MITSUBISHI ELECTRIC

TECHNICAL BULLETIN

FA-A-0333-D

Method for Replacing CC-Link IE Field Network Remote I/O Module with CC-Link IE TSN Remote I/O Module (CC-Link IE Field Network Communication Mode)

■Date of Issue

April 2021 (Ver. D: January 2026)

■Relevant Models

NZ2GF2S1-16D, NZ2GF2B1-32D, NZ2GF2B1N1-16D, NZ2GFCE3N-32D, NZ2GFCF1-32D, NZ2GF2S1-16T, NZ2GF2S1-16TE, NZ2GF2B1-32T, NZ2GF2B1-32TE, NZ2GF2B1N1-16T, NZ2GF2B1N1-16TE, NZ2GFCF1-32T, NZ2GF2B1-32DT, NZ2GF2B1-32DTE, NZ2GFCE3N-32DT, NZ2EX2S1-16D, NZ2EX2S1-16T, NZ2EX2S1-16TE, NZ2EX2B1N-16D, NZ2EX2B1N-16T, NZ2EX2B1N-16TE, NZ2GFCM1-16T, NZ2GFCM1-16TE, NZ2GFCM1-16D, NZ2GFCM1-16DE

Thank you for your continued support of Mitsubishi Electric programmable controllers.

To ensure stable product supply, we released CC-Link IE TSN remote I/O modules that can also be used for the CC-Link IE Field Network in 2019, and have gradually expanded our product lineup.

This technical bulletin describes how to replace a CC-Link IE Field Network remote I/O module with a CC-Link IE TSN remote I/O module (CC-Link IE Field Network communication mode). Please consider replacing the CC-Link IE Field Network remote I/O module with the alternative CC-Link IE TSN remote I/O module.

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1 PRECAUTIONS FOR REPLACEMENT

- Before replacing the remote I/O module, check the functions, specifications, grounding method, and usage in the manuals for each module used.

📖 CC-Link IE Field Network Remote I/O Module User's Manual (SH-081114ENG)

📖 CC-Link IE TSN Remote I/O Module User's Manual (CC-Link IE Field Network Communication Mode) (SH-082240ENG)

- After replacing the remote I/O module, perform an operation check for the entire system before operation.
- Use the firmware or software version that is compatible with the model you are replacing, as shown in the following table.

Model	Firmware version	Software version*2	
		GX Works3	GX Works2
NZ2GN2S1-32D, NZ2GN2B1-32D, NZ2GN2S1-32T, NZ2GN2B1-32T, NZ2GN2S1-32TE, NZ2GN2B1-32TE, NZ2GN2S1-32DT, NZ2GN2B1-32DT, NZ2GN2S1-32DTE, NZ2GN2B1-32DTE	02 or later*1	1.060N or later	1.590Q or later
NZ2GNCF1-32D, NZ2GNCE3-32D, NZ2GNCF1-32T, NZ2GNCE3-32DT		1.065T or later	1.595V or later
NZ2GN2S1-16D, NZ2GN2B1-16D, NZ2GN2S1-16T, NZ2GN2B1-16T, NZ2GN2S1-16TE, NZ2GN2B1-16TE		1.075D or later	1.605F or later

*1 The upper 2 digits of production information represents the firmware version at shipment.
These models support the firmware updates. For details, refer to the manual of each model.

*2 Diagnosing the replaced remote I/O module requires a specific version of software.

Point

Before replacement, confirm that the FG of the programmable controller system is grounded properly.
To ensure noise immunity, programmable controllers release noise to the ground through FGs.
Improper grounding of the FG alters system configuration, possibly causing the controller to be affected by noise. When it is difficult to check the grounding status, perform any of the following provisional measures.

- Perform independent grounding of the programmable controller system.
- Install ferrite cores on the ground cable and between module FG terminals.

2 ALTERNATIVE MODELS

2.1 List of Alternative Models

Main module

■Main input module

CC-Link IE Field Network remote I/O module				CC-Link IE TSN remote I/O module	
Module name		Number of points	Model	Module name	Model
DC input module	Spring clamp terminal block type	16	NZ2GF2S1-16D	Spring clamp terminal block type	NZ2GN2S1-16D
	Screw terminal block type	32	NZ2GF2B1-32D	Screw terminal block type	NZ2GN2B1-32D
	Screw terminal block type	16	NZ2GF2B1N1-16D	Screw terminal block type	NZ2GN2B1-16D
	Sensor connector (e-CON) type	32	NZ2GFCE3N-32D	Sensor connector (e-CON) type	NZ2GNCE3-32D
	40-pin connector type (FCN)	32	NZ2GFCF1-32D	40-pin connector type (FCN)	NZ2GNCF1-32D
	MIL connector type	16	NZ2GFCM1-16D	Screw terminal block type	NZ2GN2B1-16D*1
	MIL connector type	16	NZ2GFCM1-16DE	Screw terminal block type	NZ2GN2B1-16D*1

*1 There is no MIL connector type for the CC-Link IE TSN remote I/O modules. Please select a screw terminal block type as an alternative model.
In addition, I/O wiring must be rewired when replacing. For details, refer to the following.
☞ Page 27 MIL connector type

■Main output module

CC-Link IE Field Network remote I/O module				CC-Link IE TSN remote I/O module	
Module name		Number of points	Model	Module name	Model
DC output module	Spring clamp terminal block type	16	NZ2GF2S1-16T	Spring clamp terminal block type	NZ2GN2S1-16T
	Spring clamp terminal block type	16	NZ2GF2S1-16TE	Spring clamp terminal block type	NZ2GN2S1-16TE
	Screw terminal block type	32	NZ2GF2B1-32T	Screw terminal block type	NZ2GN2B1-32T
	Screw terminal block type	32	NZ2GF2B1-32TE	Screw terminal block type	NZ2GN2B1-32TE
	Screw terminal block type	16	NZ2GF2B1N1-16T	Screw terminal block type	NZ2GN2B1-16T
	Screw terminal block type	16	NZ2GF2B1N1-16TE	Screw terminal block type	NZ2GN2B1-16TE
	Sensor connector (e-CON) type	32	NZ2GFCE3N-32T	No alternative model	
	40-pin connector type (FCN)	32	NZ2GFCF1-32T	40-pin connector type (FCN)	NZ2GNCF1-32T
	MIL connector type	16	NZ2GFCM1-16T	Screw terminal block type	NZ2GN2B1-16T*1
	MIL connector type	16	NZ2GFCM1-16TE	Screw terminal block type	NZ2GN2B1-16TE*1

*1 There is no MIL connector type for the CC-Link IE TSN remote I/O modules. Please select a screw terminal block type as an alternative model.
In addition, I/O wiring must be rewired when replacing. For details, refer to the following.
☞ Page 27 MIL connector type

■Main I/O combined module

CC-Link IE Field Network remote I/O module				CC-Link IE TSN remote I/O module	
Module name		Number of points	Model	Module name	Model
DC I/O module	Screw terminal block type	32	NZ2GF2B1-32DT	Screw terminal block type	NZ2GN2B1-32DT
	Screw terminal block type	32	NZ2GF2B1-32DTE	Screw terminal block type	NZ2GN2B1-32DTE
	Sensor connector (e-CON) type	32	NZ2GFCE3N-32DT	Sensor connector (e-CON) type	NZ2GNCE3-32DT
	40-pin connector type (FCN)	32	NZ2GFCF1-32DT	No alternative model	

Extension module

For extension modules, there is no alternative CC-Link IE TSN remote I/O module. Depending on the combination of main module and extension module, select the appropriate alternative module.

■Extension input module

CC-Link IE Field Network remote I/O module			CC-Link IE TSN remote I/O module		Restrictions
Type of extension module	Model		Type of extension module	Model	
	Main module	Extension module			
Spring clamp terminal block type	NZ2GF2S1-16D (Number of modules that can be expanded: 1)	NZ2EX2S1-16D	Spring clamp terminal block type	NZ2GN2S1-32D	When the common wiring method for the main module differs from that of the extension module, unify the method to positive common or negative common.
	NZ2GF2S1-16T (Number of modules that can be expanded: 1)			NZ2GN2S1-32DT	Only the positive common is used for input.
	NZ2GF2S1-16TE (Number of modules that can be expanded: 1)			NZ2GN2S1-32DTE	Only the negative common is used for input.
Screw terminal block type	NZ2GF2B1N1-16D (Number of modules that can be expanded: 3)*1	NZ2EX2B1N-16D	Screw terminal block type	NZ2GN2B1-32D	When the common wiring method for the main module differs from that of the extension module, unify the method to positive common or negative common.
	NZ2GF2B1N1-16T (Number of modules that can be expanded: 3)*1			NZ2GN2B1-32DT	Only the positive common is used for input.
	NZ2GF2B1N1-16TE (Number of modules that can be expanded: 3)*1			NZ2GN2B1-32DTE	Only the negative common is used for input.

*1 When using two or more extension modules, increase the number of stations.

■Extension output module

CC-Link IE Field Network remote I/O module			CC-Link IE TSN remote I/O module		Restrictions
Type of extension module	Model		Type of extension module	Model	
	Main module	Extension module			
Spring clamp terminal block type	NZ2GF2S1-16D (Number of modules that can be expanded: 1)	NZ2EX2S1-16T	Spring clamp terminal block type	NZ2GN2S1-32DT	Only the positive common is used for input.
	NZ2GF2S1-16T (Number of modules that can be expanded: 1)			NZ2GN2S1-32T	When the external power supply for the output part differs between the main module and extension module, use the same external power supply.
	NZ2GF2S1-16TE (Number of modules that can be expanded: 1)			NZ2GN2S1-32T NZ2GN2S1-32TE	Unify the transistor output to source type or sink type.
	NZ2GF2S1-16D (Number of modules that can be expanded: 1)	NZ2EX2S1-16TE		NZ2GN2S1-32DTE	Only the negative common is used for input.
	NZ2GF2S1-16T (Number of modules that can be expanded: 1)			NZ2GN2S1-32T NZ2GN2S1-32TE	Unify the transistor output to source type or sink type.
	NZ2GF2S1-16TE (Number of modules that can be expanded: 1)			NZ2GN2S1-32TE	When the external power supply for the output part differs between the main module and extension module, use the same external power supply.
Screw terminal block type	NZ2GF2B1N1-16D (Number of modules that can be expanded: 3)*1	NZ2EX2B1N-16T	Screw terminal block type	NZ2GN2B1-32DT	Only the positive common is used for input.
	NZ2GF2B1N1-16T (Number of modules that can be expanded: 3)*1			NZ2GN2B1-32T	When the external power supply for the output part differs between the main module and extension module, use the same external power supply.
	NZ2GF2B1N1-16TE (Number of modules that can be expanded: 3)*1			NZ2GN2B1-32T NZ2GN2B1-32TE	Unify the transistor output to source type or sink type.
	NZ2GF2B1N1-16D (Number of modules that can be expanded: 3)*1	NZ2EX2B1N-16TE		NZ2GN2B1-32DTE	Only the negative common is used for input.
	NZ2GF2B1N1-16T (Number of modules that can be expanded: 3)*1			NZ2GN2B1-32T NZ2GN2B1-32TE	Unify the transistor output to source type or sink type.
	NZ2GF2B1N1-16TE (Number of modules that can be expanded: 3)*1			NZ2GN2B1-32TE	When the external power supply for the output part differs between the main module and extension module, use the same external power supply.

*1 When using two or more extension modules, increase the number of stations.

2.2 Comparison of Specifications

The following table shows a comparison of specifications. For specifications other than those in the table below, refer to the manuals for each module used.

