

CAN / PROFINET IO Gateway GT200-PN-CA

User Manual

V 3.1



SST Automation

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Important Information

Warning

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The product has many applications. The users must make sure that all operations and results are in accordance with the safety of relevant fields, and the safety includes laws, rules, codes and standards.

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Table of Contents

Important Information	1
Warning	1
Copyright	1
Trademark	1
Technical Support Contact Information	1
1 Product Overview	1
1.1 Product Function	1
1.2 Product Feature	1
1.2.1 CAN Mode	1
1.3 Technical Specifications	2
1.4 Related Products	4
1.5 Revision History	4
2 Hardware Descriptions	5
2.1 Product Appearance	5
2.2 LED Indicators	5
2.3 DIP Switch	6
2.4 Interface	6
2.4.1 Power Interface	6
2.4.2 Ethernet Interface	7
2.4.3 CAN Interface	7
3 Hardware Installation	8
3.1 Machine Dimension	8
3.2 Installation Method	8
4 Quick Start Guide	9
4.1 Gateway Configuration	9
4.2 Software Configuration	10
4.3 Run	10
4.4 Change Device IP and Name	13
4.4.1 Scan Devices on LAN	13
4.4.2 Change IP Info and Name	14
4.5 IP Address Conflict Resolution	16
5 Software Instructions	19
5.1 Main Interface	19
5.2 Menu Bar Function Description	20
5.2.1 File	20
5.2.2 Edit	20
5.2.3 Tool	20
5.2.4 View	28
5.2.5 Help	29
5.3 PROFINET Settings Instructions	30



GT200-PN-CA
CAN / PROFINET IO Gateway
User Manual

5.4 CAN Settings Instructions32

5.4.1 Run Mode: Basic32

5.4.2 Run Mode: Advanced32



1 Product Overview

1.1 Product Function

GT200-PN-CA is a gateway that can realize data communication between PROFINET network and CAN network. CAN side of GT200-PN-CA supports CAN 2.0A and CAN 2.0B protocols. This gateway is a slave on the PROFINET side. It can connect multiple CAN devices to PROFINET network and establishes a reliable communication channel between them.

1.2 Product Feature

1.2.1 CAN Mode

- Supports two 10M/100M adaptive network ports. Supports half duplex and full duplex transmission;
- The gateway is a PROFINET IO slave on the PROFINET side;
- Supports bi-directional data transmission, also can only be used as CAN receiving or sending;
- Supports two run mode, basic and advanced.

Advanced mode is the CAN frame filtering function for CAN ID.

- Under the basic mode, each CAN frame in the PROFINET message is 16 bytes; Each PROFINET data contains up to 8 CAN frames;

PROFINET input and output bytes can be set in the TIA Portal or STEP 7 modeling software, the maximum number is:

Max Input Bytes+ Max Output Bytes≤256 Bytes

①Max Input Bytes ≤128 Bytes

②Max Output Bytes ≤128 Bytes

Supports only four combinations of input and output bytes:

Input Bytes	Output Bytes
16	16

32	32
64	64
128	128

- Under the advanced mode, three types of commands are supported, which are called "Receive Frames", "Transmit Frames" and "Request/Response Frames". The number of data per CAN frame supports 0 - 8 bytes.

Note: these three types of commands only specify the communication mode of the gateway, not the actual CAN protocol.

PROFINET input and output bytes can be set in the TIA Portal or STEP 7 modeling software, the maximum number is:

Max Input Bytes+ Max Output Bytes≤768 Bytes

①Max Input Bytes ≤384 Bytes

②Max Output Bytes ≤384 Bytes

1.3 Technical Specifications

- [1] At PROFINET side GT200-PN-CA is a PROFINET slave;
- [2] Supports standard PROFINET I/O protocol;
- [3] PROFINET supports up to 32 slots, The maximum number of input bytes is 384 and the maximum number of output bytes is 384(The length available to the user is limited by the specific PLC and PDU size of the communication module). The length of input/output bytes can be set by STEP7 or TIA Portal;
- [4] Supports the following module types:
 - **Input 001 byte**
 - **Input 002 bytes**
 - **Input 004 bytes**
 - **Input 008 bytes**
 - **Input 016 bytes**
 - **Input 032 bytes**
 - **Input 064 bytes**

