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GL20-0032ETP-M Series Digital Output Module

User Guide

Industrial Automation | Intelligent Elevator | New Energy Vehicle | Industrial Robot | Rail Transit

Data code PS00021375A01

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The contents are subject to change without notice due to product upgrade.

Waste Disposal

The storage, use, and disposal of this product (including optional accessories) must comply with local laws and regulations.

Qualified Personnel

The product/system described in this documentation may be operated only by personnel qualified for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel can identify the risks of the product/system and prevent possible dangers.

Proper Use of the Product

Proper transportation, storage, assembly, installation, commissioning, operation, and maintenance are required to ensure the safe operation of the product without any problems. The required ambient conditions must be met. All operations must follow the guidelines provided in this documentation.

Preface

Introduction

The GL20-0032ETP-M is a 32-channel digital output expansion module. It supports output of source mode and can be used with GL20-RTU-ECT32 series communication interface modules.

This guide introduces the information, mechanical installation, electrical installation, program commissioning, and troubleshooting of the product.

Standards Compliance

The following table lists the certifications, directives, and standards that the product may comply with. For details about the acquired certificates, see the certification marks on the product nameplate.

Certification	Directive		Standard
CE Certification	EMC Directive	2014/30/EU	**24 VDC products:** EN 61131-2 **220 VAC products:** EN 61131-2 EN 61000-3-2 EN 61000-3-3
	LVD Directive	2014/35/EU	EN 61010-1 EN 61010-2-201
	RoHS Directive	2011/65/EU amended by (EU)2015/863	EN IEC 63000
UL/cUL Certification	-		UL 61010-1 UL 61010-2-201 CAN/CSA-C22.2 No. 61010-1 CSA C22.2 NO. 61010-2-201
KCC Certification	-		-
EAC Certification	-		-
UKCA Certification	Safety Regulations	Electrical Equipment (Safety) Regulations 2016	EN 61010-1 EN 61010-2-201
	EMC Regulations	Electromagnetic Compatibility Regulations 2016	**24 VDC products:** EN 61131-2 **220 VAC products:** EN 61131-2 EN 61000-3-2 EN 61000-3-3
	RoHS Regulations	Directive (RoHS) Regulations 2012	EN IEC 63000

More Data

Name	Code	Description
GL20-RTU-ECT/ECT32 Series Communication Interface Module User Guide	19012622	Introduces the information, mechanical installation, electrical installation, program commissioning, and troubleshooting of the product.
GL20-0032ETP-M Series Digital Output Module User Guide (This guide)	PS00021375	Introduces the information, mechanical installation, electrical installation, program commissioning, and troubleshooting of the product.

Revision History

Date	Version	Revision
September 2025	A01	**Modified:** • Modified the product diagram in *"1.1 Model and Nameplate" on page 8*. • Modified the product diagram in *"1.2 Components" on page 9*. • Modified the product diagram in *"3.2 Terminal Definition" on page 17*.
July 2025	A00	Initial release.

Access to the Guide

This guide is not delivered with the product. You can obtain the PDF version in the following ways:

- Do keyword search under Service and Support at *www.inovance.com*.
- Scan the QR code on the product with your smart phone.
- My Inovance APP: Scan the QR code below to install the app, where you can search for and download user guides.

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Within the warranty period, maintenance fee will be charged for the following damage:

- Damage caused by operations not following the instructions in the user guide
- Damage caused by fire, flood, or unusual voltage
- Damage caused by unintended use of the product
- Damage caused by use beyond the specified scope of application of the product
- Damage or secondary damage caused by force majeure (natural disaster, earthquake, and lightning strike)

The maintenance is charged according to the latest Price List of Inovance. If otherwise agreed upon, the terms and conditions in the agreement shall prevail.

For details, see Product Warranty Card.

Fundamental Safety Instructions

Safety Precautions

1. Read and follow the safety instructions when installing, operating, and maintaining the equipment.
2. To ensure your safety and prevent damage to the equipment, follow the marks on the equipment and all the safety instructions in this guide.
3. "CAUTION", "WARNING", and "DANGER" items in this guide do not indicate all safety precautions that need to be followed; instead, they just supplement the safety precautions.
4. Use this equipment according to the designated environment requirements; otherwise, a fault may occur. Malfunction or damage caused by improper use is not covered by warranty.
5. Inovance shall take no responsibility for any personal injury or property damage caused by improper use.

Safety Levels and Definitions

"DANGER" indicates that failure to comply with the notice will result in death or severe personal injuries.

"WARNING" indicates that failure to comply with the notice may result in death or severe personal injuries.

"CAUTION" indicates that failure to comply with the notice may result in minor personal injuries or equipment damage. Keep this user guide properly for future use and deliver it to the end user.

Control System Design
 • Provide a safety circuit outside the PLC so that the control system can still work safely once external power failure or controller fault occurs. • Add an external fuse or circuit breaker to prevent the module from smoking or catching fire due to long-time overcurrent caused by operation above rated current or load short-circuit.
 • An emergency stop circuit, a protection circuit, a forward/reverse operation interlocked circuit, and an upper position limit and lower position limit interlocked circuit must be set in the external circuits of PLC to prevent damage to the equipment. • To ensure safe operation, for the output signals that may cause critical accidents, use external protection circuit and safety mechanism. • Once the CPU of the PLC detects an exception in the system, all outputs may be closed; however, when a fault occurs in the controller circuit, the output may not be under control. Therefore, it is necessary to design an appropriate external control circuit to ensure normal operation. • If the output units such as relays or transistors are damaged, the output may fail to switch between ON and OFF states according to the commands. • The PLC is designed to be used in an indoor electrical environment compliant with overvoltage category II. The power supply must have a system-level surge protector to ensure that overvoltage caused by lightning shock cannot be applied to power supply input terminals, signal input terminals, and control output terminals of the PLC, therefore preventing damage to the product.

Installation
WARNING • Installation must be carried out by skilled personal who have undergone specialized electrical training and possess comprehensive electrical expertise. • Disconnect all external power supplies of the system before installing/removing the module. Failure to do so may result in electric shock, module fault, or malfunction. • Do not use the PLC in environments with dust, greasy smoke, conductive dust, corrosive or combustible gases, exposed to high temperature, condensation, wind & rain, or subject to vibration and shock. Electric shock, fire, and malfunction may also result in damage or deterioration to the product. • The PLC is open-type equipment that must be installed in a control cabinet with lock (cabinet housing protection > IP20). Only the skilled personnel who have undergone specialized electrical training and possess comprehensive electrical expertise can open the cabinet.
CAUTION • Prevent metal filings and wire ends from dropping into ventilation holes of the PLC during installation. Failure to comply may result in fire, fault, and malfunction. • Ensure there are no unwanted matters on ventilation surface. Failure to comply may result in poor ventilation, which may cause fire, fault, or malfunction. • Ensure the module is connected to the respective connector securely and hook the module firmly. Improper installation may result in malfunction, fault, or fall-off. • Ensure natural ventilation for the equipment.

Wiring
DANGER • Wiring must be carried out by skilled personnel who have undergone specialized electrical training and possess comprehensive electrical expertise. • Disconnect all external power supplies of the system before wiring. Failure to comply may result in electric shock, module fault, or malfunction. • After wiring, install the terminal cover attached to the product before power-on or operation. Failure to comply may result in electric shock. • Insulate the cable terminals properly to ensure the insulation distance between cables will not be shortened after cables are connected to the terminal block. Failure to comply may result in electric shock or damage to the product.
CAUTION • To avoid electric shock, cut off the power supply before connecting the equipment to the power supply. • The input power supply of this product must be 24 VDC. Power supplies outside ±20% of 24 VDC can cause severe damage to the product. Therefore, check whether the DC power supply provided by the switching-mode power supply is stable at a regular interval.

