

## TECHNICAL BULLETIN

[ 1 / 6 ]

FA-A-0451-A

### Line Topology with 121 or More Device Stations (CC-Link IE TSN Products)

■Date of Issue

May 2025

■Relevant Models

MELSEC series, MELSERVO-J5 series, FREQROL-A800/E800 series, and tension controllers

---

Thank you for your continued support of Mitsubishi Electric products; programmable controller MELSEC series, AC servo system MELSERVO-J5 series, general-purpose inverter FREQROL-A800/E800 series, and tension controllers. This technical bulletin informs you of support for the line topology connection with 121 or more device stations for the CC-Link IE TSN products.

---

## MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN  
NAGOYA WORKS: 1-14, YADA-MINAMI 5-CHOME, HIGASHI-KU, NAGOYA 461-8670, JAPAN

## 1 LINE TOPOLOGY CONNECTION WITH 121 OR MORE DEVICE STATIONS

Up to 253 device stations can be connected to a MELSEC MX controller MX-R model. However, there are restrictions on connection configuration when some of the device stations do not support the line topology connection with 121 or more stations.

Support timing for the line topology connection with 121 or more stations varies device stations. For the target models and support schedule, refer to Page 5 TARGET MODELS AND SUPPORT SCHEDULE FOR LINE TOPOLOGY CONNECTION WITH 121 OR MORE STATIONS.

### Point

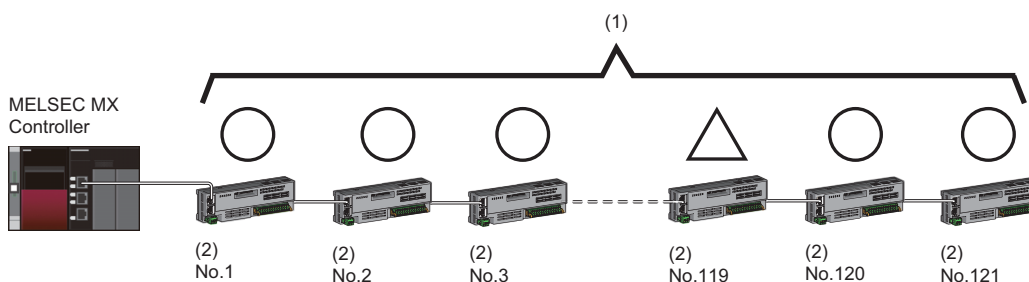
Device station models not manufactured by Mitsubishi Electric are recognized as models that do not support the line topology connection with 121 or more stations.

### 1.1 Restrictions When Some Device Stations Do Not Support The Line Topology Connection With 121 Or More Stations

When some device stations do not support the line topology connection with 121 or more stations, line topology connection with 121 or more CC-Link IE TSN Class B models cannot be used in the network via the same port of the master station.

#### Ex.

When some device stations do not support the line topology connection with 121 or more stations  
Line topology connection with 121 or more stations: ○: Supported, △: Not supported



(1) The number of line topology connection stations in the network via the same port of the master station is 121 or more.

(2) Remote station

### 1.2 How To Deal With Restrictions

Please take one of the following actions.

- If the support timing for line topology connection with 121 or more stations has passed in the target model, update the firmware to the latest one or replace the unsupported models with supported models. (☞ Page 5 TARGET MODELS AND SUPPORT SCHEDULE FOR LINE TOPOLOGY CONNECTION WITH 121 OR MORE STATIONS)
- Revise the network configuration so that the number of line topology connection stations in the network via the same port of the master station is 120 or less. (☞ Page 3 Revision of network configuration)