Input module

NZ2GF2S1-16D and NZ2GN2S1-16D

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2S1-16D	NZ2GN2S1-16D	
Station type		Remote device station	Remote device station	—
Rated input current		6.0mA TYP. (for 24VDC)	6.6mA TYP. (for 24VDC)	—
Maximum number of simultaneous input points		100%	100%	—
ON voltage/ON current		15VDC or more/4mA or more	11VDC or more/4mA or more	There is no influence because the ON range is expanded.
OFF voltage/OFF current		5VDC or less/1.5mA or less	5VDC or less/1.5mA or less	
Input resistance		3.8kΩ	3.3kΩ	—
Input response time		0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (Initial setting: 10ms)	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (At shipment: 1ms)	Change the settings according to the usage status.
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*1
	I/O part	2-piece spring clamp terminal block	2-piece spring clamp terminal block	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RX/RY)		Number of points used: 16 × (1 + Number of extension modules)	Number of points used: 16	*2
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*3
Availability of connecting extension module		Available (only 1 module)	Not available	*4
Module power supply (current)		180mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight		0.31kg	0.15kg	—

*1 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block

*2 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module

*3 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

*4 When extension modules are used, refer to the following.
☞ Page 4 Extension module

NZ2GF2B1-32D and NZ2GN2B1-32D

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2B1-32D	NZ2GN2B1-32D	
Station type		Intelligent device station	Intelligent device station	—
ON voltage/ON current		15VDC or more/4mA or more	11VDC or more/4mA or more	There is no influence because the ON range is expanded.
OFF voltage/OFF current		5VDC or less/1.5mA or less	5VDC or less/1.5mA or less	
Input resistance		3.8kΩ	3.3kΩ	—
Input response time		0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (Initial setting: 10ms)	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (At shipment: 1ms)	Change the settings according to the usage status.
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*1
	I/O part	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*2
Module power supply (current)		120mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight		0.38kg	0.31kg	—

*1 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block

*2 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

NZ2GF2B1N1-16D, NZ2GFCM1-16D, or NZ2GFCM1-16DE and NZ2GN2B1-16D

Item		Model				Cautions on replacement
		CC-Link IE Field Network remote I/O module			CC-Link IE TSN remote I/O module	
		NZ2GF2B1N1-16D	NZ2GFCM1-16D	NZ2GFCM1-16DE	NZ2GN2B1-16D	
Input type		DC input (positive/ negative common shared type)	DC input (positive common input)	DC input (negative common input)	DC input (positive/ negative common shared type)	—
Station type		Remote device station			Remote device station	—
Rated input current		6.0mA TYP. (for 24VDC)	4.0mA TYP. (for 24VDC)		6.6mA TYP. (for 24VDC)	—
Maximum number of simultaneous input points		100%	Refer to the derating chart.		100%	—
ON voltage/ON current		15VDC or more/4mA or more	17VDC or more/3mA or more		11VDC or more/4mA or more	There is no influence because the ON range is expanded.
OFF voltage/OFF current		5VDC or less/1.5mA or less			5VDC or less/1.5mA or less	
Input resistance		3.8kΩ	5.7kΩ		3.3kΩ	—
Input response time		0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (Initial setting: 10ms)			0ms/0.2ms/1ms/1.5ms/ 5ms/10ms/20ms/70ms (At shipment: 1ms)	Change the settings according to the usage status.
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	One-touch connector for power supply and FG (sold separately)		Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*1
	I/O part	18-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	20-pin MIL connector (sold separately)		18-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block			Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RX/RY)		Number of points used: 16 × (1 + Number of extension modules)			Number of points used: 16	*2
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)			Number of points used: 4 (Default value. Can be changed.)	*3
Availability of connecting extension module		Available (up to 3 module)	Available (only 1 module)		Not available	*4
Module power supply (current)		120mA or less (24VDC, all points ON)	180mA or less (24VDC, all points ON)		110mA or less (24VDC, all points ON)	—
Weight		0.30kg	0.24kg		0.21kg	—

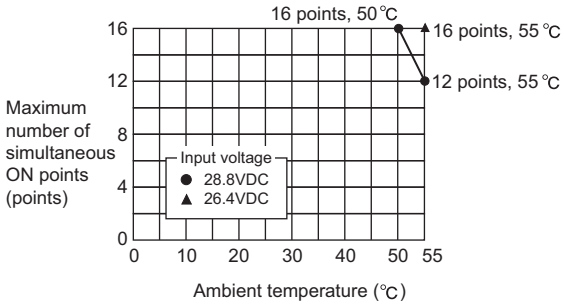
*1 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block

*2 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module

*3 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

*4 When extension modules are used, refer to the following.
☞ Page 4 Extension module

Derating chart



NZ2GFCE3N-32D and NZ2GNCE3-32D

Item	Model		Cautions on replacement
	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
	NZ2GFCE3N-32D	NZ2GNCE3-32D	
Station type	Remote device station	Intelligent device station	*1
Rated input current	4.0mA TYP. (for 24VDC)	6.6mA TYP. (for 24VDC)	—
ON voltage/ON current	17VDC or more/3mA or more	11VDC or more/4mA or more	There is no influence because the ON range is expanded.
OFF voltage/OFF current	5VDC or less/1.5mA or less	5VDC or less/1.5mA or less	
Input resistance	5.7kΩ	3.3kΩ	—
Input response time	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (Initial setting: 10ms)	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (At shipment: 1ms)	Change the settings according to the usage status.
Cyclic transmission (RX/RY)	Number of points used: 32 + 16 × Number of extension modules	Number of points used: 32	*2
Cyclic transmission (RWr/RWw)	Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*3
Availability of connecting extension module	Available (only 1 module)	Not available	*4
Module power supply (current)	100mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight	0.30kg	0.25kg	—

*1 Profiles cannot be replaced using an engineering tool. Create new profiles.

*2 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module

*3 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

*4 When using any extension modules, increase the number of stations.

NZ2GFCF1-32D and NZ2GNCF1-32D

Item	Model		Cautions on replacement
	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
	NZ2GFCF1-32D	NZ2GNCF1-32D	
Station type	Intelligent device station	Intelligent device station	—
Rated input current	4.0mA TYP. (for 24VDC)	6.6mA TYP. (for 24VDC)	—
ON voltage/ON current	19VDC or more/3mA or more	11VDC or more/4mA or more	There is no influence because the ON range is expanded.
OFF voltage/OFF current	5VDC or less/1.5mA or less	5VDC or less/1.5mA or less	
Input resistance	5.7kΩ	3.3kΩ	—
Input response time	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (Initial setting: 10ms)	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (At shipment: 1ms)	Change the settings according to the usage status.
Cyclic transmission (RX/RY)	Number of points used: 32 + 16 × Number of extension modules	Number of points used: 32	*1
Cyclic transmission (RWr/RWw)	Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*2
Availability of connecting extension module	Available (only 1 module)	Not available	*3
Module power supply (current)	100mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight	0.26kg	0.20kg	—

*1 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module

*2 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

*3 When using any extension modules, increase the number of stations.

Output module

NZ2GF2S1-16T and NZ2GN2S1-16T

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2S1-16T	NZ2GN2S1-16T	
Station type		Remote device station	Remote device station	—
Output response time	OFF → ON	0.5ms or less	0.1ms or less	*1
	ON → OFF	1.5ms or less (resistive load)	0.8ms or less (resistive load)	
External power supply for output part	Voltage	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	8mA or lower (TYP. 24VDC/common). External load current is not included.	40mA or lower (TYP. 24VDC/common). External load current is not included.	
Protection function	Overload protection function	Limited current when overcurrent is detected: 1A or more/point. Activated at each point.	Limited current when overcurrent is detected: 1.5 to 3.5A/point. Activated at each point.	*2
	Overheat protection function	Activated at each point.	Activated at each point.	
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*3
	I/O part	2-piece spring clamp terminal block	2-piece spring clamp terminal block	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RX/RY)		Number of points used: 16 × (1 + Number of extension modules)	Number of points used: 16	*4
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*5
Availability of connecting extension module		Available (only 1 module)	Not available	*6
Module power supply (current)		190mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight		0.31kg	0.15kg	—

*1 Response time is shortened. Perform operation verification as required.
*2 Output current value limited when overcurrent is detected differs. However, there is no influence for normal operation.
*3 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block
*4 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module
*5 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)
*6 When extension modules are used, refer to the following.
☞ Page 4 Extension module

NZ2GF2S1-16TE and NZ2GN2S1-16TE

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2S1-16TE	NZ2GN2S1-16TE	
Station type		Remote device station	Remote device station	—
Max. voltage drop at ON		0.5VDC (TYP.) 0.5A, 0.8VDC (MAX.) 0.5A	0.5VDC (TYP.) 0.5A, 0.8VDC (MAX.) 0.5A	—
Output response time	OFF → ON	0.5ms or less	0.5ms or less	*1
	ON → OFF	1.5ms or less (resistive load)	1.0ms or less (resistive load)	
External power supply for output part	Voltage	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	21mA or lower (TYP. 24VDC/common). External load current is not included.	80mA or lower (TYP. 24VDC/common). External load current is not included.	
Protection function	Overload protection function	Limited current when overcurrent is detected: 1A or more/point. Activated at each point.	Limited current when overcurrent is detected: 1.5A or more/point. Activated at each point.	*2
	Overheat protection function	Activated at each point.	Activated at each point.	
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*3
	I/O part	2-piece spring clamp terminal block	2-piece spring clamp terminal block	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RX/RY)		Number of points used: 16 × (1 + Number of extension modules)	Number of points used: 16	*4
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*5
Availability of connecting extension module		Available (only 1 module)	Not available	*6
Module power supply (current)		190mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight		0.31kg	0.15kg	—

*1 Response time is shortened. Perform operation verification as required.
*2 Output current value limited when overcurrent is detected differs. However, there is no influence for normal operation.
*3 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block
*4 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module
*5 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)
*6 When extension modules are used, refer to the following.
☞ Page 4 Extension module

NZ2GF2B1-32T and NZ2GN2B1-32T

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2B1-32T	NZ2GN2B1-32T	
Station type		Intelligent device station	Intelligent device station	—
Output response time	OFF → ON	0.5ms or less	0.1ms or less	*1
	ON → OFF	1.5ms or less (resistive load)	0.8ms or less (resistive load)	
External power supply for output part	Voltage	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	25mA or lower (TYP. 24VDC/common). External load current is not included.	40mA or lower (TYP. 24VDC/common). External load current is not included.	
Protection function	Overload protection function	Limited current when overcurrent is detected: 1A or more/point. Activated at each point.	Limited current when overcurrent is detected: 1.5 to 3.5A/point. Activated at each point.	*2
	Overheat protection function	Activated at each point.	Activated at each point.	
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*3
	I/O part	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*4
Module power supply (current)		130mA or less (24VDC, all points ON)	120mA or less (24VDC, all points ON)	—
Weight		0.38kg	0.29kg	—

*1 Response time is shortened. Perform operation verification as required.

*2 Output current value limited when overcurrent is detected differs. However, there is no influence for normal operation.

*3 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block

*4 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

NZ2GF2B1-32TE and NZ2GN2B1-32TE

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2B1-32TE	NZ2GN2B1-32TE	
Station type		Intelligent device station	Intelligent device station	—
Output response time	OFF → ON	0.5ms or less	0.5ms or less	*1
	ON → OFF	1.5ms or less (resistive load)	1.0ms or less (resistive load)	
External power supply for output part	Voltage	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	50mA or lower (TYP. 24VDC/common). External load current is not included.	80mA or lower (TYP. 24VDC/common). External load current is not included.	
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*2
	I/O part	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*3
Module power supply (current)		130mA or less (24VDC, all points ON)	120mA or less (24VDC, all points ON)	—
Weight		0.38kg	0.29kg	—

*1 Response time is shortened. Perform operation verification as required.

*2 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block

*3 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

NZ2GF2B1N1-16T or NZ2GFCM1-16T and NZ2GN2B1-16T

Item		Model			Cautions on replacement
		CC-Link IE Field Network remote I/O module		CC-Link IE TSN remote I/O module	
		NZ2GF2B1N1-16T	NZ2GFCM1-16T	NZ2GN2B1-16T	
Station type		Remote device station		Remote device station	—
Output response time	OFF → ON	0.5ms or less		0.1ms or less	*1
	ON → OFF	1.5ms or less (resistive load)		0.8ms or less (resistive load)	
External power supply for output part	Voltage	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)		12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	8mA or lower (TYP. 24VDC/common). External load current is not included.		40mA or lower (TYP. 24VDC/common). External load current is not included.	
Protection function	Overload protection function	Limited current when overcurrent is detected: 1A or more/point. Activated at each point.		Limited current when overcurrent is detected: 1.5 to 3.5A/point. Activated at each point.	*2
	Overheat protection function	Activated at each point.		Activated at each point.	
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	One-touch connector for power supply and FG (sold separately)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*3
	I/O part	18-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	20-pin MIL connector (sold separately)	18-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RX/RY)		Number of points used: 16 × (1 + Number of extension modules)		Number of points used: 16	*4
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)		Number of points used: 4 (Default value. Can be changed.)	*5
Availability of connecting extension module		Available (up to 3 module)	Available (only 1 module)	Not available	*6
Module power supply (current)		130mA or less (24VDC, all points ON)	190mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight		0.30kg	0.24kg	0.21kg	—

*1 Response time is shortened. Perform operation verification as required.
*2 Output current value limited when overcurrent is detected differs. However, there is no influence for normal operation.
*3 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block
*4 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module
*5 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)
*6 When extension modules are used, refer to the following.
☞ Page 4 Extension module

NZ2GF2B1N1-16TE or NZ2GFCM1-16TE and NZ2GN2B1-16TE

Item		Model			Cautions on replacement
		CC-Link IE Field Network remote I/O module		CC-Link IE TSN remote I/O module	
		NZ2GF2B1N1-16TE	NZ2GFCM1-16TE	NZ2GN2B1-16TE	
Station type		Remote device station		Remote device station	—
Output response time	OFF → ON	0.5ms or less		0.5ms or less	*1
	ON → OFF	1.5ms or less (resistive load)		1.0ms or less (resistive load)	
External power supply for output part	Voltage	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)		12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	21mA or lower (TYP. 24VDC/common). External load current is not included.		80mA or lower (TYP. 24VDC/common). External load current is not included.	
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	One-touch connector for power supply and FG (sold separately)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*2
	I/O part	18-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	20-pin MIL connector (sold separately)	18-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RX/RY)		Number of points used: 16 × (1 + Number of extension modules)		Number of points used: 16	*3
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)		Number of points used: 4 (Default value. Can be changed.)	*4
Availability of connecting extension module		Available (up to 3 module)	Available (only 1 module)	Not available	*5
Module power supply (current)		130mA or less (24VDC, all points ON)	190mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight		0.30kg	0.24kg	0.21kg	—

*1 Response time is shortened. Perform operation verification as required.