Operation and maintenance
 • Operation and maintenance must be carried out by skilled personnel who have undergone specialized electrical training and possess comprehensive electrical expertise. • Do not touch the terminals while the power is on. Failure to comply may result in electric shock or malfunction. • Disconnect all external power supplies of the system before cleaning the module or re-tightening screws on the terminal block or the connector. Failure to comply may result in electric shock. • Disconnect all external power supplies of the system before assembling/disassembling the module or connecting/removing the communication cables. Failure to comply may result in electric shock or malfunction.
Safety Recommendations • In the position where the operator directly touches the machinery part, for example, where a machinery tool is loaded/unloaded, or where a machine runs automatically, the on-site manual operating devices and any other alternative means must be carefully arranged and designed so that they are independent of the PLC and can start or terminate the automatic running of the system. • If modification on the program is needed during system operation, use the lock function or other protective measures. Ensure that only authorized personnel can make the necessary modifications.

Disposal
 • Treat the scrapped product as industrial waste. Dispose of the battery according to local laws and regulations. • Recycle retired equipment by observing industry waste disposal standards to avoid environmental pollution.

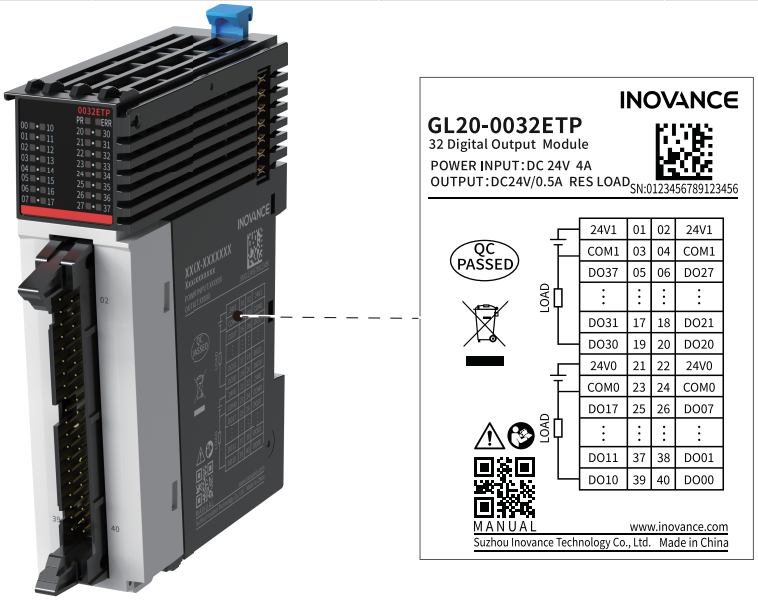
1 Product Information

1.1 Model and Nameplate

GL 20 - 00 32 E TP - M

① ② ③ ④ ⑤ ⑥ ⑦

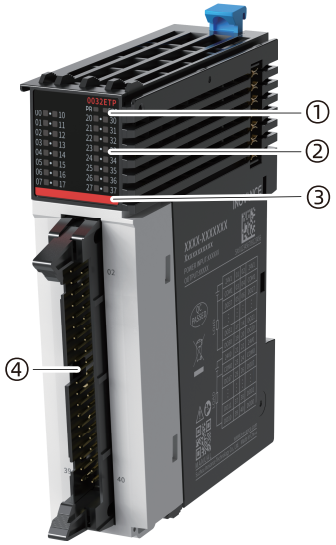
①	**Product Information** GL: Inovance general local module	③	**Number of Input Channels** 00: 0 input channels	⑤	**Module Type** E: Logic I/O expansion module	⑦	**Terminal Type** M: Ejector header (For the PUSHIN terminal, this item is empty by default)
②	**Series Number** 20: 20 series module	④	**Number of Output Channels** 32: 32 output channels	⑥	**Output Type** TP: Transistor output (source mode)	-	



The data for ordering the product is shown below.

Model	Description	Material Code	Applicable Model
GL20-0032ETP-M	GL20 series 32-channel transistor PNP output module	01440987	Applicable to the GL20-RTU-ECT32 series communication interface module

1.2 Components



No.	Component	Description			
①	Signal indicators	PR (POWER+RUN)	Power/Run indicator	Yellow-green	• Solid ON: The module is operating normally. • Flashing quickly: The module is addressed successfully. • Flashing slowly: The module is powered on but not addressed. • OFF: The module is not powered on or is faulty.
		ERR	Fault indicator	Red	ON when the module is faulty. For details, see "Troubleshooting" on page 25
②	I/O signal indicator	00 to 37	I/O signal indicator	Yellow-green	• Solid ON: The input/output is active. • OFF: The input/output is inactive.
③	Color identification		Red: Digital output		Orange: Analog output
			Gray: Digital input		Green: Analog input
			White: Communication		Blue: Other modules
④	User terminals	For details, see "3.2 Terminal Definition" on page 17			

Note

- Flashing quickly: The indicator is on for 200ms and off for 200ms.
- Flashing slowly: The indicator is on for 200ms and off for 1s.

1.3 Technical Specifications

General specifications

Item	Specification
IP rating	IP20
Dimensions (W x H x D)	24 mm x 100 mm x 75 mm
Weight	About 90 g

Power supply specifications

Item	Specification
Rated voltage of bus input power supply	5 VDC (4.75 VDC to 5.25 VDC)
Rated current of bus input power supply	90 mA (typical value@5 V)
Rated voltage of terminal input power supply	24 VDC (20.4 VDC to 28.8 VDC)
Rated terminal input current	4 A (typical@24 V)
Rated voltage of terminal output power supply	/
Rated current of terminal output power supply	/
Hot swap	Not supported

Interface specifications

Item	Specification
Output type	Digital output, high side transistor output
Output mode	Source mode
Number of output channels	32
Output voltage	24 VDC±10% (20.4 VDC to 28.8 VDC)
Output load (resistive load)	0.5 A/channel; 1 A/group; 4 A/module
Output load (inductive load)[1]	7.2 W/channel; 6 W/group; 24 W/module
Output load (lamp load)[2]	5 W/channel; 9 W/group; 36 W/module
Hardware response time upon ON/OFF	300μs/300μs
Leakage current upon OFF	10 μA
Switching frequency	Resistive load: 100 Hz; inductive load: 0.5 Hz; lamp load: 10 Hz
Isolation	Not supported
Output indicator	The output indicator turns ON (controlled by software) when the output is in drive state.
Output derating	Take resistive load as an example, the module operates at full load (with the output current of all 32 simultaneously ON output channels not exceeding 4 A) at 45°C, and operates at 50% of full load (with the output current not exceeding 2 A) at 55°C.
Protective functions	Supports channel-level short circuit and overcurrent protection, with a response current of 1.3 A per channel. The channel is shut down in case of overcurrent or short-circuit.

Caution

- [1]: Stopping inductive loads generates a large back EMF, which lasts for a time shorter than the configured switch-off cycle.
- [2]: When the lamp load is closed, a large inrush current is generated, generally 10 to 15 times the normal operating current. This module can safely drive loads with an inrush current up to 10 A for durations within 300μs.

Software specifications

Item	Specification
Output PDO data volume	4 bytes
Programming software version	• AutoShop V4.12.0.0 and above • InoProShop V1.9.1.0 and above
Output state mode during fault stop	Output zero, last value, or preset value
Preset value output during fault stop	0 or 1
Output terminal fault detection and indication	Supported
Output channel logic level configuration	Not supported
Independent channel enable configuration	Not supported
Diagnostic report configuration	Not supported
Output in the stop mode	Outputted based on fault stop state mode and preset value (no longer updated)
I/O mapping	Supports bitwise, bytewise, and wordwise I/O mapping modes

1.4 Environmental Specifications

Item	Specification
Installation/Operating environment	Free from conductive dust, conductive fibers, explosive dust, flammable gases, water mist/greasy dirt, corrosive dusts/gases, strong vibration, and repetitive shock
Max. altitude	≤ 2000 m
Pollution degree	2
Immunity	2 kV on power supply cable (compliant with IEC 61000-4-4)
Overvoltage category	I
EMC immunity level	Zone B, IEC61131-2
ESD protection level	Contact discharge +/-6 kV, air discharge +/-8 kV
Vibration resistance	• Application scenario: Tested according to IEC60068-2-6; 3.5 mm amplitude at 5 Hz to 8.4 Hz; 1 g acceleration at 8.4 Hz to 200 Hz; in ten cycles/axes • Transportation scenario: Tested according to IEC60068-2-64; 0.01 g^2/Hz power spectral density at 5 Hz to 100 Hz; 0.001 g^2/Hz power spectral density at 200 Hz; Grms: 1.14 g
Shock resistance	Application/Transportation scenario: Tested according to IEC60068-2-27; 15 g peak gravitational acceleration; 11ms pulse width; 18 times in X/Y/Z-axis directions
Operating temperature/ humidity	• Temperature: -20°C to +55°C • Humidity: < 95% RH (30°C), without condensation