- **Input 128 bytes**
- **Input 256 bytes**
- **Output 001 byte**
- **Output 002 bytes**
- **Output 004 bytes**
- **Output 008 bytes**
- **Output 016 bytes**
- **Output 032 bytes**
- **Output 064 bytes**
- **Output 128 bytes**
- **Output 256 bytes**
- **Input / Output 001 byte**
- **Input / Output 002 bytes**
- **Input / Output 004 bytes**
- **Input / Output 008bytes**
- **Input / Output 016 bytes**
- **Input / Output 032 bytes**
- **Input / Output 064 bytes**
- **Input / Output 128 bytes**
- **Input / Output 256 bytes**
- Supports CAN 2.0A and CAN 2.0B protocol;

■ **CAN features:**

- Supports CAN 2.0A and CAN 2.0B protocols;
- CAN interface supports Baud Rate: 10K, 20K, 50K, 100K, 125K, 250K, 500K and 1M;
- Supports up to 200 CAN frames in the transmit buffer (FIFO) and up to 150 CAN frames in the receive buffer (FIFO).
- Supports timeout clear function of Receive Frames and Request/Response Frames;
- Supports maximum commands No.:(60)

Receive Frames + Transmit Frames + Request/Response Frames ≤60;

Receive Frames ≤ 60 ;

Transmit Frames ≤ 60 ;

Request/Response Frames ≤ 60 ;

[7] Operating environment:

- REL Humidity: 5% to 95% (non-condensing)
- Work circumstance temperature: -4°F~140°F(-20°C to 60°C)
- Pollution level: class 3

[8] Power: 24VDC (11V~30V), maximum 90mA (24V);

[9] Built-in electrostatic protection: 15 KV ESD; Communication interface isolation: 3KV;

[10] External dimensions (W*H*D): 0.9 in *3.9 in *4.5in (22.5mm*99mm*114.5mm);

[11] Installation: 1.4 in (35mm) DIN RAIL;

[12] Protection level: IP20.

1.4 Related Products

The related products include: GT200-PN-CA.

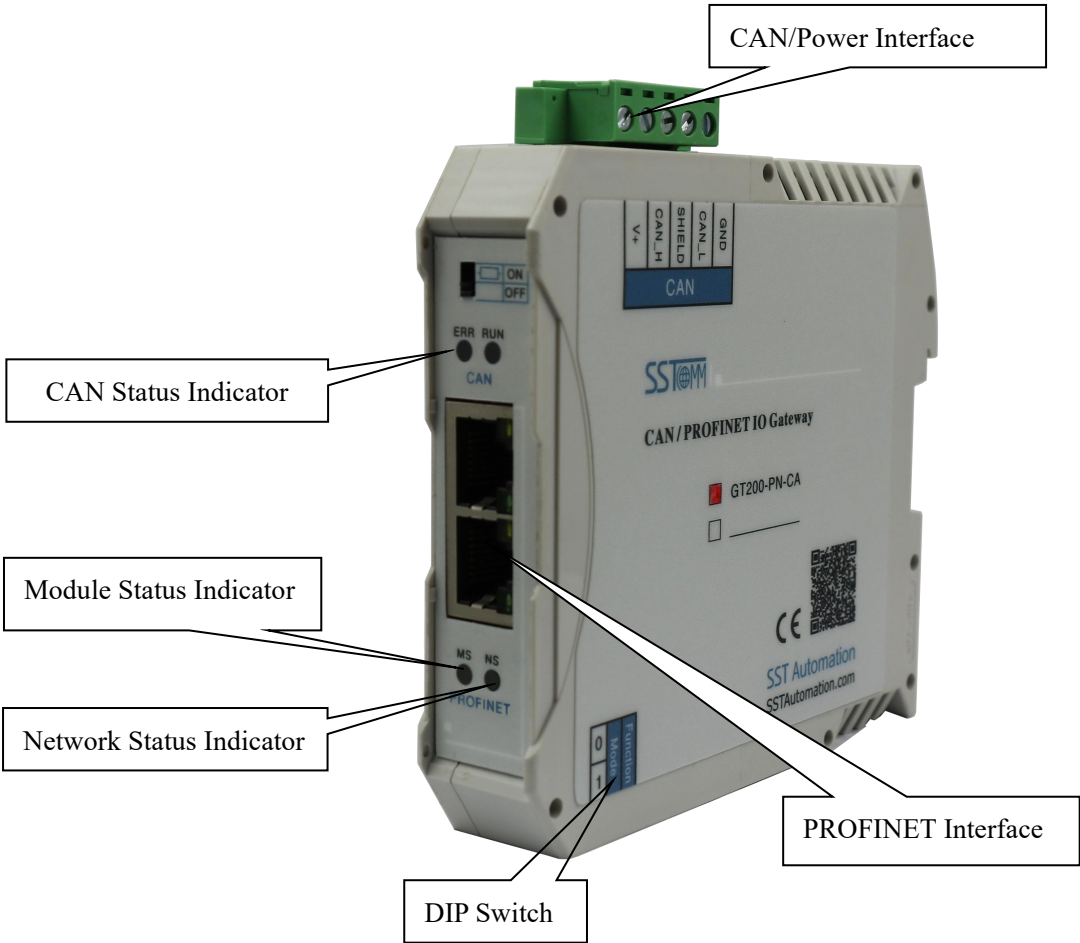
To get more information about related products, please visit SSTCOMM website: www.sstautomation.com.