*2 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block

*3 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module

*4 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

*5 When extension modules are used, refer to the following.
☞ Page 4 Extension module

NZ2GFCF1-32T and NZ2GNCF1-32T

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GFCF1-32T	NZ2GNCF1-32T	
Station type		Intelligent device station	Intelligent device station	—
Output response time	OFF → ON	0.5ms or less	0.1ms or less	*1
	ON → OFF	1.5ms or less (resistive load)	0.8ms or less (resistive load)	
External power supply for output part	Voltage	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	12/24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 10.2 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	15mA or lower (TYP. 24VDC/common). External load current is not included.	40mA or lower (TYP. 24VDC/common). External load current is not included.	
Cyclic transmission (RX/RY)		Number of points used: 32 + 16 × Number of extension modules	Number of points used: 32	*2
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*3
Availability of connecting extension module		Available (only 1 module)	Not available	*4
Module power supply (current)		110mA or less (24VDC, all points ON)	120mA or less (24VDC, all points ON)	—
Weight		0.26kg	0.16kg	—

*1 Response time is shortened. Perform operation verification as required.

*2 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module

*3 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

*4 When using any extension modules, increase the number of stations.

I/O combined module

NZ2GF2B1-32DT and NZ2GN2B1-32DT

■Input specifications

Item	Model		Cautions on replacement
	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
	NZ2GF2B1-32DT	NZ2GN2B1-32DT	
ON voltage/ON current	15VDC or more/4mA or more	11VDC or more/4mA or more	There is no influence because the ON range is expanded.
OFF voltage/OFF current	5VDC or less/1.5mA or less	5VDC or less/1.5mA or less	
Input resistance	3.8kΩ	3.3kΩ	—
Input response time	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (Initial setting: 10ms)	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (At shipment: 1ms)	Change the settings according to the usage status.

■Output specifications

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2B1-32DT	NZ2GN2B1-32DT	
Output response time	OFF → ON	0.5ms or less	0.1ms or less	*1
	ON → OFF	1.5ms or less (resistive load)	0.8ms or less (resistive load)	
External power supply for output part	Voltage	24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 20.4 to 28.8VDC)	24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 20.4 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	15mA or lower (24VDC, all points ON). External load current is not included.	25mA or lower (TYP. 24VDC/common). External load current is not included.	
Protection function	Overload protection function	Limited current when overcurrent is detected: 1A or more/point. Activated at each point.	Limited current when overcurrent is detected: 1.5 to 3.5A/point. Activated at each point.	*2
	Overheat protection function	Activated at each point.	Activated at each point.	

*1 Response time is shortened. Perform operation verification as required.
*2 Output current value limited when overcurrent is detected differs. However, there is no influence for normal operation.

■Common specifications

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2B1-32DT	NZ2GN2B1-32DT	
Station type		Intelligent device station	Intelligent device station	—
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*1
	I/O part	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*2
Module power supply (current)		120mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight		0.38kg	0.31kg	—

*1 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block

*2 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

NZ2GF2B1-32DTE and NZ2GN2B1-32DTE

■Input specifications

Item	Model		Cautions on replacement
	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
	NZ2GF2B1-32DTE	NZ2GN2B1-32DTE	
ON voltage/ON current	15VDC or more/4mA or more	11VDC or more/4mA or more	There is no influence because the ON range is expanded.
OFF voltage/OFF current	5VDC or less/1.5mA or less	5VDC or less/1.5mA or less	
Input resistance	3.8kΩ	3.3kΩ	—
Input response time	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (Initial setting: 10ms)	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (At shipment: 1ms)	Change the settings according to the usage status.

■Output specifications

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2B1-32DTE	NZ2GN2B1-32DTE	
Output response time	OFF → ON	0.5ms or less	0.5ms or less	*1
	ON → OFF	1.5ms or less (resistive load)	1.0ms or less (resistive load)	
External power supply for output part	Voltage	24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 20.4 to 28.8VDC)	24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 20.4 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	30mA or lower (24VDC, all points ON). External load current is not included.	45mA or lower (TYP. 24VDC/common). External load current is not included.	

*1 Response time is shortened. Perform operation verification as required.

■Common specifications

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GF2B1-32DTE	NZ2GN2B1-32DTE	
Station type		Intelligent device station	Intelligent device station	—
External interface	Module power supply part	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	Terminal block for module power supply and FG (2-piece spring clamp terminal block)	*1
	I/O part	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	34-point 2-piece terminal block Tightening torque range for terminal screw (M3 × 5.2): 0.43 to 0.57N·m	
Applicable solderless terminal		Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	Refer to the following. ☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block	—
Cyclic transmission (RWr/RWw)		Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*2
Module power supply (current)		120mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight		0.38kg	0.31kg	—

*1 The shapes of module power supply terminal block and I/O terminal block differ. Change the wiring. For details, refer to the following.
☞ Page 25 Comparison of Applicable Solderless Terminal for Each Terminal Block

*2 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)

NZ2GFCE3N-32DT and NZ2GNCE3-32DT

■Input specifications

Item	Model		Cautions on replacement
	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
	NZ2GFCE3N-32DT	NZ2GNCE3-32DT	
Rated input current	4.0mA TYP. (20.4 to 28.8VDC)	6.6mA TYP. (for 24VDC)	—
ON voltage/ON current	17VDC or more/3mA or more	11VDC or more/4mA or more	There is no influence because the ON range is expanded.
OFF voltage/OFF current	5VDC or less/1.5mA or less	5VDC or less/1.5mA or less	
Input resistance	5.7kΩ	3.3kΩ	—
Input response time	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (Initial setting: 10ms)	0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (At shipment: 1ms)	Change the settings according to the usage status.

■Output specifications

Item		Model		Cautions on replacement
		CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
		NZ2GFCE3N-32DT	NZ2GNCE3-32DT	
Output response time	OFF → ON	0.5ms or less	0.1ms or less	*1
	ON → OFF	1.5ms or less (resistive load)	0.8ms or less (resistive load)	
External power supply for output part	Voltage	24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 20.4 to 28.8VDC)	24VDC (Ripple ratio: 5% or less) (Allowable voltage range: 20.4 to 28.8VDC)	Power consumption differs. Check the allowable current range for the power supply used.
	Current	10mA or lower (24VDC, all points ON). External load current is not included.	25mA or lower (TYP. 24VDC/common). External load current is not included.	
Protection function	Overload protection function	Limited current when overcurrent is detected: 1A or more/point. Activated at each point.	Limited current when overcurrent is detected: 1.5 to 3.5A/point. Activated at each point.	*2
	Overheat protection function	Activated at each point.	Activated at each point.	

*1 Response time is shortened. Perform operation verification as required.
*2 Output current value limited when overcurrent is detected differs. However, there is no influence for normal operation.

■Common specifications

Item	Model		Cautions on replacement
	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
	NZ2GFCE3N-32DT	NZ2GNCE3-32DT	
Station type	Remote device station	Intelligent device station	*1
Cyclic transmission (RX/RY)	Number of points used: 32 + 16 × Number of extension modules	Number of points used: 32	*2
Cyclic transmission (RWr/RWw)	Number of points used: 20 (Default value. Can be changed.)	Number of points used: 4 (Default value. Can be changed.)	*3
Availability of connecting extension module	Available (only 1 module)	Not available	*4
Module power supply (current)	110mA or less (24VDC, all points ON)	110mA or less (24VDC, all points ON)	—
Weight	0.30kg	0.25kg	—

*1 Profiles cannot be replaced using an engineering tool. Create new profiles.
*2 There is no influence when no extension module is used. When extension modules are used, refer to the following.
☞ Page 4 Extension module
*3 When cyclic transmission is used in the CC-Link IE Field Network communication mode, the device layout (device number) may differ or some remote register areas cannot be used. For details, refer to the following.
☞ Page 29 Remote register (RWr, RWw)
*4 When using any extension modules, increase the number of stations.

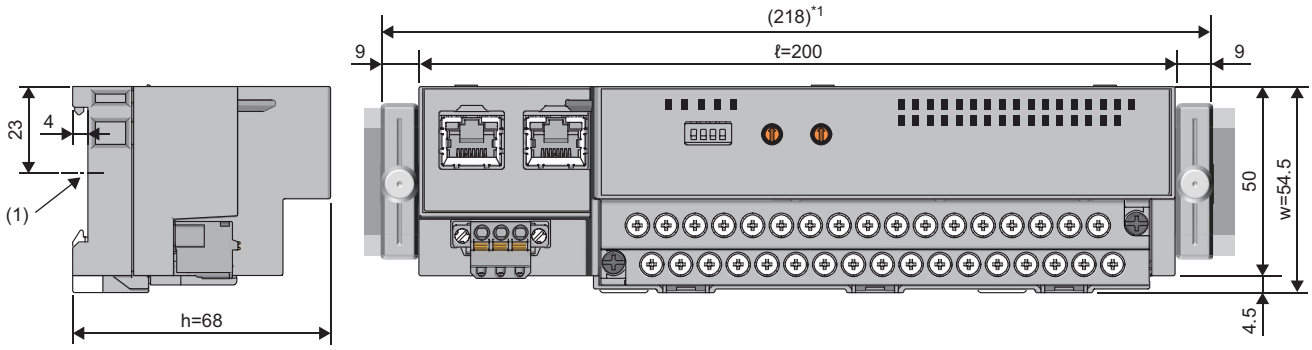
2.3 Comparison of Module Size

Module name		CC-Link IE Field Network remote I/O module			CC-Link IE TSN remote I/O module		
		Model			Model		
		Length (l) (mm)*1	Width (w) (mm)	Height (h) (mm)	Length (l) (mm)	Width (w) (mm)	Height (h) (mm)
DC input module	Spring clamp terminal block type	NZ2GF2S1-16D			NZ2GN2S1-16D		
		133 (151)	54.5	68	147	58	45.5
	Screw terminal block type	NZ2GF2B1-32D			NZ2GN2B1-32D		
		200 (218)	54.5	68	200	58	57
	Screw terminal block type	NZ2GF2B1N1-16D			NZ2GN2B1-16D		
		133 (151)	54.5	68	147	58	57
	Sensor connector (e-CON) type	NZ2GFCE3N-32D			NZ2GNCE3-32D		
		194 (212)	54.5	72.5	200	58	50.1
	40-pin connector type (FCN)	NZ2GFCF1-32D			NZ2GNCF1-32D		
		163 (181)	54.5	68	179	58	38.9
	MIL connector type	NZ2GFCM1-16D, NZ2GFCM1-16DE			NZ2GN2B1-16D		
		133 (151)	54.5	68	147	58	45.5
DC output module	Spring clamp terminal block type	NZ2GF2S1-16T, NZ2GF2S1-16TE			NZ2GN2S1-16T, NZ2GN2S1-16TE		
		133 (151)	54.5	68	147	58	45.5
	Screw terminal block type	NZ2GF2B1-32T, NZ2GF2B1-32TE			NZ2GN2B1-32T, NZ2GN2B1-32TE		
		200 (218)	54.5	68	200	58	57
	Screw terminal block type	NZ2GF2B1N1-16T, NZ2GF2B1N1-16TE			NZ2GN2B1-16T, NZ2GN2B1-16TE		
		133 (151)	54.5	68	147	58	57
	40-pin connector type (FCN)	NZ2GFCF1-32T			NZ2GNCF1-32T		
		163 (181)	54.5	68	179	58	38.9
	MIL connector type	NZ2GFCM1-16T, NZ2GFCM1-16TE			NZ2GN2B1-16T, NZ2GN2B1-16TE		
		133 (151)	54.5	68	147	58	45.5
DC I/O module	Screw terminal block type	NZ2GF2B1-32DT, NZ2GF2B1-32DTE			NZ2GN2B1-32DT, NZ2GN2B1-32DTE		
		200 (218)	54.5	68	200	58	57
	Sensor connector (e-CON) type	NZ2GFCE3N-32DT			NZ2GNCE3-32DT		
		194 (212)	54.5	72.5	200	58	50.1

*1 The number in the parentheses is the dimension including the length of fixing brackets. When a CC-Link IE TSN remote I/O module is mounted, no fixing bracket is required.

Dimensions example

• NZ2GF2B1-32D (CC-Link IE Field Network remote I/O module)

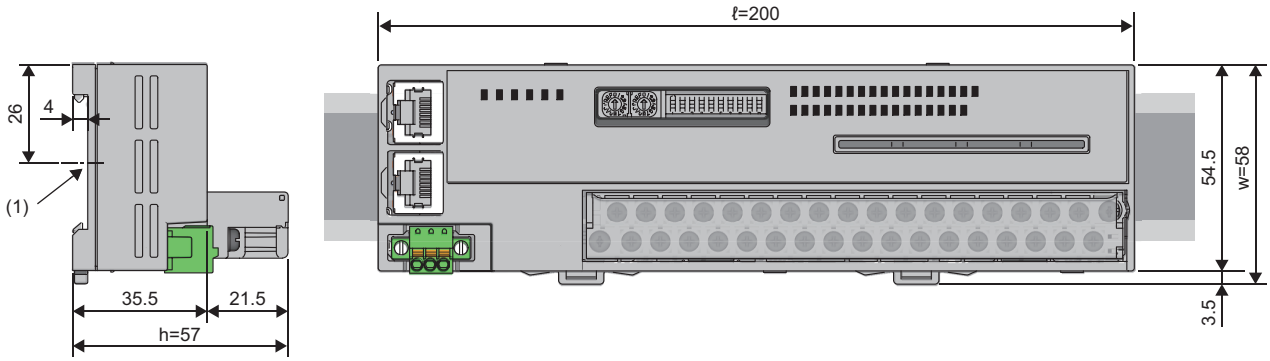


(1) Center of DIN rail

(Unit: mm)

*1 The dimension includes the length of fixing brackets.