Item	Specification
Storage temperature/ humidity	• Temperature: -20°C to +60°C • Humidity: < 95% RH (30°C), without condensation
Transportation temperature/humidity	• Temperature: -40°C to +70°C • Humidity: < 95% RH (40°C), without condensation

2 Mechanical Installation

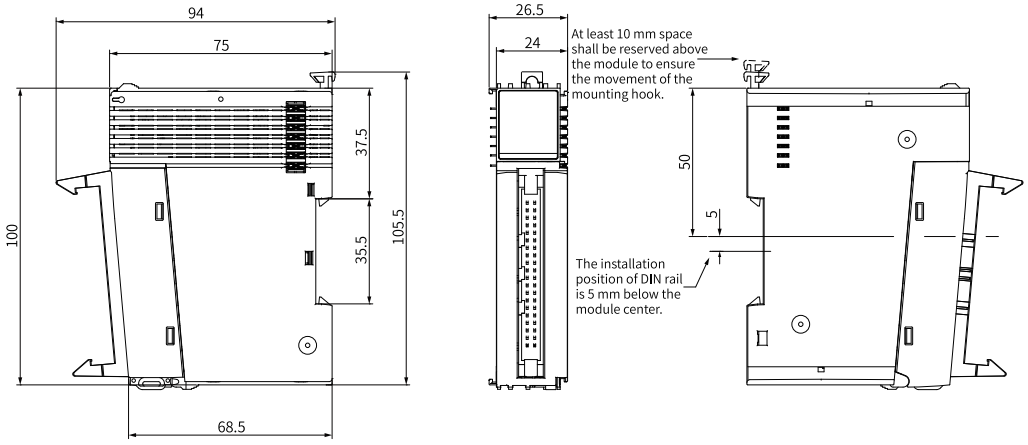
2.1 Installation Precautions

- Make sure the module is powered off before installing or removing.
- Do not hot swap the modules. Otherwise, the modules may be damaged by overcurrent or overvoltage, and the communication interface module or PLC may be subject to restart, user data loss or corruption.
- Do not drop or shock the housing or terminals of the module to avoid damage.

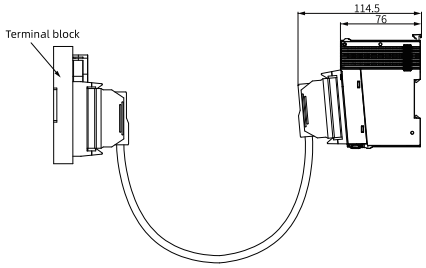
2.2 Installation Dimensions

Module

The installation dimensions (in mm) are shown in the figure below.



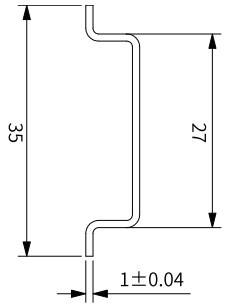
Cable



2.3 Installation Method

Installing modules side by side

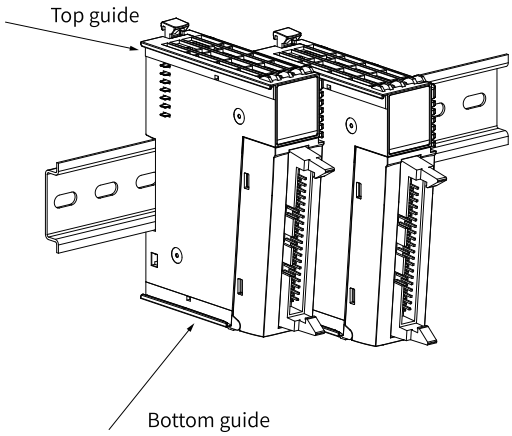
The module is mounted onto a DIN rail according to IEC 60715 (width: 35 mm, thickness: 1 mm). The dimensions (in mm) are shown below.



Caution

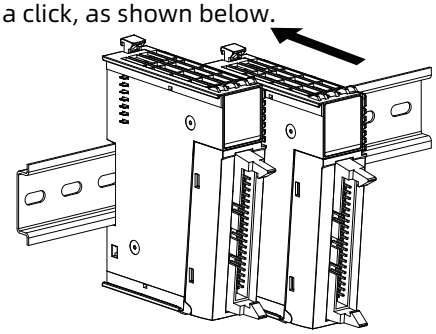
When installed on a DIN rail other than the recommended one (especially the one whose thickness is not 1.0 mm), the module will not fit in place as the mounting hook does not work.

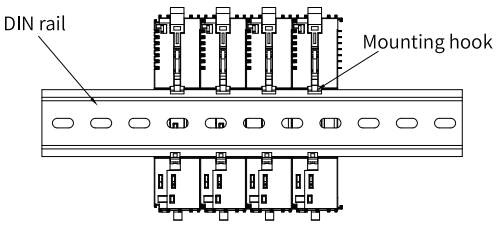
Install modules side by side by sliding them along the top and bottom guide rails of adjacent modules.



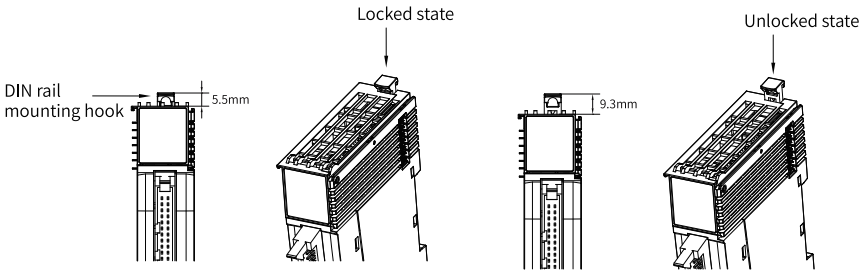
Installing modules onto DIN Rail

1. Align the module with the DIN rail and push it in the direction indicated by the arrow until you hear a click, as shown below.





2. Make sure the DIN rail mounting hook of the module is locked. The locked and unlocked states of the mounting hook are shown below.



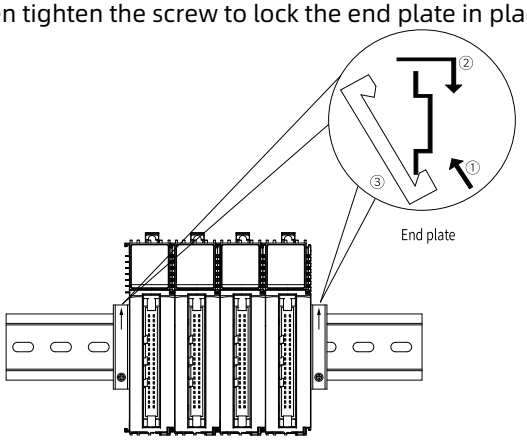
- If the mounting hook is pressed down, it is locked.
- If the mounting hook is lifted up, it is unlocked.

To lock the module to the DIN rail, press down the mounting hook.

Caution

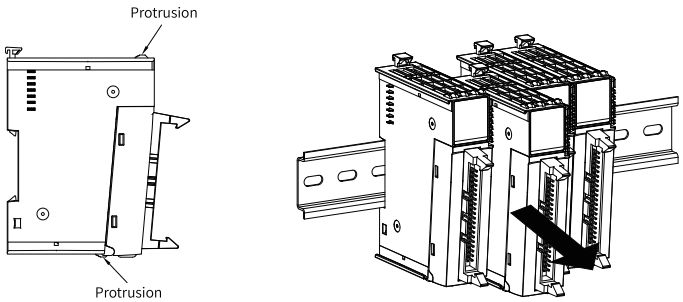
When the module is not installed on the rail, keep the mounting hook in the locked state. Keeping the mounting hook unlocked for a prolonged time may cause the hook to fail.