1.5 Revision History

Revision	Date	Chapter	Description
V3.1	02/12/2026	ALL	New Release

2 Hardware Descriptions

2.1 Product Appearance



Note: This picture is for reference only. The product appearance is subject to the actual product.

2.2 LED Indicators

Indicators		Status	Description
CAN Status	ERR	Green On	The CAN network is normal
		Red Blinking/On	Bus Off
		Red, Green and Off blinks alternately	The error counter of CAN controller reach or exceed alarm value
	RUN	Green Blinking	Data sending and receiving
		Green Off	No data sending and receiving
MS		See below table	
NS		See below table	

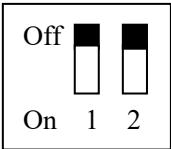
Note: GT200-PN-CA is in the configuration state, the ERROR and RUN indicators blinks alternately in orange.

Module indicator and network indicator:

Module indicator MS	Network indicator NS	Description
Off	Red Blinking/On	Start-up state, waiting to initialize
Green on	Red/Green Blinking	Initialize complete, no connection with PLC
Green on	Green on	PLC has connected
Green Blinking/On	Red on	The network cable is disconnected or not connected
Other	Other	Undefined state

2.3 DIP Switch

The DIP switch is used for setting operating mode of the device.

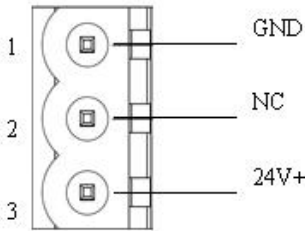


Mode (Bit 1)	Function (Bit 2)	Description
Off	Off	Run mode, configuration enabled
Off	On	Configuration Mode
On	NA	The module enters the update program state (customers cannot use this state)

2.4 Interface

2.4.1 Power Interface

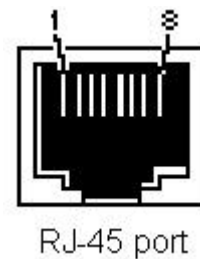
Pin	Function
1	Power ground
2	NC(Not Connected)
3	+24V DC



2.4.2 Ethernet Interface

The Ethernet interface uses RJ45 interface, follows the IEEE802.3u 100BASE-T standard, 10/100M adaptive. Its pin (standard Ethernet signal) is defined as below:

