



PS00017986A00

GE21-CAN-485 Communication Expansion Card User Guide

Suzhou Inovance Technology Co., Ltd.

Add.: No. 52, Tian E Dang Road, Wuzhong District, 215104,

Suzhou City, Jiangsu Province, P.R. China

Tel: (0512) 6637 6666 Fax: (0512) 6285 6720

www.inovance.com



Preface

■ Introduction

This guide introduces the full-scene task information for using this product, including product introduction, installation, wiring, configuration, and commissioning. Before using this product, read this guide carefully to ensure safe use.

■ 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 name	Directive name		Standards compliance
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	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	-		-

Certification name	Directive name		Standards compliance
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

Data Name	Code	Description
Easy321&Easy511 Programmable Logic Controller User Guide	PS00017976	Introduces comprehensive task information for using Easy321 and Easy511 products, including product introduction, installation, wiring, configuration and commissioning, product features, fault diagnosis, maintenance, and more.
H5U and Easy Series Programmable Logic Controller Programming Guide	19011157	Introduces the basics of H5U&Easy series PLC programming, quick start guide, communication, motion control, and high-speed counter usage.
H5U and Easy Series Programmable Logic Controller Instruction Guide	19011156	Introduces the basic and complex instructions, as well as examples of instructions used in product programming and application.
GE21-CAN-485 Communication Expansion Card User Guide	PS00017986	Introduces the full-scene task information for using this product, including product introduction, installation, wiring, configuration, and commissioning.

■ Revision History

Date	Version	Revision
May 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.
- Scan the QR code below to install My Inovance app, where you can search for and download user guides.



■ Warranty Disclaimer

Inovance provides warranty service within the warranty period (as specified in your order) for any fault or damage that is not caused by improper operation of the user. Maintenance will be charged after the warranty period expires.

Within the warranty period, maintenance 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

- This chapter presents essential safety instructions for a proper use of the equipment. Before operating the equipment, read through the guide and comprehend all the safety instructions. Failure to observe the safety instructions may result in death, personal injuries, or equipment damage.
- "DANGER", "WARNING", and "CAUTION" in this guide only indicate some of the precautions that need to be followed; they just supplement the safety precautions.
- Use this product according to designated environment requirements. Damage caused by improper use is not covered by warranty.
- Inovance shall take no responsibility for any personal injuries or property damage caused by improper usage.

■ Safety Levels and Definitions



DANGER

Indicates that failure to comply with the notice can result in death or severe personal injuries.



WARNING

Indicates that failure to comply with the notice may result in death or severe personal injury.



CAUTION

Indicates that failure to comply with the notice may result in minor or moderate personal injuries or equipment damage.

■ Fundamental Safety Instructions

- Drawings in the guide are sometimes shown without covers or protective guards. Remember to install the covers or protective guards as specified first, and then perform operations in accordance with the instructions.
- The drawings in the guide are shown for illustration only and may be different from the product you purchased.
- Operators must take mechanical precautions to protect personal safety and wear protective equipment, such as anti-smashing shoes, safety clothing, safety glasses, protective gloves, and protective sleeves.

Unpacking



WARNING

- Do not install the equipment if you find damage, rust, or signs of use on the equipment or accessories upon unpacking.
- Do not install the equipment if you find water seepage or missing or damaged components upon unpacking.
- Do not install the equipment if you find the packing list does not conform to the equipment you received.



CAUTION

- Check whether the packing is intact and whether there is damage, water seepage, dampness, and deformation before unpacking.
- Unpack the package in accordance with the package sequence. Do not hit the package with force.
- Check whether there is damage, rust, or injuries on the surface of the equipment and equipment accessories before unpacking.
- Check whether the package contents are consistent with the packing list before unpacking.

Storage and Transportation



WARNING

- Large-scale or heavy equipment must be handled by qualified professionals using specialized hoisting equipment. Failure to comply may result in personal injuries or equipment damage.
- Before hoisting the equipment, ensure that components such as the front cover and terminal blocks are secured firmly with screws. Loosely-connected components may fall off and result in personal injuries or equipment damage.
- Never stand or stay below the equipment when the equipment is being hoisted by the hoisting equipment.
- When hoisting the equipment with a steel rope, ensure the equipment is hoisted at a constant speed without suffering from vibration or shock. Do not turn the equipment over or let the equipment stay hanging in the air. Failure to comply may result in personal injuries or equipment damage.