3. Install a DIN rail end plate on both sides of the PLC or expansion module. To install the end plate, hook the bottom of it to the bottom of the DIN rail, rotate the end plate to hook the top of it to the top of the DIN rail, and then tighten the screw to lock the end plate in place, as shown below.



Removing modules

Pry the DIN rail mounting hook upwards with a tool such as slotted screwdriver, hold the protrusions and pull the module out straight forward, and then press down the top of the DIN rail mounting hook.



3 Electrical Installation

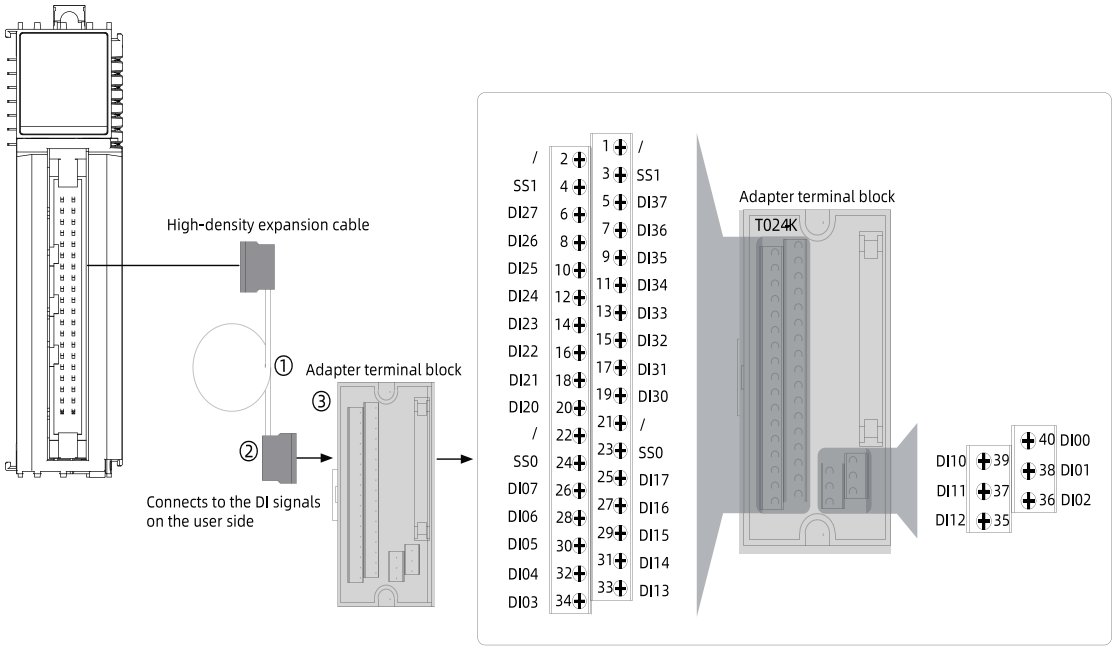
3.1 External Terminal Block and Cable Selection

The following table describes the order data of the terminal block and the cable.

Name	Material Code	Specifications	Description	Note
Cable (connector not provided)	15310167	XA3210A-40-L0.5M-01	40PIN MIL cable (500 mm)	High density adapter cable, including two 40PIN MIL connectors (500 mm)
	15310166	XA3210A-40-L2M-01	40PIN MIL cable (2000 mm)	High density adapter cable, including two 40PIN MIL connectors (2000 mm)
Terminal block	15020452	T024-K	40PIN MIL-to-screw terminal block	T024-K

Terminal block connection

After installation, connect the module to the external I/O terminal block through connecting cables. This module supports one external terminal block. When the T024-K adapter terminal block is used for connection, the correspondence between the terminals of the block and the terminals of the module is shown in the figure below. (When other types of adapter terminal blocks are used, check the terminal correspondence.)



3.2 Terminal Definition

Left Indicator	Left Signal	Left Terminal	Right Terminal	Right Signal	Right Indicator
-	24V1	01	02	24V1	-
-	COM1	03	04	COM1	-
37	DO37	05	06	DO27	27
36	DO36	07	08	DO26	26
35	DO35	09	10	DO25	25
34	DO34	11	12	DO24	24
33	DO33	13	14	DO23	23
32	DO32	15	16	DO22	22
31	DO31	17	18	DO21	21
30	DO30	19	20	DO20	20
-	24V0	21	22	24V0	-
-	COM0	23	24	COM0	-
17	DO17	25	26	DO07	07
16	DO16	27	28	DO06	06
15	DO15	29	30	DO05	05
14	DO14	31	32	DO04	04
13	DO13	33	34	DO03	03
12	DO12	35	36	DO02	02
11	DO11	37	38	DO01	01
10	DO10	39	40	DO00	00

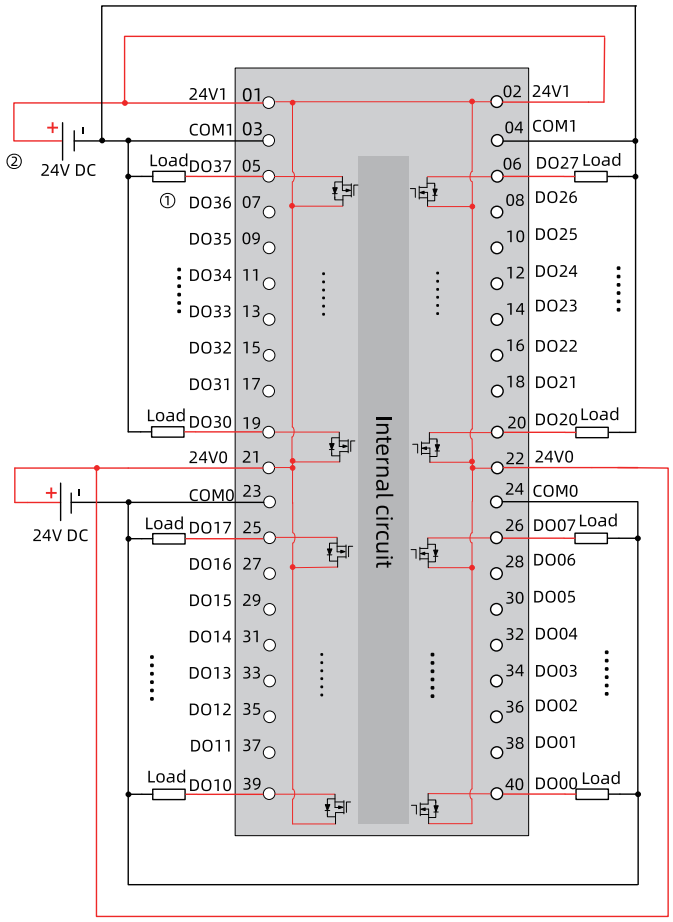
3.3 Terminal Wiring

Wiring precautions

- Do not bundle the expansion cable together with power cables (with high voltage and large current) that produce strong interference signals; otherwise, the expansion cable may be influenced by noise, surge, or induction. Separate it from other cables and avoid cabling in parallel.

- Use recommended cables and adapter boards for connection. It is recommended that shielded cables be used as expansion cables to enhance anti-interference capacity.
- Apply single-point grounding for the shielding of shielded cable and solder sealed cable.