• NZ2GN2B1-32D (CC-Link IE TSN remote I/O module)



(1) Center of DIN rail

(Unit: mm)

2.4 Comparison of Applicable Solderless Terminal for Each Terminal Block

Module power supply terminal block

Spring clamp terminal block type, screw terminal block, 40-pin connector type (FCN)

The shape of module power supply terminal block for the CC-Link IE Field Network remote I/O module differs from that for the CC-Link IE TSN remote I/O module. When replacing, change the wiring.
Applicable solderless terminals differ as shown in the following table.
○: Available, —: Not available

Model	Applicable wire size	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	Applicable crimping tool	Reference
TE0.5-8	0.3 to 0.5mm²	○	○	NH-79A (Succeeding product of NH-79)	NICHIFU Co., Ltd.
TE0.5-10		○	○		
TE0.75-8	0.75mm²	○	○		
TE0.75-10		○	○		
TE1.0-8	1.0mm²	○	—		
TE1.0-10		○	—		
TE1.5-8	1.5mm²	○	—		
TE1.5-10		○	—		
AI0.34-8TQ	0.34mm²	○	—	CRIMPFOX6	PHOENIX CONTACT GmbH & Co. KG
AI0.34-10TQ		—	○		
AI0.5-8WH	0.5mm²	○	—		
AI0.5-10WH		○	○		
AI0.75-8GY	0.75mm²	○	—		
AI0.75-10GY		○	○		
AI1-8RD	1.0mm²	○	—		
AI1-10RD		○	—		
AI1.5-8BK	1.5mm²	○	—		
AI1.5-10BK		○	—		
A0.5-10	0.5mm²	—	○		
A0.75-10	0.75mm²	—	○		
A1.0-10	1.0mm²	—	○		
A1.5-10	1.5mm²	—	○		

MIL connector type

The power supply terminal blocks for the CC-Link IE Field Network remote I/O modules and CC-Link IE TSN remote I/O modules are changed from the connector type to the terminal block type. Thus, rewire when replacing modules.
For details on applicable solderless terminals, refer to the following.
☞ Page 25 Spring clamp terminal block type, screw terminal block, 40-pin connector type (FCN)

Sensor connector (e-CON) type

There is no difference between the specifications of the module power supply terminal block for the CC-Link IE Field Network remote I/O module and those for the CC-Link IE TSN remote I/O module.
There is no restriction when replacement.
For details on applicable solderless terminals, refer to the manuals for each module used.

I/O terminal block

Spring clamp terminal block type

○: Available, —: Not available

Model	Applicable wire size	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	Applicable crimping tool	Reference
TE0.5-8	0.3 to 0.5mm²	○	—	NH-79A (Succeeding product of NH-79)	NICHIFU Co., Ltd.
TE0.5-10		○	—		
TE0.75-8	0.75mm²	○	—		
TE0.75-10		○	—		
TE1.0-8	1.0mm²	○	—		
TE1.0-10		○	—		
TE1.5-8	1.5mm²	○	—		
TE1.5-10		○	—		
AI0.34-8TQ	0.34mm²	○	—	CRIMPFOX6	PHOENIX CONTACT GmbH & Co. KG
AI0.34-10TQ		—	○		
AI0.5-8WH	0.5mm²	○	—		
AI0.5-10WH		○	○		
AI0.75-8GY	0.75mm²	○	—		
AI0.75-10GY		○	○		
AI1-8RD	1.0mm²	○	—		
AI1-10RD		○	—		
AI1.5-8BK	1.5mm²	○	—		
AI1.5-10BK		○	—		
A0.5-10	0.5mm²	—	○		
A0.75-10	0.75mm²	—	○		
A1.0-10	1.0mm²	—	○		
A1.5-10	1.5mm²	—	○		

Screw terminal block type

○: Available, —: Not available

Model	Applicable wire size	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	Reference
RAA1.25-3	0.3 to 1.25mm²	○	○	—
V2-MS3	1.25 to 2.0mm²	○	○	J.S.T. Mfg. Co., Ltd.
TGV2-3N	1.25 to 2.0mm²	○	○	NICHIFU Co., Ltd.
RAP2-3SL	1.25 to 2.0mm²	○	—	Discontinued.*1 (Nippon Tanshi Co., Ltd.)

*1 The solderless terminal can be used even though the production has been discontinued.

Sensor connector (e-CON) type

There is no difference between the specifications of the module I/O terminal block for the CC-Link IE Field Network remote I/O module and those for the CC-Link IE TSN remote I/O module.
There is no restriction when replacement.
For details on applicable solderless terminals, refer to the manuals for each module used.

40-pin connector type (FCN)

There is no difference between the specifications of the module I/O terminal block for the CC-Link IE Field Network remote I/O module and those for the CC-Link IE TSN remote I/O module.
There is no restriction when replacement.
For details on applicable solderless terminals, refer to the manuals for each module used.

MIL connector type

The I/O terminal blocks for the CC-Link IE Field Network remote I/O modules and CC-Link IE TSN remote I/O modules are changed from the connector type to the terminal block type. Thus, wires from the load must be changed to applicable wires when replacing modules.
For details on applicable solderless terminals, refer to the following.
☞ Page 27 Screw terminal block type

2.5 Functions Comparison

The following table lists the functions that are restricted when the CC-Link IE Field Network remote I/O module is replaced with the CC-Link IE TSN remote I/O module (CC-Link IE Field Network communication mode).
For functions other than the table below, refer to the manuals for each module used.
○: Available, —: Not available

No.	FUNCTIONS	Description	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	Cautions on replacement
1	Extension module supporting function	The number of input points or output points can be increased by connecting an extension I/O module. This function can be used with an input module and an output module.	○	—	Replace the modules depending on the specifications in the combination of main module and extension module. For details, refer to the following. ☞ Page 4 Extension module
2	Input OFF delay function	This function turns off an X signal after a predetermined time passed from when an actual input becomes off from on.	○	—	This function is not supported by the alternative model.
3	Cyclic data update watch function	The update intervals of cyclic data are monitored. The last output value is held or cleared when the cyclic transmission stop status continues longer than the set monitoring time.	○	—	This function is not supported by the alternative model.
4	Number of ON times integration function	The total number of ON times of each output point is counted with this function. The integration value remains even though the output module is powered off.	○	—	This function is not supported by the alternative model. Set the processing in the program.
5	Fast logic function	This function controls output according to the input status inside of the I/O module and without communication with the master station. High-speed output control can be performed with this function.	○	—	This function is not supported by the alternative model.
6	Initial operation setting function	This function sets whether the initial processing using the program is necessary or not when the data link is established.	○	—	The alternative model has this function as a standard setting.
7	Automatic I/O parameter setting	When this function is used and the I/O module is used as a general-purpose remote I/O, parameter settings are not required and start-up time can be shortened.	○	—	The alternative model has this function as a standard setting.
8	Module power supply voltage drop detection function	Detects a voltage drop of the module power supply.	—	○	—

2.6 Comparison of Link Device (RX, RY, RWr, RWw)

Remote I/O signal (RX, RY)

There is no difference between the specifications of the remote I/O signals for the CC-Link IE Field Network remote I/O module and those for the CC-Link IE TSN remote I/O module. There is no restriction when replacement.
When using two or more extension modules, increase the number of stations.

Remote register (RWr, RWw)

When the CC-Link IE TSN remote I/O module is used in the CC-Link IE Field Network communication mode, the device layout (device number) differs or some remote register areas cannot be used.

■Input module

• Remote register (RWr)

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□D	CC-Link IE TSN remote I/O module NZ2GN□-32D	
RWr0	Module status area	Module status area	If Initial processing request flag or Warning status flag is used in the program, delete the flag.*6
RWr1	Error code	Error code	—
RWr2	Warning code	Function selection status area	If the remote register is used in the program, delete it.*7
RWr3	Function selection status flag	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr4	Use prohibited	Use prohibited	—
RWr5*1	Output Y current value Y10 to Y1F	Use prohibited	If the remote register is used in the program, delete it.*7
RWr6*2	Output Y current value Y20 to Y2F	Use prohibited	
RWr7*5	Output Y current value Y30 to Y3F	Use prohibited	
RWr8	Use prohibited	Use prohibited	—
RWr9*1	Output Y ON information Y10 to Y1F	Use prohibited	If the remote register is used in the program, delete it.*7
RWrA*2	Output Y ON information Y20 to Y2F	Use prohibited	
RWrB*5	Output Y ON information Y30 to Y3F	Use prohibited	
RWrC	Use prohibited	Use prohibited	—
RWrD*1	Output Y OFF information Y10 to Y1F	Use prohibited	If the remote register is used in the program, delete it.*7
RWrE*2	Output Y OFF information Y20 to Y2F	Use prohibited	
RWrF*5	Output Y OFF information Y30 to Y3F	Use prohibited	
RWr10	Use prohibited	Synchronous input timing information X0 OFF to ON	—
RWr11	Use prohibited	Synchronous input timing information X0 ON to OFF	—
RWr12	Use prohibited	Synchronous input timing information X1 ON to OFF	—
RWr13	Use prohibited	Synchronous input timing information X1 OFF to ON	—
RWr14*3	Synchronous input timing information X0 OFF to ON	Synchronous input timing information X2 OFF to ON	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr15*3	Synchronous input timing information X0 ON to OFF	Synchronous input timing information X2 ON to OFF	
RWr16*3	Synchronous input timing information X1 OFF to ON	Synchronous input timing information X3 OFF to ON	
RWr17*3	Synchronous input timing information X1 ON to OFF	Synchronous input timing information X3 ON to OFF	

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□D	CC-Link IE TSN remote I/O module NZ2GN□-32D	
RWr18*3	Synchronous input timing information X2 OFF to ON	Synchronous input timing information X4 OFF to ON	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr19*3	Synchronous input timing information X2 ON to OFF	Synchronous input timing information X4 ON to OFF	
RWr1A*3	Synchronous input timing information X3 OFF to ON	Synchronous input timing information X5 OFF to ON	
RWr1B*3	Synchronous input timing information X3 ON to OFF	Synchronous input timing information X5 ON to OFF	
RWr1C*3	Synchronous input timing information X4 OFF to ON	Synchronous input timing information X6 OFF to ON	
RWr1D*3	Synchronous input timing information X4 ON to OFF	Synchronous input timing information X6 ON to OFF	
RWr1E*3	Synchronous input timing information X5 OFF to ON	Synchronous input timing information X7 OFF to ON	
RWr1F*3	Synchronous input timing information X5 ON to OFF	Synchronous input timing information X7 ON to OFF	
RWr20*3	Synchronous input timing information X6 OFF to ON	Synchronous input timing information X8 OFF to ON	
RWr21*3	Synchronous input timing information X6 ON to OFF	Synchronous input timing information X8 ON to OFF	
RWr22*3	Synchronous input timing information X7 OFF to ON	Synchronous input timing information X9 OFF to ON	
RWr23*3	Synchronous input timing information X7 ON to OFF	Synchronous input timing information X9 ON to OFF	
RWr24*3	Synchronous input timing information X8 OFF to ON	Synchronous input timing information XA OFF to ON	
RWr25*3	Synchronous input timing information X8 ON to OFF	Synchronous input timing information XA ON to OFF	
RWr26*3	Synchronous input timing information X9 OFF to ON	Synchronous input timing information XB OFF to ON	
RWr27*3	Synchronous input timing information X9 ON to OFF	Synchronous input timing information XB ON to OFF	
RWr28*3	Synchronous input timing information XA OFF to ON	Synchronous input timing information XC OFF to ON	
RWr29*3	Synchronous input timing information XA ON to OFF	Synchronous input timing information XC ON to OFF	
RWr2A*3	Synchronous input timing information XB OFF to ON	Synchronous input timing information XD OFF to ON	
RWr2B*3	Synchronous input timing information XB ON to OFF	Synchronous input timing information XD ON to OFF	
RWr2C*3	Synchronous input timing information XC OFF to ON	Synchronous input timing information XE OFF to ON	
RWr2D*3	Synchronous input timing information XC ON to OFF	Synchronous input timing information XE ON to OFF	
RWr2E*3	Synchronous input timing information XD OFF to ON	Synchronous input timing information XF OFF to ON	
RWr2F*3	Synchronous input timing information XD ON to OFF	Synchronous input timing information XF ON to OFF	
RWr30*3	Synchronous input timing information XE OFF to ON	Synchronous input timing information X10 OFF to ON	
RWr31*3	Synchronous input timing information XE ON to OFF	Synchronous input timing information X10 ON to OFF	
RWr32*3	Synchronous input timing information XF OFF to ON	Synchronous input timing information X11 OFF to ON	
RWr33*3	Synchronous input timing information XF ON to OFF	Synchronous input timing information X11 ON to OFF	