CAUTION

- Handle the equipment with care during transportation and mind your steps to prevent personal injuries or equipment damage.
- When carrying the equipment with bare hands, hold the equipment casing firmly with care to prevent parts from falling. Failure to comply may result in personal injuries.
- Store and transport the equipment based on the storage and transportation requirements. Failure to comply may result in equipment damage.
- Avoid storing or transporting the equipment in environments with water splash, rain, direct sunlight, strong electric field, strong magnetic field, and strong vibration.
- Avoid storing the product for more than 3 months. When the product needs to be stored for an extended period, take strict protection and necessary inspection measures.
- Pack the equipment strictly before transportation. Use a sealed box for long-distance transportation.
- Never transport the equipment with other equipment or materials that may harm or have negative impacts on the product.

Installation



DANGER

- Installation must be carried out by skilled personnel who have undergone specialized electrical training and possess comprehensive electrical expertise. Non-professionals are not allowed to install the equipment.



WARNING

- Read through the guide and safety precautions before installation.
- Do not install the equipment in places with strong electric or magnetic fields.
- Before installation, check that the mechanical strength of the installation site can bear the weight of the equipment. Failure to comply will result in mechanical hazards.
- Do not wear loose clothes or accessories during installation. Failure to comply may result in electric shock.
- When installing the equipment in a closed environment (such as a cabinet or casing), use a cooling device (such as a fan or air conditioner) to cool the environment down to the required temperature. Failure to comply may result in equipment over-temperature or a fire.
- Do not retrofit the equipment.
- Do not fiddle with the bolts used to fix equipment components or the bolts marked in red.
- When the equipment is installed in a cabinet or final assembly, a fireproof enclosure providing both electrical and mechanical protections must be provided. The IP rating must meet IEC standards and local laws and regulations.
- Before installing devices with strong electromagnetic interference, such as a transformer, install a shielding device for the equipment to prevent malfunction.
- Install the product on an incombustible object such as metal and do not touch or attach the product to combustibles. Failure to comply can result in fire accident.



CAUTION

- Cover the top of the equipment with a piece of cloth or paper during installation. This is to prevent unwanted objects such as metal chippings, oil, and water from falling into the equipment and causing faults. After installation, remove the cloth or paper to prevent over-temperature caused by poor ventilation due to blocked ventilation holes.
- Resonance may occur when the equipment operating at a constant speed switches to variable speed operations. In this case, install the vibration-proof rubber under the motor frame or use the vibration suppression function to reduce resonance.

Wiring



DANGER

- Equipment installation, wiring, maintenance, inspection, or component replacement must be performed only by professionals.
- Before wiring, disconnect all the power supplies of the equipment. Wait for at least the time designated on the equipment warning label before further operations because residual voltage still exists after power-off. Measure the DC voltage of the main circuit and make sure that it is below the safety voltage. Failure to comply can result in electric shock.
- Do not perform wiring, remove the equipment cover, or touch the circuit board with power ON. Failure to comply will result in an electric shock.
- Check that the equipment is grounded properly. Failure to comply will result in an electric shock.



WARNING

- Do not connect the input power supply to the output end of the equipment. Failure to comply will result in equipment damage or even a fire.
- When connecting a drive to the motor, check that the phase sequences of the drive and motor terminals are consistent to prevent reverse motor rotation.
- Cables used for wiring must meet cross sectional area and shielding requirements. The shield of the cable must be reliably grounded at one end.
- Tighten the terminal screws with the tightening torque specified in the user guide. Improper tightening torque may result in overheat, damage to the connecting parts, or a fire.
- After wiring is done, check that all cables are connected properly and no screws, washers or exposed cables are left inside the equipment. Failure to comply may result in electric shock or equipment damage.

Wiring



CAUTION

- During wiring, follow the proper electrostatic discharge (ESD) procedures, and wear an antistatic wrist strap. Failure to comply will result in damage to internal equipment circuits.
- Use shielded twisted pairs for the control circuit. Connect the shield to the grounding terminal of the equipment for grounding purpose. Failure to comply can result in equipment malfunction.

Power-On



DANGER

- Before power-on, check that the equipment is installed properly with reliable wiring and the motor can be restarted.
- Check that the power supply meets equipment requirements before powering on to prevent equipment damage or a fire.
- When the equipment is powered on, do not open the cabinet door or protective cover, touch any wiring terminal, or disassemble any component of the equipment. Failure to comply can result in electric shock.