Circuit block diagram and wiring diagram



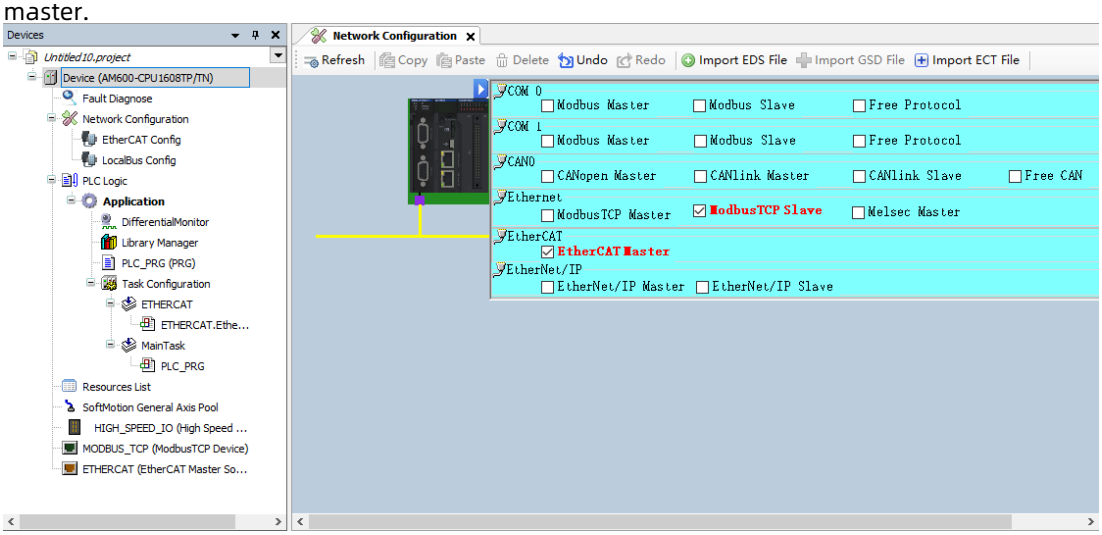
No.	Description
①	Terminals (05 to 19), (06 to 20), (25 to 39), and (26 to 40) are output terminals for wiring.
②	Terminals (01, 03), (02, 04), (21, 23), and (22, 24) are power supply terminals for wiring.

4 Program Commissioning

The following is an example where AM600 series PLC is used as the master control module along with the GL20-0032ETP-M module.

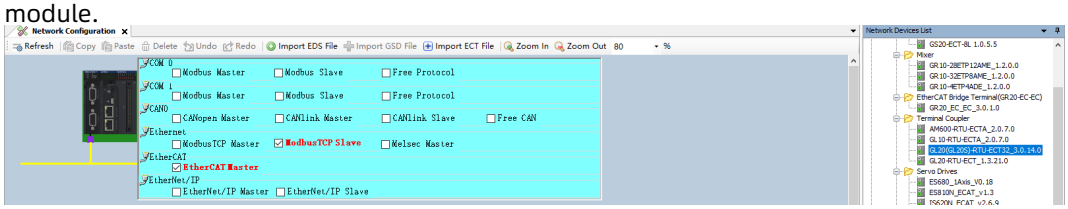
1. Enable the AM600 series PLC as the EtherCAT master and add the GL20-RTU-ECT32 communication interface module.

   a. In the left **Devices** pane, double-click **Network Configuration** and click the AM600 figure in the upper left corner of the interface. Check the "EtherCAT Master" to enable the PLC as an EtherCAT master.

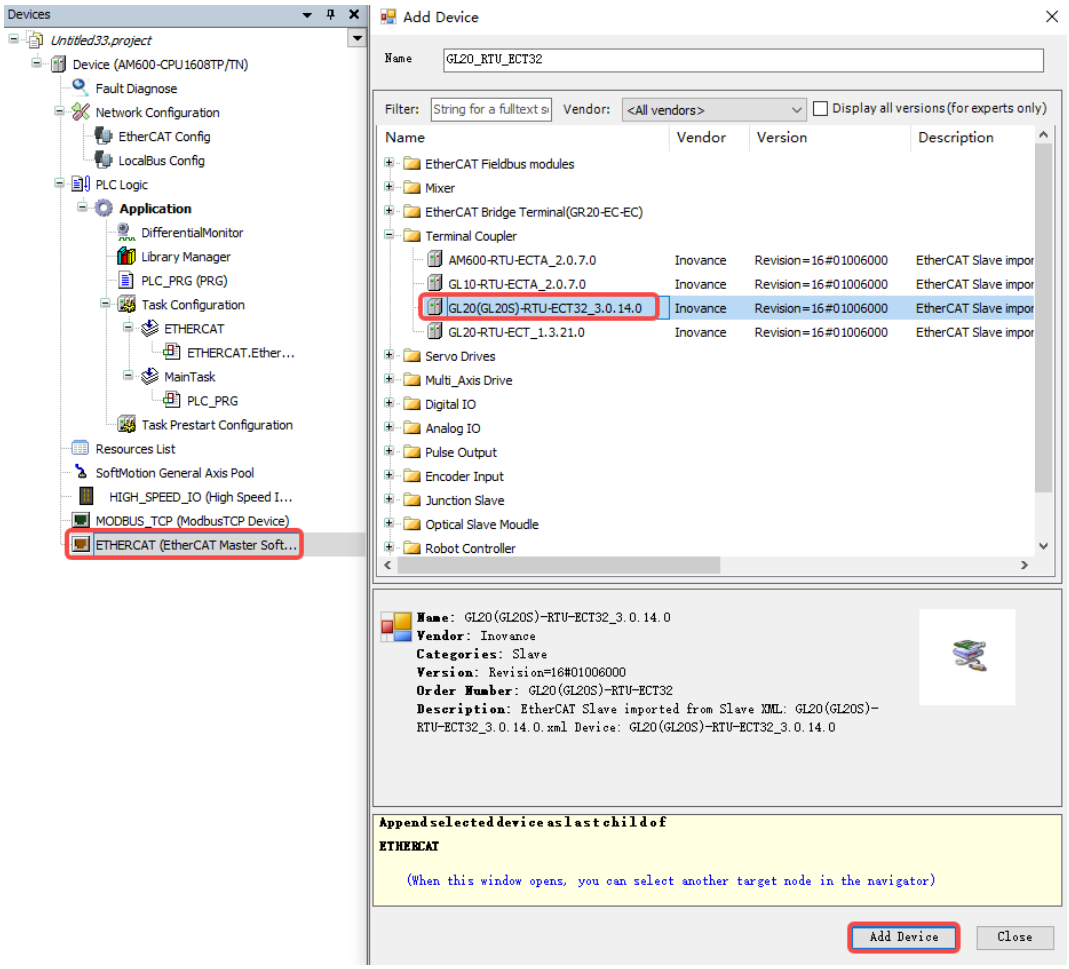


   b. Add the GL20-RTU-ECT32 communication interface module.

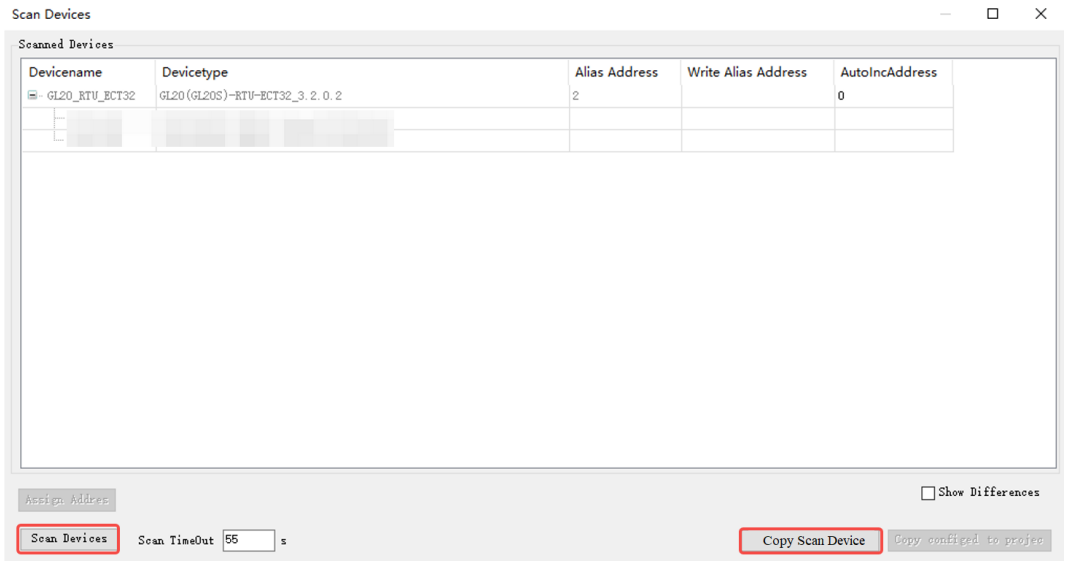
   - Method 1: In the right **Network Devices List**, double-click "GL20-RTU-ECT32" to add the module.