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□D	CC-Link IE TSN remote I/O module NZ2GN□-32D	
RWr34*4	Synchronous input timing information X10 OFF to ON	Synchronous input timing information X12 OFF to ON	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr35*4	Synchronous input timing information X10 ON to OFF	Synchronous input timing information X12 ON to OFF	
RWr36*4	Synchronous input timing information X11 OFF to ON	Synchronous input timing information X13 OFF to ON	
RWr37*4	Synchronous input timing information X11 ON to OFF	Synchronous input timing information X13 ON to OFF	
RWr38*4	Synchronous input timing information X12 OFF to ON	Synchronous input timing information X14 OFF to ON	
RWr39*4	Synchronous input timing information X12 ON to OFF	Synchronous input timing information X14 ON to OFF	
RWr3A*4	Synchronous input timing information X13 OFF to ON	Synchronous input timing information X15 OFF to ON	
RWr3B*4	Synchronous input timing information X13 ON to OFF	Synchronous input timing information X15 ON to OFF	
RWr3C*4	Synchronous input timing information X14 OFF to ON	Synchronous input timing information X16 OFF to ON	
RWr3D*4	Synchronous input timing information X14 ON to OFF	Synchronous input timing information X16 ON to OFF	
RWr3E*4	Synchronous input timing information X15 OFF to ON	Synchronous input timing information X17 OFF to ON	
RWr3F*4	Synchronous input timing information X15 ON to OFF	Synchronous input timing information X17 ON to OFF	
RWr40*4	Synchronous input timing information X16 OFF to ON	Synchronous input timing information X18 OFF to ON	
RWr41*4	Synchronous input timing information X16 ON to OFF	Synchronous input timing information X18 ON to OFF	
RWr42*4	Synchronous input timing information X17 OFF to ON	Synchronous input timing information X19 OFF to ON	
RWr43*4	Synchronous input timing information X17 ON to OFF	Synchronous input timing information X19 ON to OFF	
RWr44*4	Synchronous input timing information X18 OFF to ON	Synchronous input timing information X1A OFF to ON	
RWr45*4	Synchronous input timing information X18 ON to OFF	Synchronous input timing information X1A ON to OFF	
RWr46*4	Synchronous input timing information X19 OFF to ON	Synchronous input timing information X1B OFF to ON	
RWr47*4	Synchronous input timing information X19 ON to OFF	Synchronous input timing information X1B ON to OFF	
RWr48*4	Synchronous input timing information X1A OFF to ON	Synchronous input timing information X1C OFF to ON	
RWr49*4	Synchronous input timing information X1A ON to OFF	Synchronous input timing information X1C ON to OFF	
RWr4A*4	Synchronous input timing information X1B OFF to ON	Synchronous input timing information X1D OFF to ON	
RWr4B*4	Synchronous input timing information X1B ON to OFF	Synchronous input timing information X1D ON to OFF	
RWr4C*4	Synchronous input timing information X1C OFF to ON	Synchronous input timing information X1E OFF to ON	
RWr4D*4	Synchronous input timing information X1C ON to OFF	Synchronous input timing information X1E ON to OFF	
RWr4E*4	Synchronous input timing information X1D OFF to ON	Synchronous input timing information X1F OFF to ON	

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□D	CC-Link IE TSN remote I/O module NZ2GN□-32D	
RWr4F*4	Synchronous input timing information X1D ON to OFF	Synchronous input timing information X1F ON to OFF	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr50*4	Synchronous input timing information X1E OFF to ON	—	
RWr51*4	Synchronous input timing information X1E ON to OFF	—	
RWr52*4	Synchronous input timing information X1F OFF to ON	—	
RWr53*4	Synchronous input timing information X1F ON to OFF	—	

The following notices 1 to 5 are applied to CC-Link IE Field Network remote I/O modules.

*1 The remote register cannot be used for the NZ2GFCE3N-32D, NZ2GFCF1-32D, and NZ2GF2B1-32D.
*2 The remote register can be used for the NZ2GF2B1N1-16D, NZ2GF2B1-32D, NZ2GFCE3N-32D, and NZ2GFCF1-32D.
*3 The remote register can be used for the NZ2GF2B1-32D, NZ2GF2B1N1-16D, NZ2GF2S1-16D, and NZ2GFCF1-32D.
*4 The remote register can be used for the NZ2GFCF1-32D and NZ2GF2B1-32D.
*5 The remote register can be used only for the NZ2GF2B1N1-16D.
*6 The alternative model does not support Initial processing completion flag.
*7 The alternative model does not support the corresponding remote register.

• Remote register (RWw)

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□D	CC-Link IE TSN remote I/O module NZ2GN□-32D	
RWw0	Module operation area	Module operation area	If Initial processing request flag is used in the program, delete it.*4
RWw1, 2	Use prohibited	Use prohibited	—
RWw3	Function selection setting flag	Use prohibited	If the remote register is used in the program, delete it.*5
RWw4 to 8	Use prohibited	Use prohibited	—
RWw9*1	Output Y ON information clear request Y10 to Y1F	Use prohibited	If the remote register is used in the program, delete it.*5
RWwA*2	Output Y ON information clear request Y20 to Y2F	Use prohibited	
RWwB*3	Output Y ON information clear request Y30 to Y3F	Use prohibited	
RWwC	Use prohibited	Use prohibited	—
RWwD*1	Output Y OFF information clear request Y10 to Y1F	Use prohibited	If the remote register is used in the program, delete it.*5
RWwE*2	Output Y OFF information clear request Y20 to Y2F	Use prohibited	
RWwF*3	Output Y OFF information clear request Y30 to Y3F	Use prohibited	
RWw10 to 4F	Use prohibited	Use prohibited	—
RWw50 to 53	Use prohibited	—	—

The following notices 1 to 3 are applied to CC-Link IE Field Network remote I/O modules.

*1 The remote register cannot be used for the NZ2GFCE3N-32D, NZ2GFCF1-32D, and NZ2GF2B1-32D.
*2 The remote register can be used for the NZ2GF2B1N1-16D, NZ2GF2B1-32D, NZ2GFCE3N-32D, and NZ2GFCF1-32D.
*3 The remote register can be used only for the NZ2GF2B1N1-16D.
*4 The alternative model does not support Initial processing completion flag.
*5 The alternative model does not support the corresponding remote register.

■Output module

• Remote register (RWr)

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□T(E)	CC-Link IE TSN remote I/O module NZ2GN□-□T(E)	
RWr0	Module status area	Module status area	If Initial processing request flag or Warning status flag is used in the program, delete the flag.*3
RWr1	Error code	Error code	—
RWr2	Warning code	Function selection status area	If the remote register is used in the program, delete it.*4
RWr3	Function selection status flag	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr4	Output Y current value Y0 to YF	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr5	Output Y current value Y10 to Y1F	Use prohibited	
RWr6*1	Output Y current value Y20 to Y2F	Use prohibited	If the remote register is used in the program, delete it.*4
RWr7*2	Output Y current value Y30 to Y3F	Use prohibited	
RWr8	Output Y ON information Y0 to YF	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr9	Output Y ON information Y10 to Y1F	Use prohibited	
RWrA*1	Output Y ON information Y20 to Y2F	Output Y current value Y0 to YF	If the remote register is used in the program, delete it.*4
RWrB*2	Output Y ON information Y30 to Y3F	Output Y current value Y10 to Y1F	
RWrC	Output Y OFF information Y0 to YF	Output Y ON information Y0 to YF	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWrD	Output Y OFF information Y10 to Y1F	Output Y ON information Y10 to Y1F	
RWrE*1	Output Y OFF information Y20 to Y2F	Output Y OFF information Y0 to YF	If the remote register is used in the program, delete it.*4
RWrF*2	Output Y OFF information Y30 to Y3F	Output Y OFF information Y10 to Y1F	
RWr10 to 4F	Use prohibited	Use prohibited	—
RWr50 to 53	Use prohibited	—	—

The following notices 1 to 2 are applied to CC-Link IE Field Network remote I/O modules.

*1 The remote register can be used for the NZ2GF2B1N1-16T, NZ2GF2B1N1-16TE, NZ2GF2B1-32TE, and NZ2GFCF1-32T.
*2 The remote register can be used for the NZ2GF2B1N1-16T and NZ2GF2B1N1-16TE.
*3 The alternative model does not support Initial processing completion flag.
*4 The alternative model does not support the corresponding remote register.

• Remote register (RWw)

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□T(E)	CC-Link IE TSN remote I/O module NZ2GN□-□T(E)	
RWw0	Module operation area	Module operation area	If Initial processing request flag is used in the program, delete it.*5
RWw1	Use prohibited	Use prohibited	—
RWw2	Use prohibited	Function selection setting area	—
RWw3	Function selection setting flag	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWw4 to 7	Use prohibited	Use prohibited	—
RWw8	Output Y ON information clear request Y0 to YF	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWw9	Output Y ON information clear request Y10 to Y1F	Use prohibited	
RWwA*1	Output Y ON information clear request Y20 to Y2F	Use prohibited	If the remote register is used in the program, delete it.*6
RWwB*4	Output Y ON information clear request Y30 to Y3F	Use prohibited	
RWwC	Output Y OFF information clear request Y0 to YF	Output Y ON information clear request Y0 to YF	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWwD	Output Y OFF information clear request Y10 to Y1F	Output Y ON information clear request Y10 to Y1F	
RWwE*1	Output Y OFF information clear request Y20 to Y2F	Output Y OFF information clear request Y0 to YF	If the remote register is used in the program, delete it.*6
RWwF*4	Output Y OFF information clear request Y30 to Y3F	Output Y OFF information clear request Y10 to Y1F	
RWw10	Use prohibited	Synchronous output timing information Y0 OFF to ON	—
RWw11	Use prohibited	Synchronous output timing information Y0 ON to OFF	—
RWw12	Use prohibited	Synchronous output timing information Y1 ON to OFF	—
RWw13	Use prohibited	Synchronous output timing information Y1 OFF to ON	—
RWw14*2	Synchronous output timing information Y0 OFF to ON	Synchronous output timing information Y2 OFF to ON	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWw15*2	Synchronous output timing information Y0 ON to OFF	Synchronous output timing information Y2 ON to OFF	
RWw16*2	Synchronous output timing information Y1 OFF to ON	Synchronous output timing information Y3 OFF to ON	
RWw17*2	Synchronous output timing information Y1 ON to OFF	Synchronous output timing information Y3 ON to OFF	
RWw18*2	Synchronous output timing information Y2 OFF to ON	Synchronous output timing information Y4 OFF to ON	
RWw19*2	Synchronous output timing information Y2 ON to OFF	Synchronous output timing information Y4 ON to OFF	
RWw1A*2	Synchronous output timing information Y3 OFF to ON	Synchronous output timing information Y5 OFF to ON	
RWw1B*2	Synchronous output timing information Y3 ON to OFF	Synchronous output timing information Y5 ON to OFF	

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□T(E)	CC-Link IE TSN remote I/O module NZ2GN□-□T(E)	
RWw1C*2	Synchronous output timing information Y4 OFF to ON	Synchronous output timing information Y6 OFF to ON	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWw1D*2	Synchronous output timing information Y4 ON to OFF	Synchronous output timing information Y6 ON to OFF	
RWw1E*2	Synchronous output timing information Y5 OFF to ON	Synchronous output timing information Y7 OFF to ON	
RWw1F*2	Synchronous output timing information Y5 ON to OFF	Synchronous output timing information Y7 ON to OFF	
RWw20*2	Synchronous output timing information Y6 OFF to ON	Synchronous output timing information Y8 OFF to ON	
RWw21*2	Synchronous output timing information Y6 ON to OFF	Synchronous output timing information Y8 ON to OFF	
RWw22*2	Synchronous output timing information Y7 OFF to ON	Synchronous output timing information Y9 OFF to ON	
RWw23*2	Synchronous output timing information Y7 ON to OFF	Synchronous output timing information Y9 ON to OFF	
RWw24*2	Synchronous output timing information Y8 OFF to ON	Synchronous output timing information YA OFF to ON	
RWw25*2	Synchronous output timing information Y8 ON to OFF	Synchronous output timing information YA ON to OFF	
RWw26*2	Synchronous output timing information Y9 OFF to ON	Synchronous output timing information YB OFF to ON	
RWw27*2	Synchronous output timing information Y9 ON to OFF	Synchronous output timing information YB ON to OFF	
RWw28*2	Synchronous output timing information YA OFF to ON	Synchronous output timing information YC OFF to ON	
RWw29*2	Synchronous output timing information YA ON to OFF	Synchronous output timing information YC ON to OFF	
RWw2A*2	Synchronous output timing information YB OFF to ON	Synchronous output timing information YD OFF to ON	
RWw2B*2	Synchronous output timing information YB ON to OFF	Synchronous output timing information YD ON to OFF	
RWw2C*2	Synchronous output timing information YC OFF to ON	Synchronous output timing information YE OFF to ON	
RWw2D*2	Synchronous output timing information YC ON to OFF	Synchronous output timing information YE ON to OFF	
RWw2E*2	Synchronous output timing information YD OFF to ON	Synchronous output timing information YF OFF to ON	
RWw2F*2	Synchronous output timing information YD ON to OFF	Synchronous output timing information YF ON to OFF	
RWw30*2	Synchronous output timing information YE OFF to ON	Synchronous output timing information Y10 OFF to ON	
RWw31*2	Synchronous output timing information YE ON to OFF	Synchronous output timing information Y10 ON to OFF	
RWw32*2	Synchronous output timing information YF OFF to ON	Synchronous output timing information Y11 OFF to ON	
RWw33*2	Synchronous output timing information YF ON to OFF	Synchronous output timing information Y11 ON to OFF	