WARNING

- Perform a trial run after wiring and parameter setting to ensure the equipment operates safely. Failure to comply may result in personal injuries or equipment damage.
- Before power-on, check that the rated voltage of the equipment is consistent with that of the power supply. Failure to comply may result in fire accident.
- Before power-on, check that no one is near the equipment, motor, or machine. Failure to comply may result in death or personal injury.

Operation



DANGER

- The equipment must be operated only by professionals. Failure to comply can result in death or personal injuries.
- During operation, do not touch any connecting terminals or disassemble any component of the equipment. Failure to comply can result in electric shock.



WARNING

- Do not touch the equipment enclosure, fan, or resistor with bare hands. Failure to comply may result in burns.
- During operation, prevent metal or other objects from falling into the equipment. Failure to comply may result in fire or equipment damage.

Maintenance



DANGER

- Equipment installation, wiring, maintenance, inspection, or component replacement must be performed only by professionals.
- Do not maintain the equipment with power ON. Failure to comply can result in electric shock.
- Before maintenance, cut off all the power supplies of the equipment and wait for at least the time designated on the equipment warning label.
- In case of a permanent magnet motor, do not touch the motor terminals immediately after power-off because the motor terminals will generate induced voltage during rotation even after the equipment power supply is off. Failure to comply will result in an electric shock.



WARNING

- Perform routine and regular inspection and maintenance on the equipment in accordance with maintenance requirements and keep a record.

Repair



DANGER

- Equipment installation, wiring, maintenance, inspection, or component replacement must be performed only by professionals.
- Do not perform maintenance on the equipment with power on. Failure to comply can result in electric shock.
- Before inspection and maintenance, disconnect all the power supplies of the equipment and wait for at least the time designated on the equipment warning label.



WARNING

- Submit a request for repair services in accordance with the product warranty agreement.
- When the fuse is blown or the circuit breaker or earth leakage current breaker (ELCB) trips, wait for at least the time designated on the equipment warning label before power-on or further operations. Failure to comply may result in death, personal injuries, or equipment damage.
- Troubleshooting and repair must be performed by professionals in accordance with the repair instructions, with repair records kept properly.
- Replace quick-wear parts of the equipment in accordance with the replacement instructions.
- Do not use damaged equipment. Failure to comply may result in death, personal injury, or severe equipment damage.
- After the equipment is replaced, check the wiring and set parameters again.

Disposal



WARNING

- Dispose of retired equipment in accordance with local regulations and standards. Failure to comply may result in death, personal injuries, or property damage.
- Recycle retired equipment in accordance with industry waste disposal standards to avoid environmental pollution.

■ Safety Labels

For safe operation and maintenance, comply with the safety labels on the equipment. Do not damage or remove the safety labels. The following table describes the meaning of the safety labels.

To ensure safe operation, comply with equipment-related safety labels. The following table describes the meaning of the safety labels.

Safety Labels	Description
	• Read through the safety instructions before operating the equipment. Failure to comply may result equipment damage, personal injuries, or even death. • Do not touch the terminals or remove the cover with power ON or within 10 min after power-off. Failure to comply will result in electric shock.

1 Product Introduction

1.1 Product Overview

The GE21-CAN-485 communication expansion card is independently developed by Inovance Technology and is designed to work with the Easy321 and Easy511 PLCs. It supports one CAN and one RS485 communication channel.

1.2 Model and Nameplate

■ Model description

GE21 - CAN - 485

①

②

③

① Product Series

GE21 series general-purpose expansion card

③ Product Code

RS485 communication card

② Product Code

CAN communication card

-

■ Nameplate description



Communication Expansion Card

SN:01234567890123456

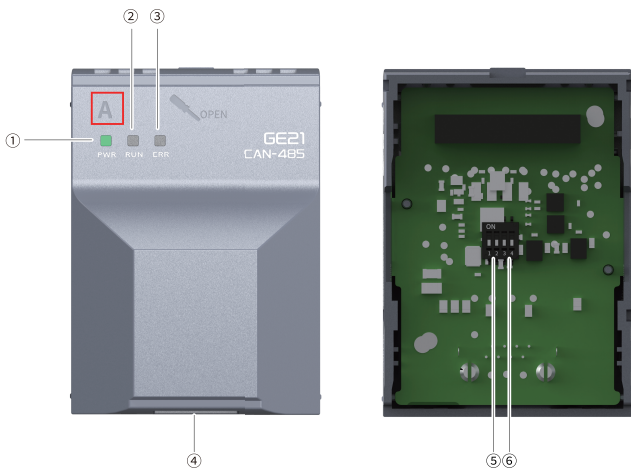
Suzhou Inovance Technology Co., Ltd.