   - Method 2: In the left "Devices" pane, right-click "ETHERCAT(EtherCAT Master SoftMotion)" and select "Add Device". Select "GL20_RTU_ECT32_*X.X.X.X*" in the pop-up dialog box and click "Add Device".



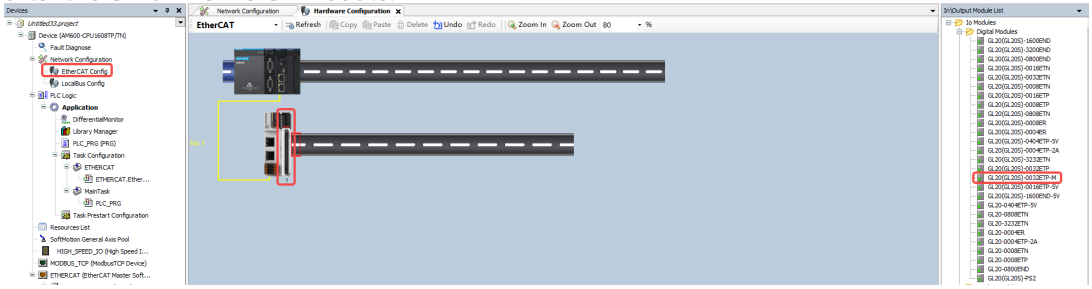
- Method 3: In the left "Devices" pane, right-click "ETHERCAT(EtherCAT Master SoftMotion)" and select "Scan For Devices". Click "Scan Devices", select the GL20-RTU-ECT module, and click "Copy Scan Device".



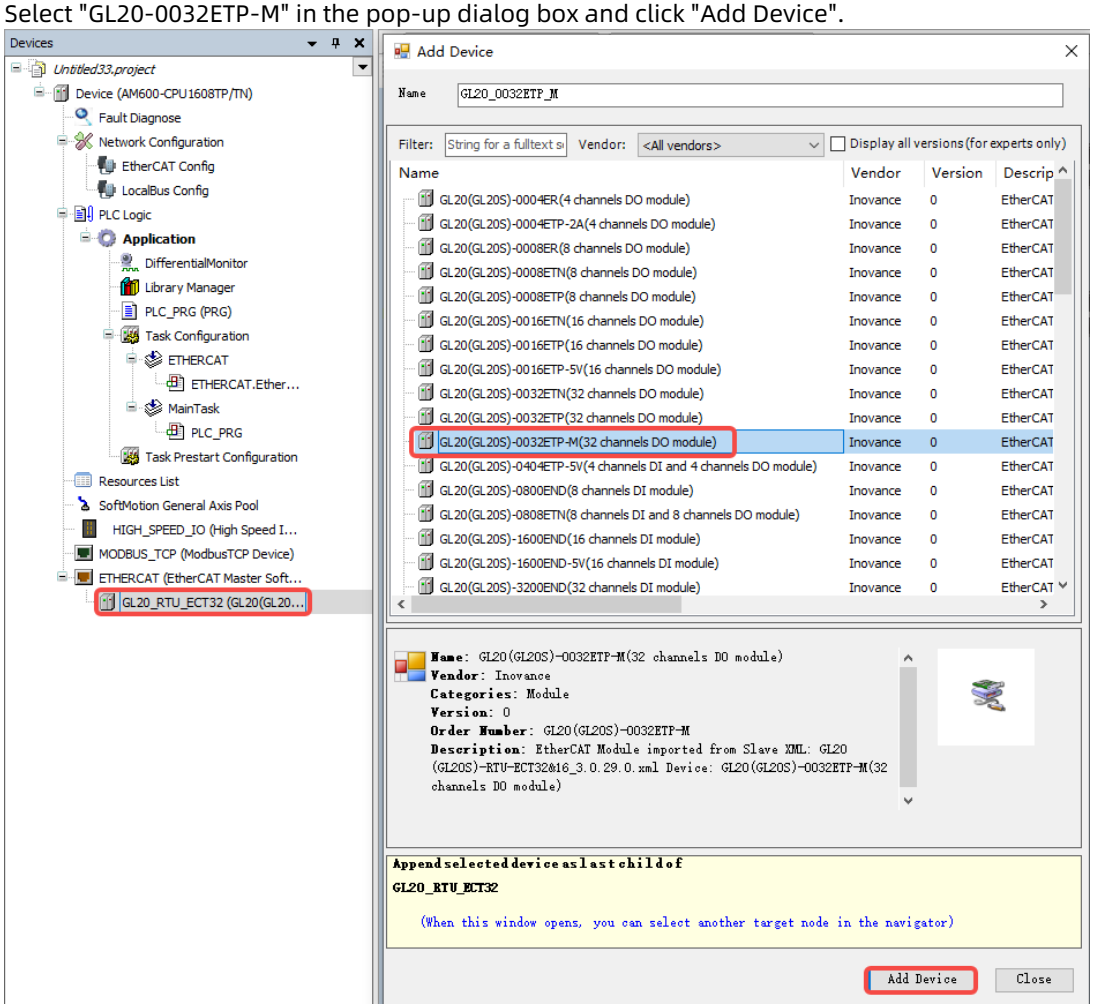
2. Add the GL20-0032ETP-M module.

- Method 1: Open the **Hardware Configuration** pane by double-clicking **EtherCAT Config** in the left **Devices** pane, or double-clicking the GL20-RTU-ECT32 figure in the **Network Configuration**

pane. In the right **In\Output Module List**, double-click "GL20-0032ETP-M" or drag and place it after the GL20-RTU-ECT32 module.

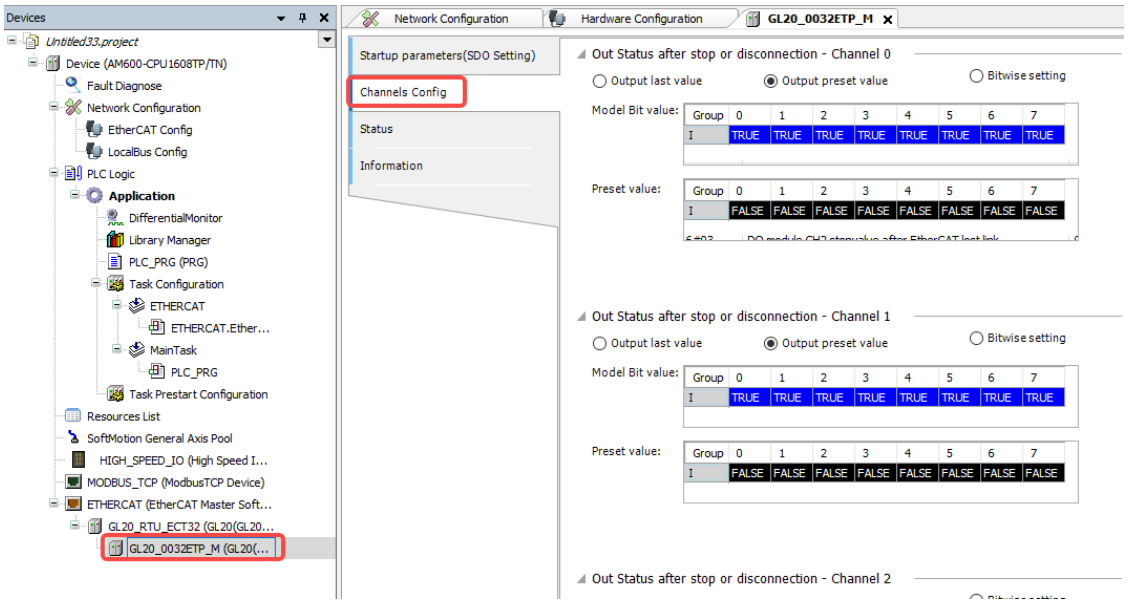


- Method 2: In the left "Devices" pane, right-click "GL20_RTU_ECT32" and select "Add Device". Select "GL20-0032ETP-M" in the pop-up dialog box and click "Add Device".