FA-A-0451-A

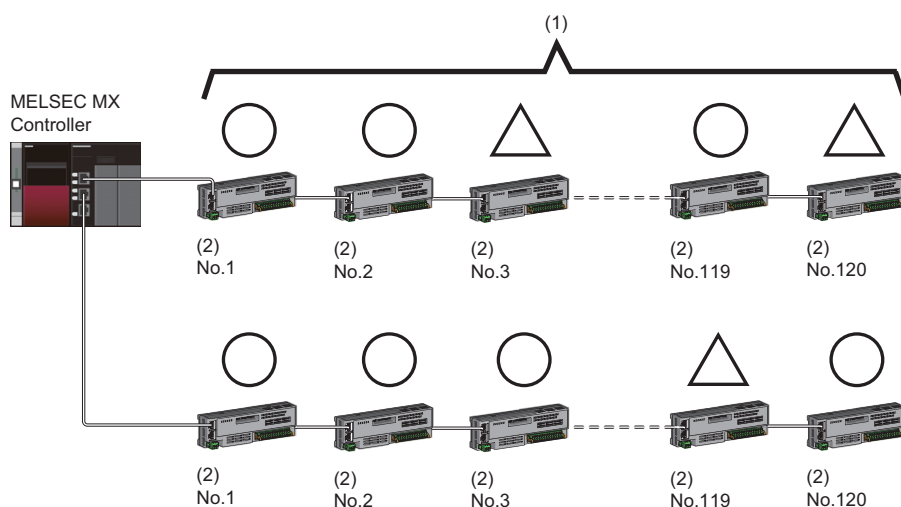
## Revision of network configuration

When some device stations do not support the line topology connection with 121 or more stations, revise the network configuration so that the number of line topology connection stations in the network via the same port of the master station is 120 or less as follows.

### Network configuration example

- Use other ports to decrease the number of line topology connection stations in the network via the same port of the master station to 120 or less.

Line topology connection with 121 or more stations: ○: Supported, △: Not supported

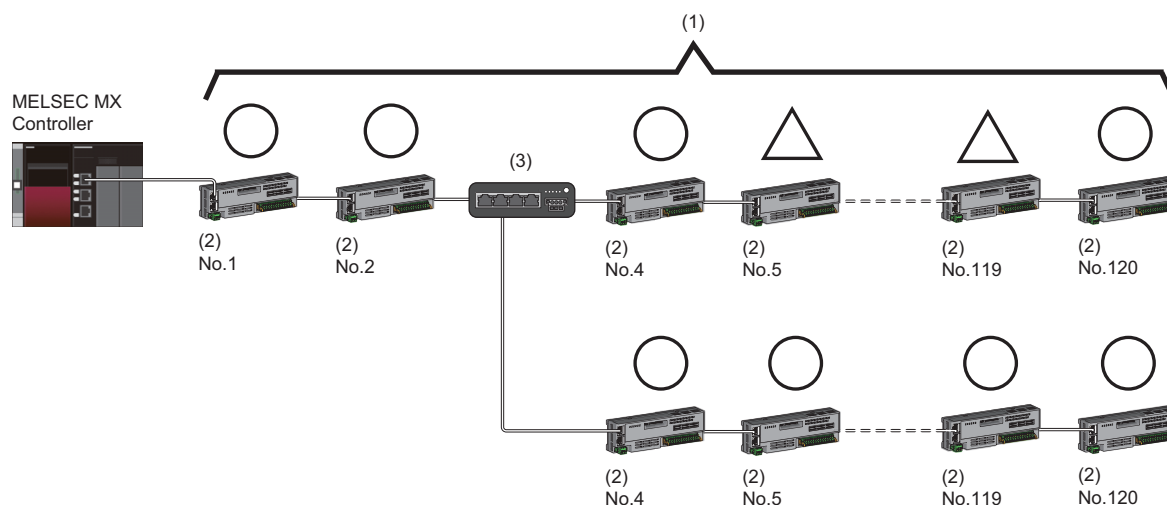


(1) The number of line topology connection stations in the network via the same port of the master station is 120 or less.

(2) Remote station

- Use a TSN switch. Connect 120 or less line topology connection stations in the network via the same port of the master station to each port of the TSN switch.

Line topology connection with 121 or more stations: ○: Supported, △: Not supported



(1) The number of line topology connection stations in the network via the same port of the master station is 120 or less.