Made in China



Model	Description	Code
GE21-CAN-485	PLC controller optional accessory, GE21 series CAN and RS485 communication card	01480073

1.3 Components



N-o.	Component	Mark	Definition	Indicator Color	Description
①	Power supply status indicator	PWR	Power supply state	Yellow-green	● ON: The power supply is normal ● OFF: The power supply is abnormal.
②	Operation state indicator	RUN	Operation state	Yellow-green	CANlink ● ON: Indicates successful CANlink connection (node receives remote frame). ● Flashing ($\leq 0.3s$): Indicates in CANlink communication, CANlink bus data is received/sent in one frame per flash. ● Flashing (0.2s): Indicates the monitor. ● OFF: Indicates the CANlink bus is not connected or has disconnected. CANopen ● Slow flashing: Indicates the CANopen node is in pre-operational state. ● ON: Indicates the CANopen node is in operational state. ● Single flash: Indicates the CANopen node is in stopped state. ● OFF: Indicates the CANopen bus is not connected or has disconnected.

N-o.	Component	Mark	Definition	Indicator Color	Description
③	Operation state indicator	ERR	Operation error	Yellow-green	CANlink ● ON: Indicates the monitor (node) times out, or no node (monitor) exists. ● Flashing (2s): Indicates CANlink configuration error (for configurator only). ● Flashing (1s): Indicates CANlink node timeout, meaning a network node is lost or crashed (for monitor only). ● Flashing (0.2s): Indicates CANlink address conflict. ● OFF: Indicates no faults with CANlink. CANopen ● ON: Indicates the CANopen bus is shut down. ● Single flash: At least one error counter of the CANopen master has reached or exceeded the warning level (too many error frames). ● Double flash: Error control event (node protection or heartbeat timeout). ● OFF: Indicates no faults with CANopen.
④	User terminal	-	-	-	For details, see "3.1 Terminal Definitions" on page 25 .

N-o.	Component	Mark	Definition	Indicator Color	Description
⑤	CAN DIP switch	1, 2	Used to control the termination resistor.	-	The CAN DIP switch is set to ON by default. To turn off the switch, toggle switches 1 and 2 using tools such as tweezers.
⑥	RS485 DIP switch	3, 4	Used to control the termination resistor.	-	The RS485 DIP switch is set to OFF by default. To turn on the switch, toggle switches 3 and 4 using tools such as tweezers.

Note

In the picture, “A” indicates support for slot A of the PLC.

1.4 Product Specifications

1.4.1 General Specifications

Item	Specification
IP rating	IP20
Dimensions (W x H x D)	58 mm × 42 mm × 28.5 mm
Weight	Approx. 24 g

1.4.2 Power Supply Specifications

Item	Specification
Short circuit protection	Supported
Hot swap	Not supported

1.4.3 Communication Specifications

Item		Specification
RS485	Number of channels supported	1
	Isolation method	Non-isolation
	Termination resistor	With termination resistor, which can be controlled by DIP switch. The switch is set to OFF by default, in which case the termination resistor is not connected.
	Number of slaves connected	Supports up to 31 slaves (The distance from each slave to the PLC must be less than 3 m.) For more information see "3.2 RS485 Communication" on page 26.
	Baud rates	9.6kbps, 19.2kbps, 38.4kbps, 57.6kbps, 115.2kbps
	Communication distance	• < 100 m@115.2 kbps • < 1000 m@ 19.2 kbps
CAN	Number of channels supported	1
	Isolation method	Non-isolation
	Termination resistor	With termination resistor, which can be controlled by DIP switch. The switch is set to ON by default, in which case the termination resistor is connected.
	Number of slaves connected	• CANlink: Supports up to 63 slaves. • CANopen: Supports up to 30 slaves.
	Communication distance	• < 30 m@1000 kbps • < 80 m@500 kbps • < 150 m@250 kbps • < 300 m@125 kbps • < 500 m@100 kbps • < 1000 m@50 kbps

1.5 Environmental Specifications

Take the operability, serviceability, and adaptability to environment into account when installing the expansion card to the PLC.