- Method 3: In the left **Devices** pane, right-click **ETHERCAT(EtherCAT Master SoftMotion)** and select **Scan For Devices**. Click **Scan Devices**, select the GL20-0032ETP-M module, and click **Copy Scan Device**.

3. Double-click the module to set "Channels config".

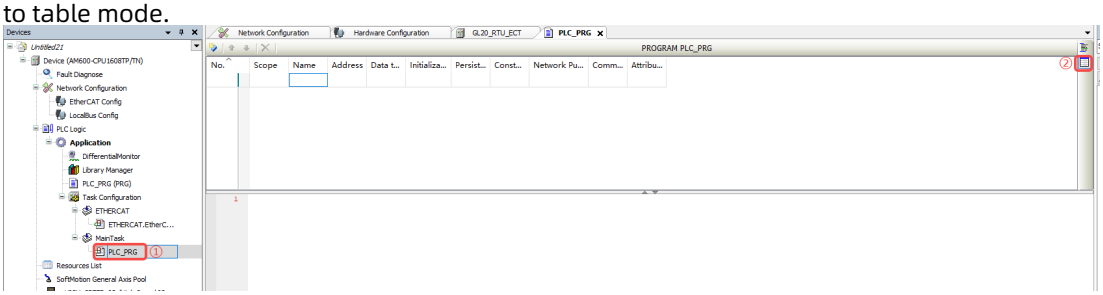


The parameters for channel configuration are shown in the following table.

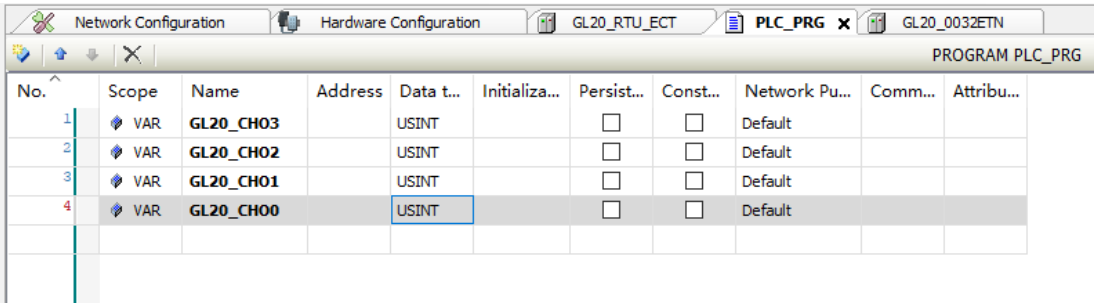
Parameter	Description	Configuration
Out Status after stop or disconnection	Output mode of the output channel of the module in non-OP state (when the module is stopped or the communication interface module is disconnected)	The following options are supported: • **Output last value**: All channels in the corresponding group retain the output state before module stop or network disconnection. • **Output preset value**: The output mode of each channel in the corresponding group matches the preset values. The preset value is matched by bit, with one bit representing one channel. For example, if Bit 0 is set to FALSE, the output state of channel 0 is 0; if Bit 0 is set to TRUE, the output state of channel 0 is 1. • **Bitwise setting**: The output mode of each channel in the corresponding group is matched by bit, with one bit representing one channel. If Bit 0 is set to TRUE, channel 0 outputs according to its preset value. If Bit 0 is set to FALSE, channel 0 retains the last output state.•

4. Create output variables.

a. In the left **Devices** pane, double-click **PLC_PRG** and click  in the upper right corner to switch to table mode.

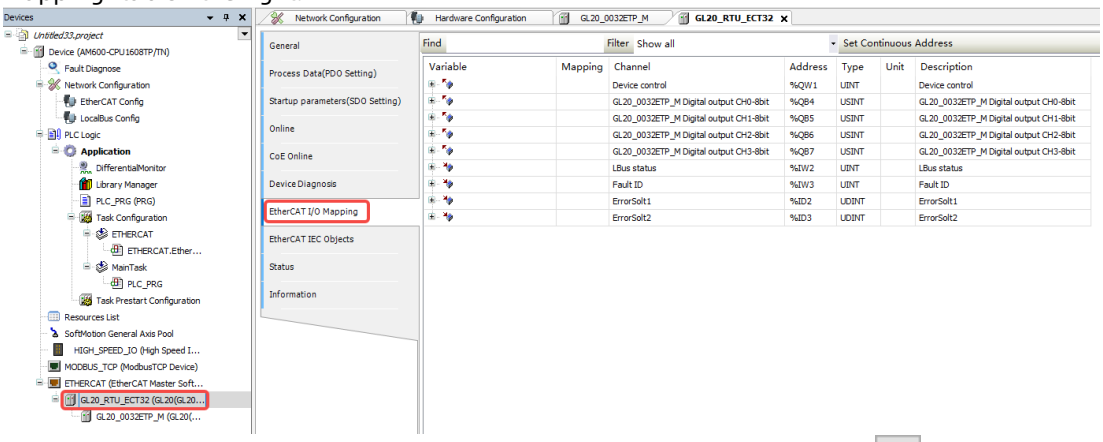


b. Add custom output variables "GL20_CHO0", "GL20_CHO1", "GL20_CHO2", and "GL20_CHO3". Set the scope of these variables to "VAR" and data type to "USINT", as shown below.

