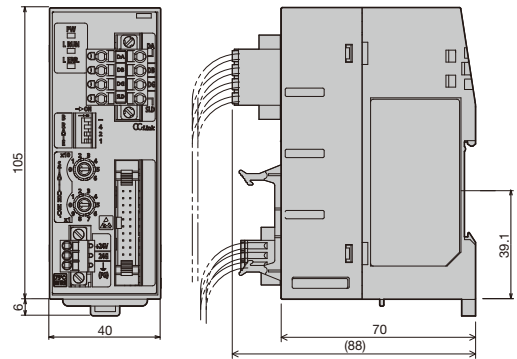
External dimensions

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.

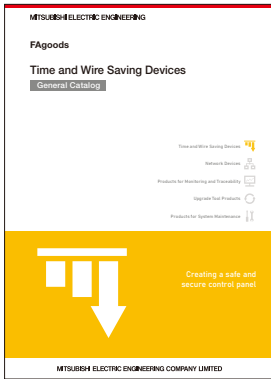
Name	Length	Model
CC-Link cable	200m ^{*1}	FA-CBL200SB
High-performance CC-Link cable	200m ^{*1}	FA-CBL200SBH
Vibration-resistant CC-Link cable for moving parts	200m ^{*1}	FA-CBL200SBZ
Ver.1.10-compatible CC-Link cable	200m ^{*1}	FA-CBL200PSBH
Ver.1.10-compatible vibration-resistant CC-Link cable for 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.

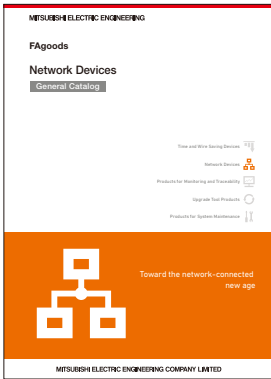
*2: Custom lengths are not available, but a 500-meter option is available.

■ Related catalogs

Time and Wire Saving Devices



Network Devices



■ Related leaflets

Digital Signal Converters (Terminal Modules)
(MEIC224E-226)



Analog Signal Converters
(MEIC220E-21Y)



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