Item	Specification
Installation/Ambient environment	Free from conductive dust, conductive fibers, explosive dust, flammable gases, water mist/greasy dirt, corrosive dust/gases, strong vibration, and repetitive shock.
Max. altitude	≤ 2000 m
Pollution degree	Level 2
Interference immunity	2 kV on DC power supply line (IEC61000-4-4)
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 g²/Hz power spectral density at 5 Hz to 100 Hz; 0.001 g²/Hz power spectral density at 200 Hz; 1.14 g Grms
Shock resistance	Application/Transportation scenario: Tested according to IEC60068-2-27; 15 g peak acceleration, 11 ms pulse width, 18 cycles in total in X, Y and Z axial directions
Ambient temperature/humidity	● Temperature: -20°C to +55°C ● Humidity: < 95% RH (30°C), without condensation
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

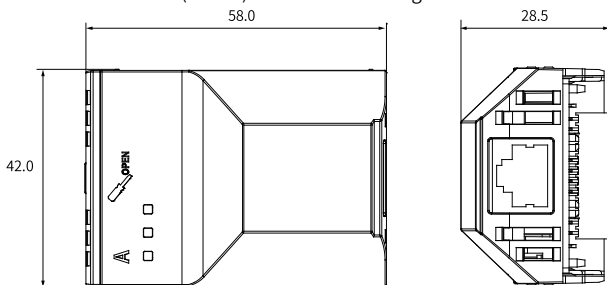
2 Installation

2.1 Installation Precautions

- Make sure the PLC is powered off before installing or removing the expansion card.
- Do not connect/disconnect the expansion card with power ON. This may lead to PLC restart or user data loss or damage.
- Do not drop or shock the housing or terminals of the expansion card to avoid damage.

2.2 Installation Dimensions

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

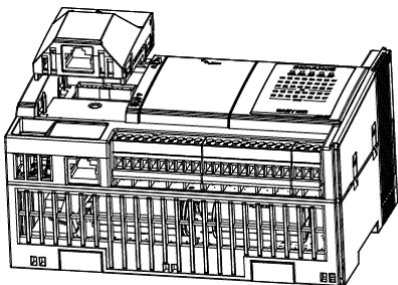


2.3 Installation Method

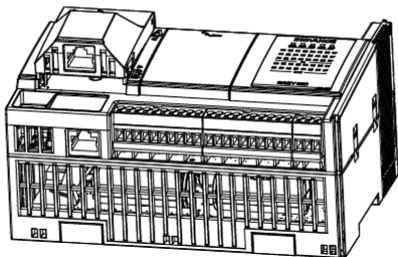
■ Installing the expansion card

The expansion card module is installed with the PLC through a snap-fit mechanism.

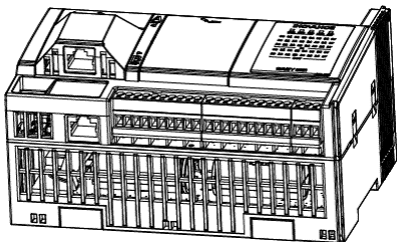
1. Place the PLC horizontally, and align the expansion card module horizontally with it.



2. Insert the expansion card module vertically into the corresponding slot A of the PLC along the guide ribs.

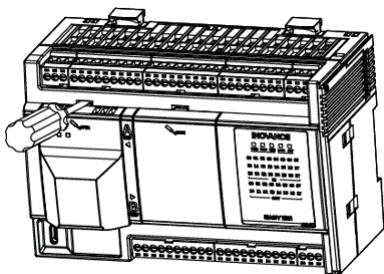


3. Press down on the expansion card module until you hear a click and its top surface is flush with the surface of the PLC, indicating that the installation is complete.

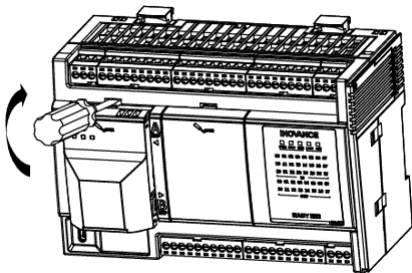


■ Removing the expansion card

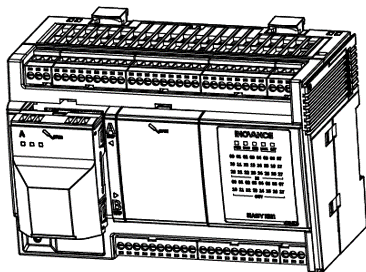
1. Place the PLC horizontally and insert a slotted screwdriver into the inner snap-fit position.