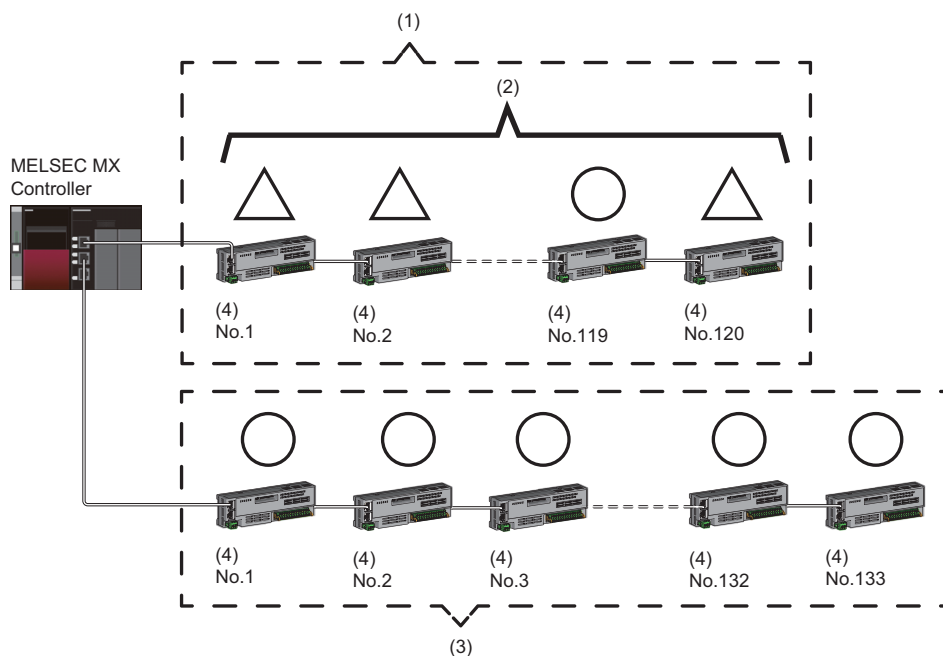
(2) Remote station

(3) TSN switch

## FA-A-0451-A

- Separate the ports to be used. Use one port to connect only the device stations that support the line topology connection with 121 or more stations, and the other to connect 120 or less stations including device stations that do not support the line topology connection with 121 or more stations.

Line topology connection with 121 or more stations: ○: Supported, △: Not supported



- (1) Device stations that do not support the line topology connection with 121 or more stations are included.  
 (2) The number of line topology connection stations in the network via the same port of the master station is 120 or less.  
 (3) Only device stations that support the line topology connection with 121 or more stations are connected.  
 (4) Remote station

## 2 TARGET MODELS AND SUPPORT SCHEDULE FOR LINE TOPOLOGY CONNECTION WITH 121 OR MORE STATIONS

Product		Model	Support schedule for line topology connection with 121 or more stations	Available firmware versions
Remote I/O Module	Input module	NZ2GN2S1-16D	Already supported in April 2025	10 or later
		NZ2GN2S1-32D		
		NZ2GN2B1-16D		
		NZ2GN2B1-32D		
		NZ2GNCF1-32D		
		NZ2GNCE3-32D		
		NZ2GN12A4-16D		
		NZ2GN12A4-16DE		
	Output module	NZ2GN2S1-16T	Already supported in April 2025	10 or later
		NZ2GN2S1-32T		
		NZ2GN2B1-16T		
		NZ2GN2B1-32T		
		NZ2GNCF1-32T		
		NZ2GN12A2-16T		
		NZ2GN2S1-16TE		
		NZ2GN2S1-32TE		
		NZ2GN2B1-16TE		
		NZ2GN2B1-32TE		
		NZ2GN12A2-16TE		
	I/O combined module	NZ2GN2S1-32DT	Already supported in April 2025	10 or later
		NZ2GN2B1-32DT		
		NZ2GNCE3-32DT		
		NZ2GN12A42-16DT		
		NZ2GN2S1-32DTE		
		NZ2GN2B1-32DTE		
		NZ2GN12A42-16DTE		
Remote analog module		NZ2GN2S-60AD4	Already supported in April 2025	08 or later
		NZ2GN2B-60AD4		
		NZ2GN2S-60DA4		
		NZ2GN2B-60DA4		
MELSERVO-J5 series AC servo system		MR-J5-G(4)	Already supported in April 2025	F0 or later (1Gbps only)
		MR-J5-G(4)-RJ		
		MR-J5-G(4)-HS		
		MR-J5-G(4)-LL		
		MR-J5W-G		
		MR-J5D-G4		
		MR-JET-G(4)		
		MR-JET-G4-HS		
FREQROL-A800/E800 series general-purpose inverter		FR-A800-GN	To be supported	To be supported
		FR-A8NCG		
		FR-A8NCG-S		
Tension controller		LM7-1LG	To be supported	To be supported
		LM7-2LG		
CC-Link IE TSN Remote Station Communication LSI with GbE-PHY		NZ2GACP620-60	Already supported in April 2025	1.09K or later
		NZ2GACP620-300		

FA-A-0451-A

---

**REVISIONS**

Version	Date of Issue	Revision
A	May 2025	First edition

**TRADEMARKS**

The company names, system names, and product names mentioned in this technical bulletin are either registered trademarks or trademarks of their respective companies.

In some cases, trademark symbols such as '™' or '®' are not specified in this technical bulletin.