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□T(E)	CC-Link IE TSN remote I/O module NZ2GN□-□T(E)	
RWw34*3	Synchronous input timing information Y10 OFF to ON	Synchronous output timing information Y12 OFF to ON	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWw35*3	Synchronous input timing information Y10 ON to OFF	Synchronous output timing information Y12 ON to OFF	
RWw36*3	Synchronous input timing information Y11 OFF to ON	Synchronous output timing information Y13 OFF to ON	
RWw37*3	Synchronous input timing information Y11 ON to OFF	Synchronous output timing information Y13 ON to OFF	
RWw38*3	Synchronous input timing information Y12 OFF to ON	Synchronous output timing information Y14 OFF to ON	
RWw39*3	Synchronous input timing information Y12 ON to OFF	Synchronous output timing information Y14 ON to OFF	
RWw3A*3	Synchronous input timing information Y13 OFF to ON	Synchronous output timing information Y15 OFF to ON	
RWw3B*3	Synchronous input timing information Y13 ON to OFF	Synchronous output timing information Y15 ON to OFF	
RWw3C*3	Synchronous input timing information Y14 OFF to ON	Synchronous output timing information Y16 OFF to ON	
RWw3D*3	Synchronous input timing information Y14 ON to OFF	Synchronous output timing information Y16 ON to OFF	
RWw3E*3	Synchronous input timing information Y15 OFF to ON	Synchronous output timing information Y17 OFF to ON	
RWw3F*3	Synchronous input timing information Y15 ON to OFF	Synchronous output timing information Y17 ON to OFF	
RWw40*3	Synchronous input timing information Y16 OFF to ON	Synchronous output timing information Y18 OFF to ON	
RWw41*3	Synchronous input timing information Y16 ON to OFF	Synchronous output timing information Y18 ON to OFF	
RWw42*3	Synchronous input timing information Y17 OFF to ON	Synchronous output timing information Y19 OFF to ON	
RWw43*3	Synchronous input timing information Y17 ON to OFF	Synchronous output timing information Y19 ON to OFF	
RWw44*3	Synchronous input timing information Y18 OFF to ON	Synchronous output timing information Y1A OFF to ON	
RWw45*3	Synchronous input timing information Y18 ON to OFF	Synchronous output timing information Y1A ON to OFF	
RWw46*3	Synchronous input timing information Y19 OFF to ON	Synchronous output timing information Y1B OFF to ON	
RWw47*3	Synchronous input timing information Y19 ON to OFF	Synchronous output timing information Y1B ON to OFF	
RWw48*3	Synchronous input timing information Y1A OFF to ON	Synchronous output timing information Y1C OFF to ON	
RWw49*3	Synchronous input timing information Y1A ON to OFF	Synchronous output timing information Y1C ON to OFF	
RWw4A*3	Synchronous input timing information Y1B OFF to ON	Synchronous output timing information Y1D OFF to ON	
RWw4B*3	Synchronous input timing information Y1B ON to OFF	Synchronous output timing information Y1D ON to OFF	

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-□T(E)	CC-Link IE TSN remote I/O module NZ2GN□-□T(E)	
RWw4C*3	Synchronous input timing information Y1C OFF to ON	Synchronous output timing information Y1E OFF to ON	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWw4D*3	Synchronous input timing information Y1C ON to OFF	Synchronous output timing information Y1E ON to OFF	
RWw4E*3	Synchronous input timing information Y1D OFF to ON	Synchronous output timing information Y1F OFF to ON	
RWw4F*3	Synchronous input timing information Y1D ON to OFF	Synchronous output timing information Y1F ON to OFF	
RWw50*3	Synchronous input timing information Y1E OFF to ON	—	
RWw51*3	Synchronous input timing information Y1E ON to OFF	—	
RWw52*3	Synchronous input timing information Y1F OFF to ON	—	
RWw53*3	Synchronous input timing information Y1F ON to OFF	—	

The following notices 1 to 4 are applied to CC-Link IE Field Network remote I/O modules.

*1 The remote register can be used for the NZ2GF2B1N1-16T, NZ2GF2B1N1-16TE, NZ2GF2B1-32TE, and NZ2GFCF1-32T.
*2 The remote register can be used for the NZ2GF2B1N1-16T, NZ2GF2B1N1-16TE, NZ2GF2B1-32T, NZ2GF2B1-32TE, NZ2GF2S1-16T, NZ2GF2S1-16TE, and NZ2GFCF1-32T.
*3 The remote register can be used for the NZ2GFCF1-32T, NZ2GF2B1-32T, and NZ2GF2B1-32TE.
*4 The remote register can be used for the NZ2GF2B1N1-16T and NZ2GF2B1N1-16TE.
*5 The alternative model does not support Initial processing completion flag.
*6 The alternative model does not support the corresponding remote register.

■I/O combined module

• Remote register (RWr)

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□-32DT(E)	CC-Link IE TSN remote I/O module NZ2GN□-32DT(E)	
RWr0	Module status area	Module status area	If Initial processing request flag or Warning status flag is used in the program, delete the flag.*2
RWr1	Error code	Error code	—
RWr2	Warning code	Function selection status area	If the remote register is used in the program, delete it.*3
RWr3	Function selection status flag	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr4	Use prohibited	Use prohibited	—
RWr5	Output Y current value Y10 to Y1F	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr6	Output Y current value Y20 to Y2F	Use prohibited	If the remote register is used in the program, delete it.*3
RWr7, 8	Use prohibited	Use prohibited	—
RWr9	Output Y ON information Y10 to Y1F	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWrA	Output Y ON information Y20 to Y2F	Use prohibited	If the remote register is used in the program, delete it.*3
RWrB	Use prohibited	Output Y current value Y10 to Y1F	—
RWrC	Use prohibited	Use prohibited	—
RWrD	Output Y OFF information Y10 to Y1F	Output Y ON information Y10 to Y1F	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWrE	Output Y OFF information Y20 to Y2F	Use prohibited	If the remote register is used in the program, delete it.*3
RWrF	Use prohibited	Output Y OFF information Y10 to Y1F	—
RWr10	Use prohibited	Synchronous input timing information X0 OFF to ON	—
RWr11	Use prohibited	Synchronous input timing information X0 ON to OFF	—
RWr12	Use prohibited	Synchronous input timing information X1 ON to OFF	—
RWr13	Use prohibited	Synchronous input timing information X1 OFF to ON	—
RWr14*1	Synchronous input timing information X0 OFF to ON	Synchronous input timing information X2 OFF to ON	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr15*1	Synchronous input timing information X0 ON to OFF	Synchronous input timing information X2 ON to OFF	
RWr16*1	Synchronous input timing information X1 OFF to ON	Synchronous input timing information X3 OFF to ON	
RWr17*1	Synchronous input timing information X1 ON to OFF	Synchronous input timing information X3 ON to OFF	
RWr18*1	Synchronous input timing information X2 OFF to ON	Synchronous input timing information X4 OFF to ON	

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□-32DT(E)	CC-Link IE TSN remote I/O module NZ2GN□-32DT(E)	
RWr19[*1]	Synchronous input timing information X2 ON to OFF	Synchronous input timing information X4 ON to OFF	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWr1A[*1]	Synchronous input timing information X3 OFF to ON	Synchronous input timing information X5 OFF to ON	
RWr1B[*1]	Synchronous input timing information X3 ON to OFF	Synchronous input timing information X5 ON to OFF	
RWr1C[*1]	Synchronous input timing information X4 OFF to ON	Synchronous input timing information X6 OFF to ON	
RWr1D[*1]	Synchronous input timing information X4 ON to OFF	Synchronous input timing information X6 ON to OFF	
RWr1E[*1]	Synchronous input timing information X5 OFF to ON	Synchronous input timing information X7 OFF to ON	
RWr1F[*1]	Synchronous input timing information X5 ON to OFF	Synchronous input timing information X7 ON to OFF	
RWr20[*1]	Synchronous input timing information X6 OFF to ON	Synchronous input timing information X8 OFF to ON	
RWr21[*1]	Synchronous input timing information X6 ON to OFF	Synchronous input timing information X8 ON to OFF	
RWr22[*1]	Synchronous input timing information X7 OFF to ON	Synchronous input timing information X9 OFF to ON	
RWr23[*1]	Synchronous input timing information X7 ON to OFF	Synchronous input timing information X9 ON to OFF	
RWr24[*1]	Synchronous input timing information X8 OFF to ON	Synchronous input timing information XA OFF to ON	
RWr25[*1]	Synchronous input timing information X8 ON to OFF	Synchronous input timing information XA ON to OFF	
RWr26[*1]	Synchronous input timing information X9 OFF to ON	Synchronous input timing information XB OFF to ON	
RWr27[*1]	Synchronous input timing information X9 ON to OFF	Synchronous input timing information XB ON to OFF	
RWr28[*1]	Synchronous input timing information XA OFF to ON	Synchronous input timing information XC OFF to ON	
RWr29[*1]	Synchronous input timing information XA ON to OFF	Synchronous input timing information XC ON to OFF	
RWr2A[*1]	Synchronous input timing information XB OFF to ON	Synchronous input timing information XD OFF to ON	
RWr2B[*1]	Synchronous input timing information XB ON to OFF	Synchronous input timing information XD ON to OFF	
RWr2C[*1]	Synchronous input timing information XC OFF to ON	Synchronous input timing information XE OFF to ON	
RWr2D[*1]	Synchronous input timing information XC ON to OFF	Synchronous input timing information XE ON to OFF	
RWr2E[*1]	Synchronous input timing information XD OFF to ON	Synchronous input timing information XF OFF to ON	
RWr2F[*1]	Synchronous input timing information XD ON to OFF	Synchronous input timing information XF ON to OFF	
RWr30[*1]	Synchronous input timing information XE OFF to ON	Use prohibited	
RWr31[*1]	Synchronous input timing information XE ON to OFF	Use prohibited	
RWr32[*1]	Synchronous input timing information XF OFF to ON	Use prohibited	
RWr33[*1]	Synchronous input timing information XF ON to OFF	Use prohibited	

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□-32DT(E)	CC-Link IE TSN remote I/O module NZ2GN□-32DT(E)	
RWr34 to 4F	Use prohibited	Use prohibited	—
RWr50 to 53	Use prohibited	—	—

The following notice 1 is applied to CC-Link IE Field Network remote I/O modules.

*1 The remote register can be used for the NZ2GF2B1-32DT and NZ2GF2B1-32DTE.
*2 The alternative model does not support Initial processing completion flag.
*3 The alternative model does not support the corresponding remote register.