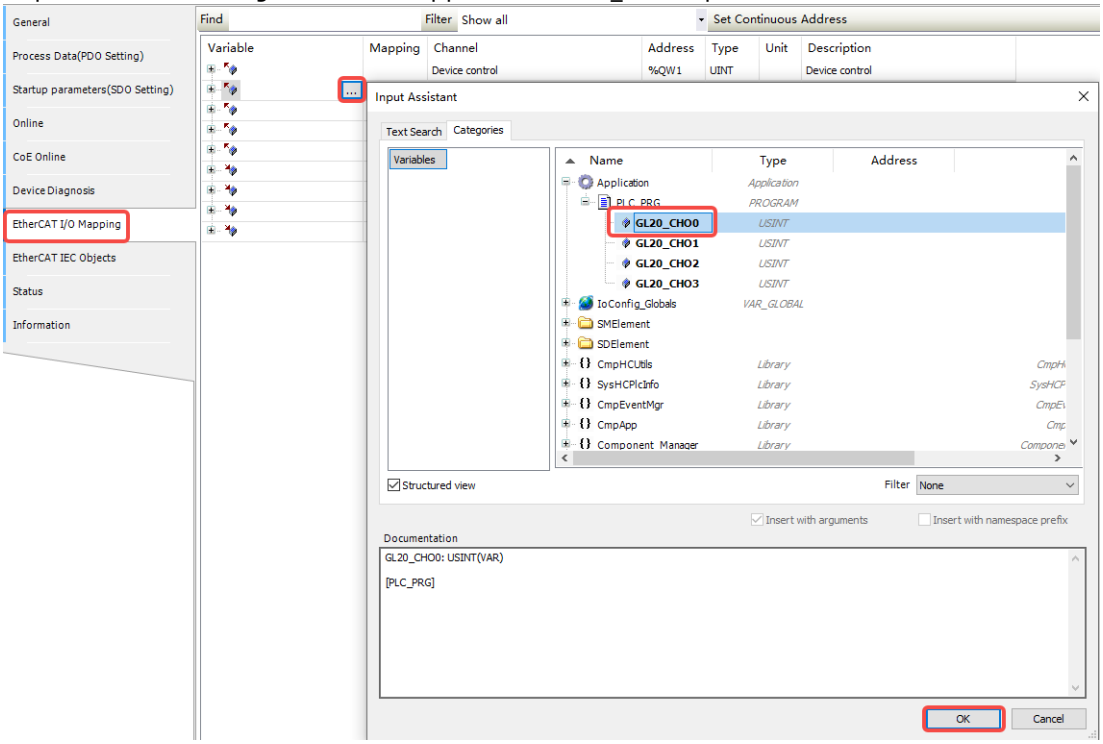


5. Map the output variables to the corresponding output channel.

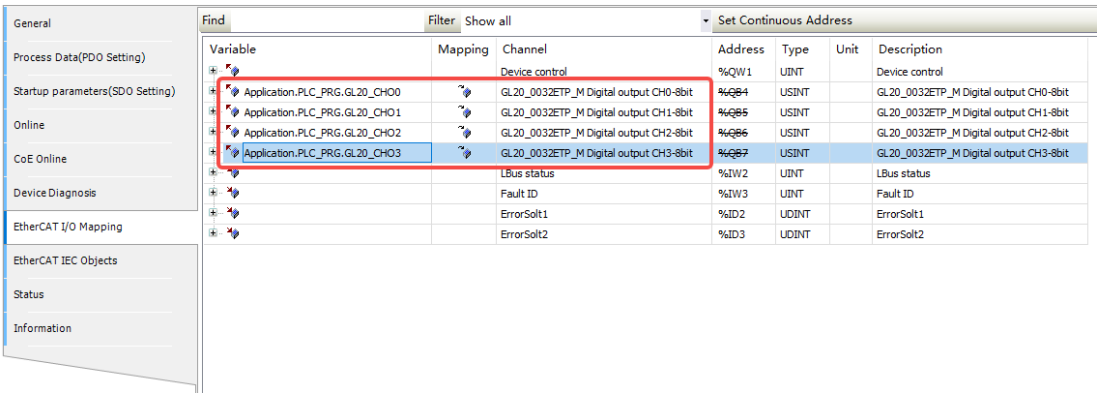
a. Double-click "GL20_RTU_ECT32" in the left "Devices" pane, and then click the "EtherCAT I/O Mapping" tab on the right.



b. On the "EtherCAT I/O Mapping" tab, double-click the variable entry and click ... to open the "Input Assistant" dialog box. Select "Application > PLC_PRG > specific variables" and click "OK".



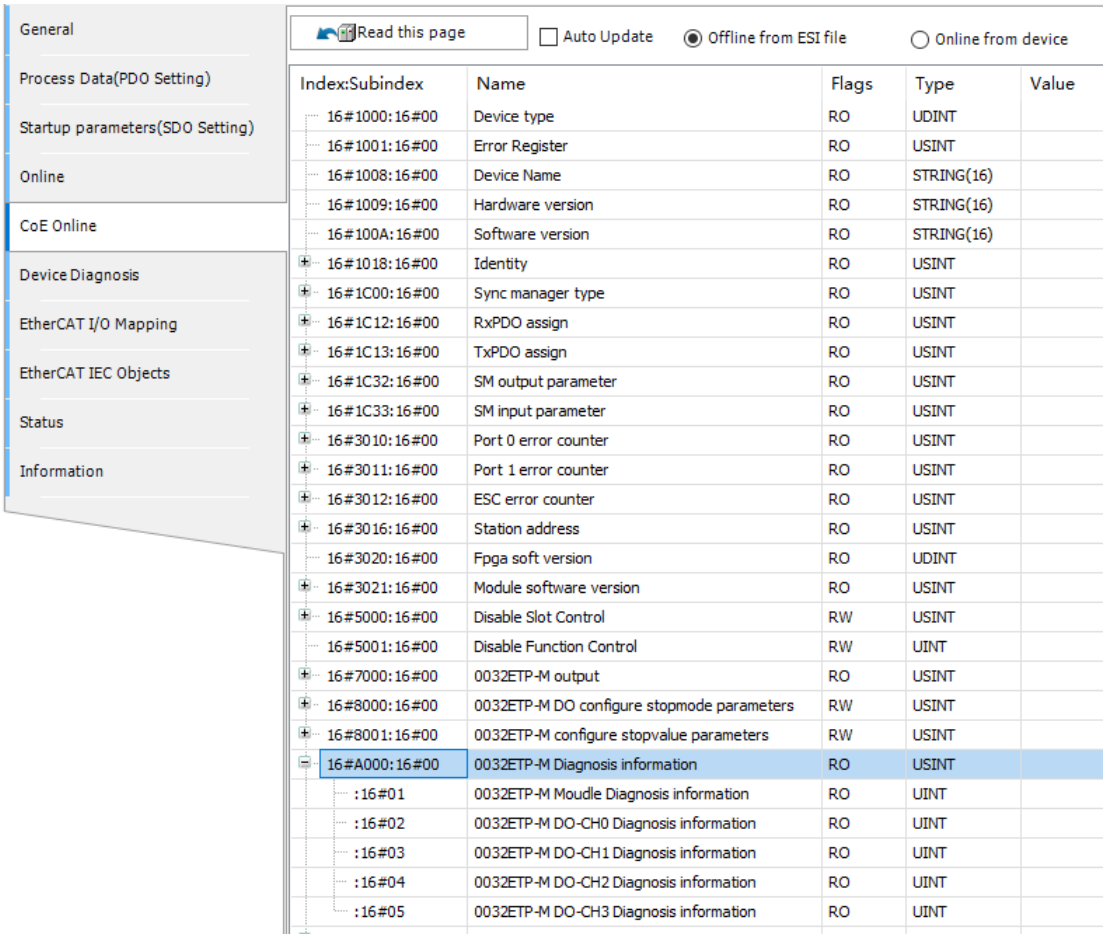
Map the variables "GL20_CHO0", "GL20_CHO1", "GL20_CHO2", and "GL20_CHO3" to the output channels of the configured module.



6. Double-click **PLC_PRG** in the left **Devices** pane and complete the programming on the **PLC_PRG** page.
7. Check, compile, log in, download, and run the program.
   a. Click  on the toolbar at the top of the interface to check whether the program is correct.
   b. Click  on the toolbar to compile all the code into PLC executable code.
   c. Click  on the toolbar, and follow the interface prompts to log in to the PLC and download the program.
   d. Click  on the toolbar to execute the program.

5 Troubleshooting

When the ERR indicator is ON, it indicates that the module is faulty. The module reports a fault code. You can get the fault code through the diagnostic data object dictionary value displayed on the **CoE Online** interface, as shown below. For the module installed in slot n (n=0-31), the object dictionary definition for index 0xA000+0x40*n is shown in the table below.



- Diagnostic data

  For the module in slot n (n = 0 to 31), the object dictionary definition for index 0xA000+0x40*n is shown in the table below.

Index	0xA000+0x40*n: 0032ETP-M Diag data				
Subindex	Name	Data Type	Access Type	Mapping	Default Value
0	Subindex 000	USINT	RO	NO	3
1	Module Error Code	UINT	RO	NO	0x0000
2	DO Channel Error Code CH0	UINT	RO	NO	0x0000
3	DO Channel Error Code CH1	UINT	RO	NO	0x0000

- Fault codes

Code	Description	Solution
0x5003	External 24 V power failure	Check the isolated power supply of the module.
0x6007	Channel short-circuited or overcurrent fault	Check whether the external loads is short-circuited or complies with the product specifications.

Note

The module reports short-circuit or overcurrent faults in groups of eight channels. When fault code 0x6007 is reported in 0032ETP-M DO-CH0/1/2/3 Diagnosis information, it indicates a short-circuit or overcurrent fault within the corresponding channel group.

6 Appendix: Version Matching Information

The version matching information is shown in the following table.

Product Name	Firmware Version	Device Description File (.xml)
This module	Logic software: 4.1.1.3 and later	-
GL20-RTU-ECT32 series communication interface module	Logic software: 0.1.4.5 and later	3.0.30.0 and later

Note

You can get the firmware of the module and the firmware of communication interface module from Inovance technical support, and download XML files and InoProShop from *https://www.inovance.com*.

Service and Support

Should you encounter a safety accident during the use or operation of the product, or face challenges in operating and maintaining the equipment, which remain unresolved after the relevant documentation is consulted, we provide multiple channels to ensure prompt resolution:

- Channel #1: Contact service@inovance.com.
- Channel #2: Visit https://www.inovance.com/global to access document downloads, after-sales support, spare parts ordering, repair applications, and authenticity verification services.
- Channel #3: Download My Inovance app (https://zshc-eu.inovance.com/download-pc/) where you can access products info and documentation, and query product parameters.

We are committed to providing you with quick and professional technical support, and we look forward to your satisfaction and trust.

PS00021375A01

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