2. Pry the expansion card module in the direction of the arrow.

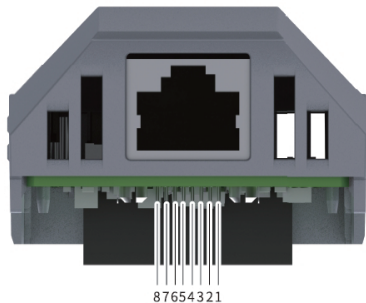


3. Remove the expansion card module vertically when you hear a distinct sound indicating that the expansion card has partially detached from the PLC.



3 Wiring

3.1 Terminal Definitions



RJ45 pin	Description
1	CAN signal+
2	CAN signal-
3	Communication Ground GND
4	RS485 communication signal +
5	RS485 communication signal -
6	-
7	-
8	Communication Ground GND

3.2 RS485 Communication

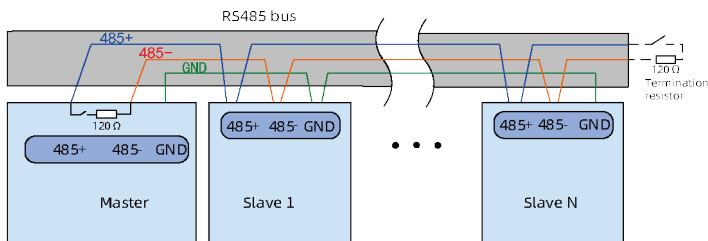


Caution

- Do not bundle the extension cable together with power cables (high voltage, large current) which produce strong interference signals. Separate it from other cables and avoid cabling in parallel.
- Select recommended cables and pinboards for connection. It is recommended that shielded cables be used as extension cables to enhance capacity of resisting interference.

The RS485 bus connection topology is shown in the figure below. When wiring, obey the following precautions:

- It is recommended to use shielded twisted pair cables for the RS485 bus, with 485+ and 485- connected using twisted pairs.
- To prevent signal reflection, 120Ω termination resistors should be connected at both ends of the bus.
- Connect the reference grounds of RS485 signals of all the nodes together.
- A maximum of 32 nodes can be connected, and the distance between two nodes must be shorter than 3 m.



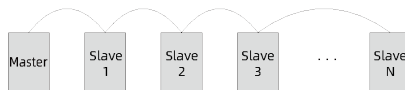
Multi-node connection

In case of a large number of nodes, connect the RS485 bus using the daisy chain mode. If branches need to be connected, keep the branch line as short as possible (less than 3 m). Star connections are prohibited. Common bus structures are shown in the following figures.

- Daisy chain connection

Recommended  

RS485 bus



■ Branch cable connection

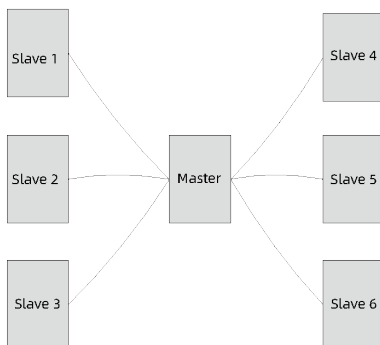


RS485 bus



■ Star connection

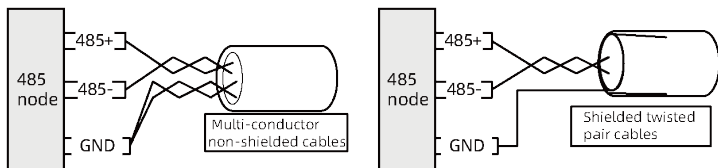
Forbidden



● Terminal wiring

Ensure that the RS485 bus contains three cables and the terminals are connected correctly. Particularly note that if a shielded cable is used, connect the shield layer to GND. Never connect the shield layer to any terminal except GND, including the drive housing and grounding terminal.