• Remote register (RWw)

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-32DT(E)	CC-Link IE TSN remote I/O module NZ2GN□-32DT(E)	
RWw0	Module operation area	Module operation area	If Initial processing request flag is used in the program, delete it.*2
RWw1	Use prohibited	Use prohibited	—
RWw2	Use prohibited	Function selection setting area	—
RWw3	Function selection setting flag	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWw4 to 8	Use prohibited	Use prohibited	—
RWw9	Output Y ON information clear request Y10 to Y1F	Use prohibited	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWwA	Output Y ON information clear request Y20 to Y2F	Use prohibited	If the remote register is used in the program, delete it.*3
RWwB, C	Use prohibited	Use prohibited	—
RWwD	Output Y OFF information clear request Y10 to Y1F	Output Y ON information clear request Y10 to Y1F	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWwE	Output Y OFF information clear request Y20 to Y2F	Use prohibited	If the remote register is used in the program, delete it.*3
RWwF	Use prohibited	Output Y OFF information clear request Y10 to Y1F	—
RWw10 to 2F	Use prohibited	Use prohibited	—
RWw30	Use prohibited	Synchronous output timing information Y10 OFF to ON	—
RWw31	Use prohibited	Synchronous output timing information Y10 ON to OFF	—
RWw32	Use prohibited	Synchronous output timing information Y11 OFF to ON	—
RWw33	Use prohibited	Synchronous output timing information Y11 ON to OFF	—
RWw34*1	Synchronous output timing information Y10 OFF to ON	Synchronous output timing information Y12 OFF to ON	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWw35*1	Synchronous output timing information Y10 ON to OFF	Synchronous output timing information Y12 ON to OFF	
RWw36*1	Synchronous output timing information Y11 OFF to ON	Synchronous output timing information Y13 OFF to ON	
RWw37*1	Synchronous output timing information Y11 ON to OFF	Synchronous output timing information Y13 ON to OFF	
RWw38*1	Synchronous output timing information Y12 OFF to ON	Synchronous output timing information Y14 OFF to ON	
RWw39*1	Synchronous output timing information Y12 ON to OFF	Synchronous output timing information Y14 ON to OFF	
RWw3A*1	Synchronous output timing information Y13 OFF to ON	Synchronous output timing information Y15 OFF to ON	
RWw3B*1	Synchronous output timing information Y13 ON to OFF	Synchronous output timing information Y15 ON to OFF	
RWw3C*1	Synchronous output timing information Y14 OFF to ON	Synchronous output timing information Y16 OFF to ON	
RWw3D*1	Synchronous output timing information Y14 ON to OFF	Synchronous output timing information Y16 ON to OFF	
RWw3E*1	Synchronous output timing information Y15 OFF to ON	Synchronous output timing information Y17 OFF to ON	

Device number	Name		Cautions on replacement
	CC-Link IE Field Network remote I/O module NZ2GF□□-32DT(E)	CC-Link IE TSN remote I/O module NZ2GN□-32DT(E)	
RWw3F*1	Synchronous output timing information Y15 ON to OFF	Synchronous output timing information Y17 ON to OFF	If the remote register is used in the program, change it to the remote register of the device to be newly assigned.
RWw40*1	Synchronous output timing information Y16 OFF to ON	Synchronous output timing information Y18 OFF to ON	
RWw41*1	Synchronous output timing information Y16 ON to OFF	Synchronous output timing information Y18 ON to OFF	
RWw42*1	Synchronous output timing information Y17 OFF to ON	Synchronous output timing information Y19 OFF to ON	
RWw43*1	Synchronous output timing information Y17 ON to OFF	Synchronous output timing information Y19 ON to OFF	
RWw44*1	Synchronous output timing information Y18 OFF to ON	Synchronous output timing information Y1A OFF to ON	
RWw45*1	Synchronous output timing information Y18 ON to OFF	Synchronous output timing information Y1A ON to OFF	
RWw46*1	Synchronous output timing information Y19 OFF to ON	Synchronous output timing information Y1B OFF to ON	
RWw47*1	Synchronous output timing information Y19 ON to OFF	Synchronous output timing information Y1B ON to OFF	
RWw48*1	Synchronous output timing information Y1A OFF to ON	Synchronous output timing information Y1C OFF to ON	
RWw49*1	Synchronous output timing information Y1A ON to OFF	Synchronous output timing information Y1C ON to OFF	
RWw4A*1	Synchronous output timing information Y1B OFF to ON	Synchronous output timing information Y1D OFF to ON	
RWw4B*1	Synchronous output timing information Y1B ON to OFF	Synchronous output timing information Y1D ON to OFF	
RWw4C*1	Synchronous output timing information Y1C OFF to ON	Synchronous output timing information Y1E OFF to ON	
RWw4D*1	Synchronous output timing information Y1C ON to OFF	Synchronous output timing information Y1E ON to OFF	
RWw4E*1	Synchronous output timing information Y1D OFF to ON	Synchronous output timing information Y1F OFF to ON	
RWw4F*1	Synchronous output timing information Y1D ON to OFF	Synchronous output timing information Y1F ON to OFF	
RWw50*1	Synchronous output timing information Y1E OFF to ON	—	
RWw51*1	Synchronous output timing information Y1E ON to OFF	—	
RWw52*1	Synchronous output timing information Y1F OFF to ON	—	
RWw53*1	Synchronous output timing information Y1F ON to OFF	—	

The following notice 1 is applied to CC-Link IE Field Network remote I/O modules.

*1 The remote register can be used for the NZ2GF2B1-32DT and NZ2GF2B1-32DTE.

*2 The alternative model does not support Initial processing completion flag.

*3 The alternative model does not support the corresponding remote register.

2.7 Comparison of Remote Buffer Memory

When the CC-Link IE TSN remote I/O module is used in the CC-Link IE Field Network communication mode, the specifications differ or some remote buffer memory areas cannot be used.

Remote buffer memory address		Area name		Cautions on replacement
Decimal	Hexadecimal	CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module	
0 to 255	0000H to 00FFH	Parameter area	Parameter area*1	If the area is used in the program, delete it.*2
256 to 511	0100H to 01FFH		Use prohibited	
512 to 767	0200H to 02FFH			
768 to 1023	0300H to 03FFH			
1024 to 1279	0400H to 04FFH			
1280 to 1535	0500H to 05FFH	Monitoring area	Use prohibited	If the area is used in the program, delete it.*3
1536 to 1791	0600H to 06FFH			
1792 to 2047	0700H to 07FFH			
2048 to 2303	0800H to 08FFH			
2304 to 2559	0900H to 09FFH			
2560 to 4095	0A00H to 0FFFH	Error history area	Error history area	—
4096 to 4351	1000H to 10FFH	Module control data area	Module control data area	If the area other than those listed below is used in the program, delete it.*3 • Error history clear command • Error history clear completed
4352 to 4607	1100H to 11FFH		Use prohibited	
4608 to 4863	1200H to 12FFH			
4864 to 5119	1300H to 13FFH			
5120 to 5375	1400H to 14FFH			

*1 This area can be used with the firmware version "06" or later.
*2 Applicable parameters differ. Because alternative models can configure all the parameters by using the function setting switch, delete the area setting from the program.
*3 Alternative models do not support the corresponding remote buffer memory areas.

3 PROCEDURE FOR REPLACING THE MODULE

The procedure for replacing the module is shown below.

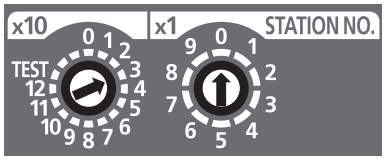
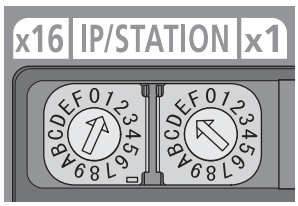
Operating procedure

1. Set the station number using the station number setting switches.
2. Set the functions using the function setting switches.
3. Replace the remote I/O module.
4. Rewire cables.

3.1 Set the station number using the station number setting switches.

Comparison of station number setting switches

Set the station number using the station number setting switches on the front of the module.
For the CC-Link IE Field Network remote I/O module, the station number is set using the switches with decimal number. For the CC-Link IE TSN remote I/O module, however, the station number is set using the switches with hexadecimal number.
The setting value of the station number becomes valid when the module is powered on. Thus, set the station number when the module is powered off.
The following shows the setting method of the station number setting switch of the CC-Link IE Field Network remote I/O module and CC-Link IE TSN remote I/O module.

CC-Link IE Field Network remote I/O module	CC-Link IE TSN remote I/O module
When 30 is set as the station number • The hundreds and tens places of the station number are set with x10. • The ones place of the station number is set with x1. 	When 30 is set as the station number Set the station number by combining x1 and x16 (hexadecimal). For how to set the switches corresponding to the decimal station number, refer to the following. ☞ Page 46 How to set the station number switches for the CC-Link IE TSN remote I/O module 

How to set the station number switches for the CC-Link IE TSN remote I/O module

Combinations of x1 and x16 (hexadecimal) are as follows.
Set a value between 1 and 120. When a value outside this range is set, an error occurs and the DATA LINK LED flashes.

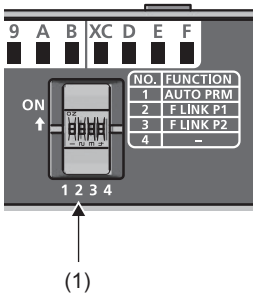
x16 \ x1	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
3	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
4	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
5	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
6	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
7	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
8	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
9	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
A	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
B	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
C	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
D	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
E	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
F	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

3.2 Function Setting using Function Setting Switches

Set functions using the function setting switches on the front of the module.
For the CC-Link IE TSN remote I/O module, items that are automatically set by enabling "automatic I/O parameter setting function" for the CC-Link IE Field Network remote I/O module are set by default. Therefore, these items can be used immediately simply by setting the IP address (station number).

Function setting switches on the CC-Link IE Field Network remote I/O module

The following figure shows the function setting switches on the CC-Link IE Field Network remote I/O module.



No.	Switch name	Function name	Setting details
1	Function setting switch 1 (AUTO PRM)	Automatic I/O parameter setting	Using this switch, set whether to enable or disable the automatic I/O parameter setting function. The setting with this switch is enabled when the module is powered on. Thus, set this function when the module is powered off. The automatic I/O parameter setting is enabled or disabled as follows depending on the status of function setting switch 1. On: Enable Off: Disable
2	Function setting switch 2 (F LINK P1)	Fast link-up function	Set whether to enable or disable the fast link-up function of PORT1 with function setting switch 2 and the fast link-up function of PORT2 with function setting switch 3. The fast link-up function for each PORT operates as follows depending on the status of the function setting switches. On: Enable Off: Disable The use of these switches is prohibited for the modules that do not support the fast link-up function.
3	Function setting switch 3 (F LINK P2)		
4	—	Use prohibited	—

Comparison of setting values

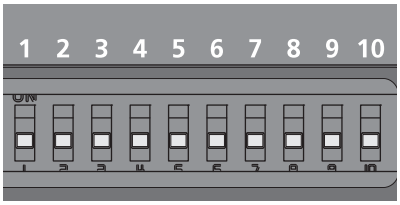
The following table lists the differences between the values set using the "automatic I/O parameter setting function" of the CC-Link IE Field Network remote I/O module and the default values of the CC-Link IE TSN remote I/O module.

No.	Function	Value set using the "automatic I/O parameter setting function" of the CC-Link IE Field Network remote I/O module	Default value of the CC-Link IE TSN remote I/O module
1	Input response time setting	10ms	1ms*1
2	Output HOLD/CLEAR setting	CLEAR	CLEAR
3	Cyclic data update watch time setting	Not monitor	Not supported (Equivalent to "Not monitor")
4	Mode switch	Automatical judgment mode (When network synchronous communication is enabled for the master station, the module operates in the "synchronous communication mode".)	Synchronous X/Y control mode (Equivalent to the "synchronous communication mode" for the CC-Link IE Field Network remote I/O module)
5	Initial operation setting	Without initial processing	Not supported*2 (Equivalent to "No initial processing")

*1 The setting value differs. When the input response time is set to 10, change the value.
*2 The initial operation setting function is not supported. Do not include the initial processing in the program.

Function setting switches on the CC-Link IE TSN remote I/O module

This section describes how to set the function setting switches on the CC-Link IE TSN remote I/O module. The following figure shows the switches.



No.	Switch name	Function name	Setting details
1	Function setting switch 1	Network setting function	Off: CC-Link IE TSN communication mode (at shipment) On: CC-Link IE Field Network communication mode
2 3 4	Function setting switch 2 to function setting switch 4	Input response time setting function	Set the input response time. 0ms/0.2ms/1ms/1.5ms/5ms/10ms/20ms/70ms (At shipment: 1ms) When setting 10ms, set switches 2 and 4 to on, and set switch 3 to off. For other settings, refer to the following. 📖 CC-Link IE TSN Remote I/O Module User's Manual (CC-Link IE Field Network Communication Mode) (SH-082240ENG)
5	Function setting switch 5	Output HOLD/CLEAR setting	Set whether to hold or clear the last output value when the I/O module is disconnected from data link. Off: CLEAR (Factory default) On: HOLD
6 7	Function setting switch 6 and function setting switch 7	CC-Link IE Field Network synchronous communication mode setting function	Set the operation mode of the CC-Link IE Field Network to synchronous communication mode. Switch 6 = Off, switch 7 = Off: Synchronous X/Y control mode (Equivalent to the synchronous communication mode for the CC-Link IE Field Network remote I/O module) Switch 6 = Off, switch 7 = On: Synchronization cycle timing control mode
8 9	Function setting switch 8 and function setting switch 9	Fast link-up function	Set whether to enable or disable the fast Link-up function. (Equivalent to function setting switches 2 and 3 on the CC-Link IE Field Network remote I/O module)
10	Function setting switch 10	Use prohibited	Off (fixed)

Operating procedure

1. Selecting the CC-Link IE Field Network communication mode

Set function setting switch 1 to on for selecting the CC-Link IE Field Network communication mode.

2. Setting I/O parameters

As required, set functions using function setting switches 2 to 7.

For the CC-Link IE Field Network remote I/O module, the input response time setting and Output HOLD/CLEAR setting are set using an engineering tool. For the CC-Link IE TSN remote I/O module, however, the settings can be set using function setting switches 2 to 5.

3.3 Rewiring of Cables

After disconnecting the cables from the existing module, reconnect them to the new module.

For how to disconnect the cables, refer to the manuals for each module used.

4 REPLACEMENT PROCEDURE USING THE ENGINEERING TOOL

A profile is required for each of the model names of the modules to be replaced.
This chapter describes the replacement procedure for profiles.