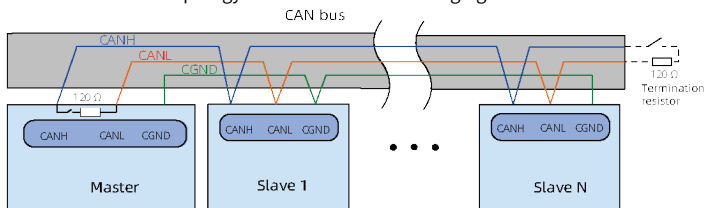
Due to cable attenuation, use AGW26 or thicker cables if the connection length is longer than 3 m. Twisted pair cables are always recommended for connecting RS485+ and RS485-.



- Recommended cable 1: Use multi-conductor twisted pair cables, with one twisted pair connected to RS485+ and RS485-, and others twisted together to connect GND.
- Recommended cable 2: Use shielded twisted pair cables, with the twisted pair connected RS485+ and RS485-, and the shield connected to CGND. In applications where shielded cables are used, the shield can be connected to GND only. Never connect the shield to the ground.

3.3 CAN Communication

In a CAN network, The three cables of each device must be interconnected. By default, a 120Ω matching resistor has been added to the first end of the CAN bus, and a 120Ω matching resistor needs to be added to the second end of the CAN bus. The CAN bus connection topology is shown in the following figure.



3.4 Cable Connection

- Connection: Insert the crystal head into the RJ45 port until you hear a click.
- Removal: Press down the clip of the RJ45 cable and pull it out along the direction parallel with the module.



Caution

It is recommended to use network cables for RS485 communication and CAN communication. It is not recommended to strip the wires for separate connection. If you do need to strip the wires for separate connection, see ["3.1 Terminal Definitions" on page 25](#) for the definition of RJ45 pins, and also see ["3.3 CAN Communication" on page 28](#) and ["3.2 RS485 Communication" on page 26](#).

4 Configuration and Commissioning

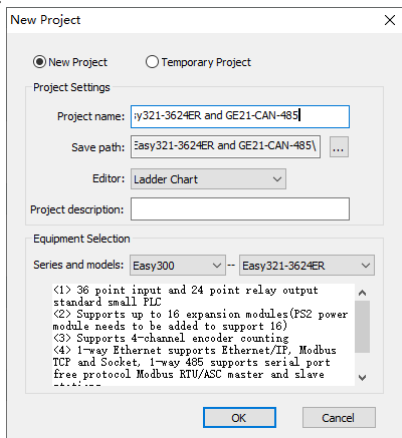
Note

- The GE21-CAN-485 expansion card only supports EXP-A.
- The type ID of the GE21-CAN-485 expansion card is 16. The configured expansion card type must be consistent with the actually installed expansion card type.

Operation procedure

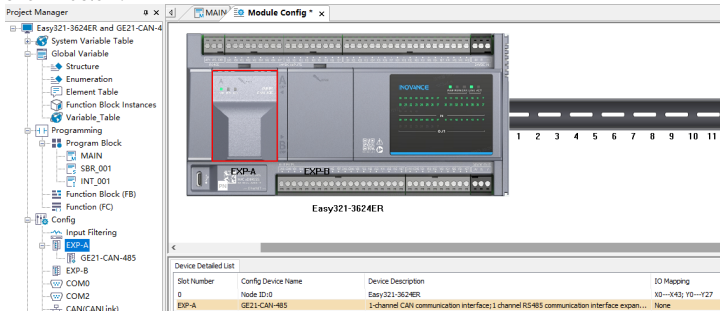
1. Create a project.

- Double-click the AutoShop shortcut icon on the PC desktop to open the AutoShop programming software.
- In the menu bar, select **File > New Project** to open the **New Project** dialog box, as shown below.



- Set **Project name**, **Save path**, **Editor**, **Project description**, and **Series and models**, and then click **OK**.

- In the **Project Manager** pane, go to **Config > EXP-A**. Right-click **EXP-A** and select **GE21-CAN-485**. Alternatively, go to **Config > Module Config**. Right-click **Module Config** and select **Automatic Scan** to add the GE21-CAN-485 expansion card, as shown below.



- Modify the serial port configuration and CAN communication configuration as per needs. For specific methods, refer to "Serial Communication" and "CAN Communication" sections of the *"H5U&Easy Series Programmable Logic Controller Programming Guide"*.
- After successful compiling, download the project and run it.
 - Click the download button  in the toolbar to download the program to the PLC.
 - After the download is complete, click the run button  in the toolbar to run the program.