4.1 Replacement Procedure

The replacement procedure differs depending on whether the number of points for the CC-Link IE Field Network remote I/O module exceeds 32 or is 32 or less.
Refer to the following.
When the number of points is 32 or less: ☞ Page 50 Replacement procedure when the number of points is 32 or less
When the number of points exceeds 32: ☞ Page 51 Replacement procedure when the number of points exceeds 32

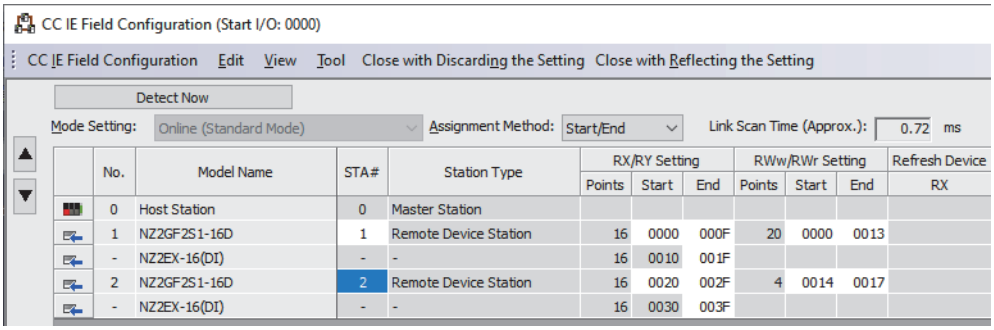
CC-Link IE Field Network remote I/O module			CC-Link IE TSN remote I/O module		Reference
Model name	**Station type**	**Extension module**	**Model name**	**Station type**	
NZ2GF2S1-16☐	Remote device station	None	NZ2GN2S1-16☐	Remote device station	☞ Page 50 Replacement procedure when the number of points is 32 or less
		1 modules	NZ2GN2S1-32☐	Intelligent device station	
NZ2GF2B1N1-16☐	Remote device station	None	NZ2GN2B1-16☐	Remote device station	
		1 modules	NZ2GN2B1-32☐	Intelligent device station	
		2 modules	NZ2GN2B1-16☐ + 32☐	Remote device station + Intelligent device station	☞ Page 51 Replacement procedure when the number of points exceeds 32
		3 modules	NZ2GN2B1-32☐ + 32☐	Intelligent device station + Intelligent device station	
NZ2GF2B1-32☐	Intelligent device station	None	NZ2GN2B1-32☐	Intelligent device station	☞ Page 50 Replacement procedure when the number of points is 32 or less
NZ2GFCE3N-32☐	Remote device station	None	NZ2GNCE3-32☐	Intelligent device station	
		1 modules	NZ2GNCE3-32☐ + 16☐	Intelligent device station + Remote device station	☞ Page 51 Replacement procedure when the number of points exceeds 32
NZ2GFCF1-32☐	Intelligent device station	None	NZ2GNCF1-32☐	Intelligent device station	☞ Page 50 Replacement procedure when the number of points is 32 or less
		1 modules	NZ2GNCF1-32☐ + 16☐	Intelligent device station + Remote device station	☞ Page 51 Replacement procedure when the number of points exceeds 32

Replacement procedure when the number of points is 32 or less

The replacement procedure when the number of points is 32 or less is shown below.

Ex.

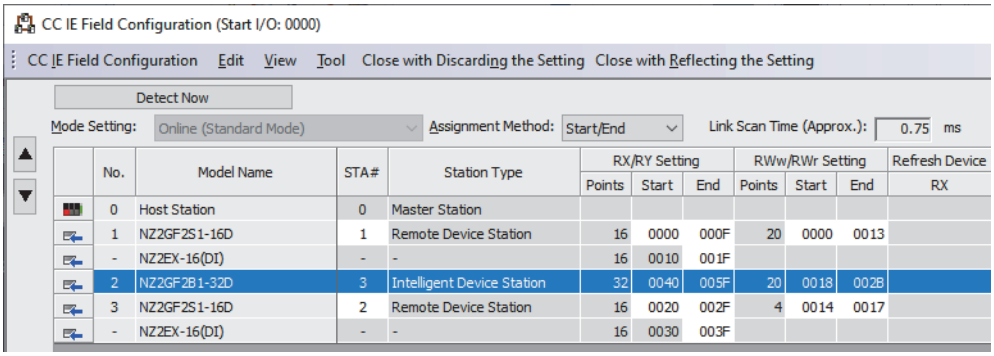
The window before setting is shown below.



Operating procedure

1. Addition of the alternative module

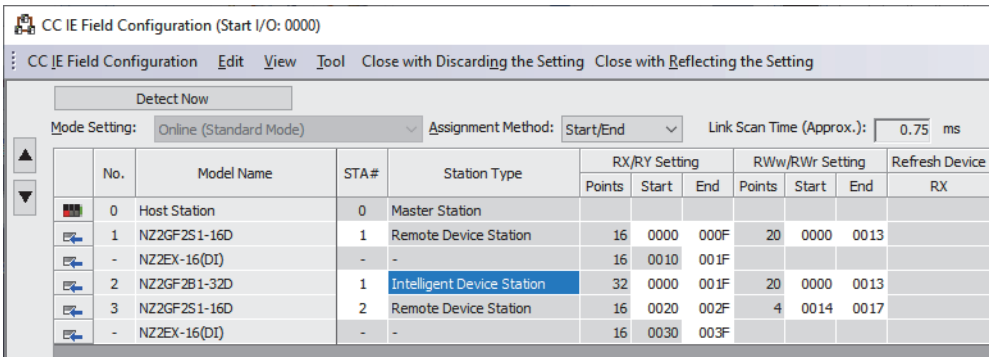
Add the alternative module. (This example describes the replacement procedure using the NZ2GF2B1-32D. The replacement procedure is the same as that for CC-Link IE TSN remote I/O modules.)



2. Change of the station number

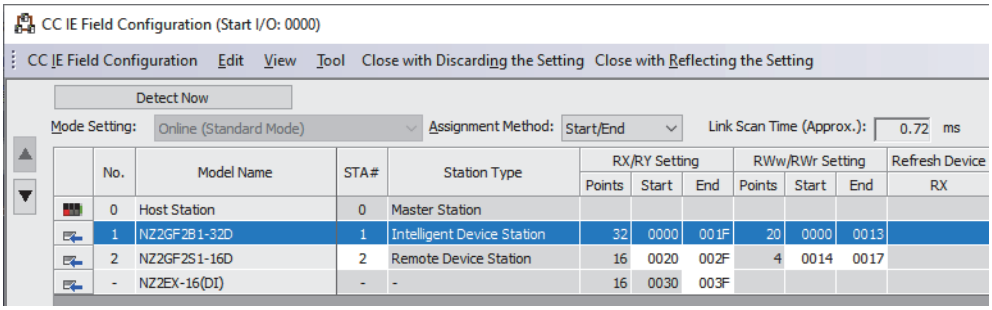
Change the station number. In the RX/RY Setting and RWw/RWr Setting, set the start number and end number to the value for the main modules and extension modules of the module to be replaced.

When the module to be replaced has no extension module, setting of the value for the extension module is not required.



3. Deletion of the station to be replaced

Delete the station to be replaced.

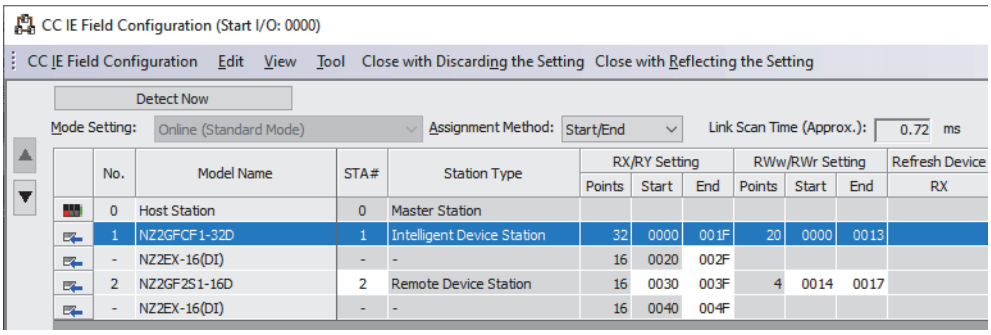


Replacement procedure when the number of points exceeds 32

The replacement procedure when the number of points exceeds 32 is shown below.

Ex.

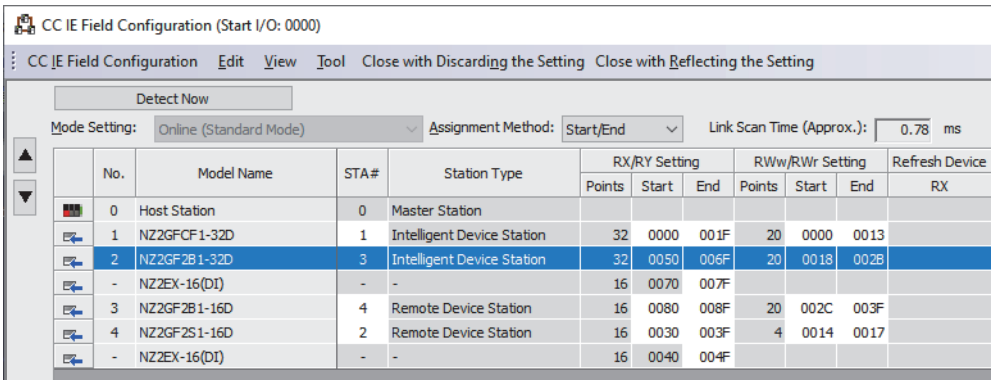
The window before setting is shown below.



Operating procedure

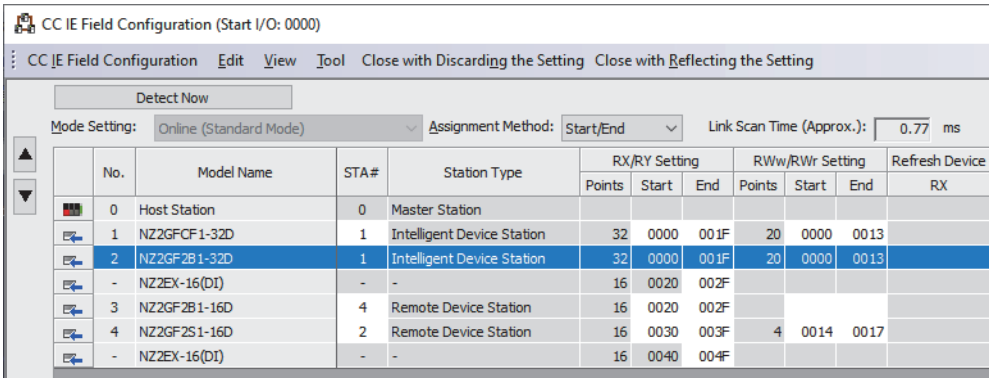
1. Addition of the alternative module

Add the alternative module. (This example describes the replacement procedure using the NZ2GF2B1-32D and NZ2GF2B1-16D. The replacement procedure is the same as that for CC-Link IE TSN remote I/O modules.)



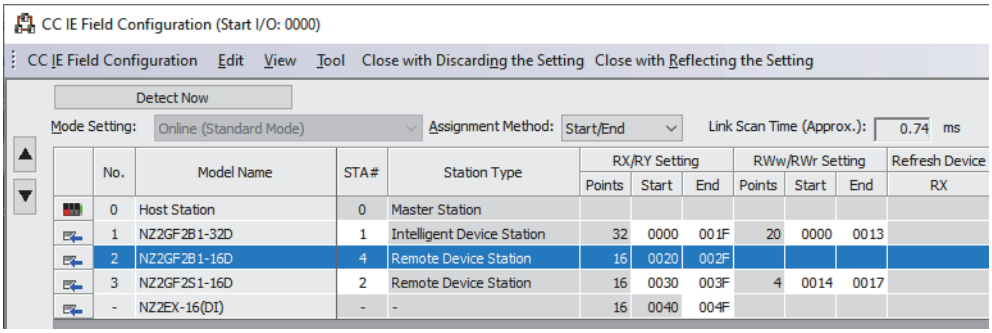
2. Set the station number and the number of points.

- For the 32-point module, set the same values as those of the main module to be replaced.
- For the 16-point module, set the station number to an unoccupied number and meet the RX/RY points with that of the extension module. (Aline the settings for the reserved station and synchronous with those for the main module.)



3. Deletion of the station to be replaced

Delete the station to be replaced.



4.2 Change of Programs

For the remote I/O (RX, RY) signals of the link device, change of the program is not required. Some remote register areas (RWr, RWw) differ in assignment (device number) or cannot be used. As required, modify the program.

For details, refer to the following.

☞ Page 29 Comparison of Link Device (RX, RY, RWr, RWw)

In addition, if the program accesses remote buffer memory areas other than those listed below, delete the access processing from the program.

- Error history data 1 to Error history data 15 (0A00H to 0AEFH)
- Error history clear command (1000H)
- Error history clear completed (1001H)

For details on replacing remote buffer memory areas, refer to the following.

☞ Page 44 Comparison of Remote Buffer Memory

REVISIONS

Version	Date of Issue	Revision
A	April 2021	First edition
B	August 2021	Correction of errors in Section 2.2
C	December 2022	Addition of NZ2GFCM1-16T, NZ2GFCM1-16TE, NZ2GFCM1-16D, and NZ2GFCM1-16DE to the relevant models
D	January 2026	Addition of precautions for replacement Addition of comparison of remote buffer memory

TRADEMARKS