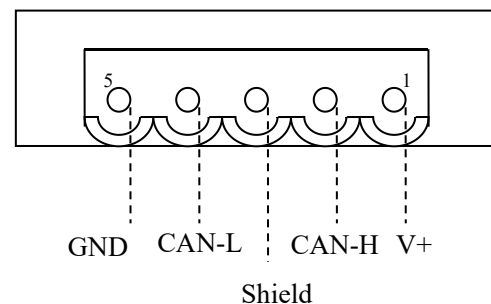
Pin	Signal description
S1	TXD+
S2	TXD-
S3	RXD+
S4	-
S5	-
S6	RXD-
S7	-
S8	-



2.4.3 CAN Interface

CAN interface of GT200-PN-CA uses 5-pin connector:

Pin	Wiring
Pin 1	V+, 24VDC(optional)
Pin 2	CAN-H
Pin 3	Shield (optional)
Pin 4	CAN-L
Pin 5	GND, GND of 24V (optional)



Note:

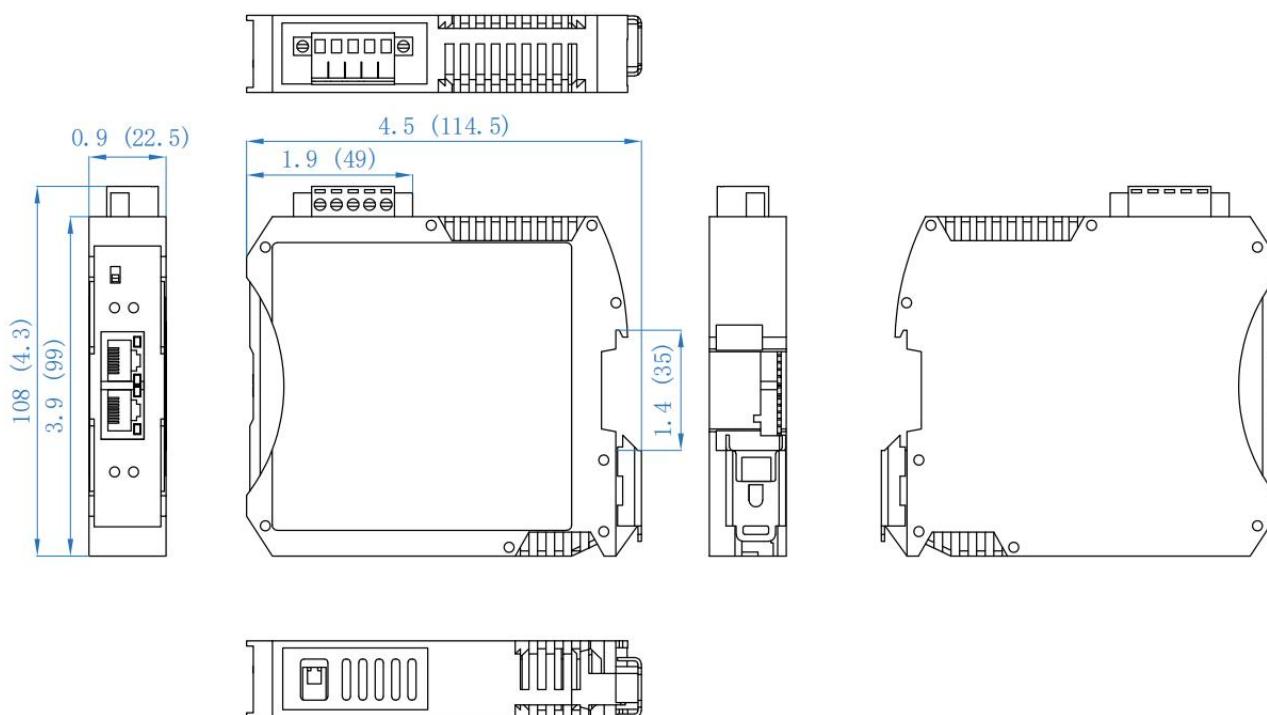
- (1) Here, shield port is optional. The CAN-L and CAN-H must be connected. Here pin 1 and 5 are connected to the pin 3 and pin 1 of power port internally ([Chapter 2.4.1](#)).
- (2) Chapter2.4.1 and Chapter2.4.3 both contain power interfaces, and only one of them is required to connect. **If two power interfaces are connected at the same time, the gateway will be burned.**

3 Hardware Installation

3.1 Machine Dimension

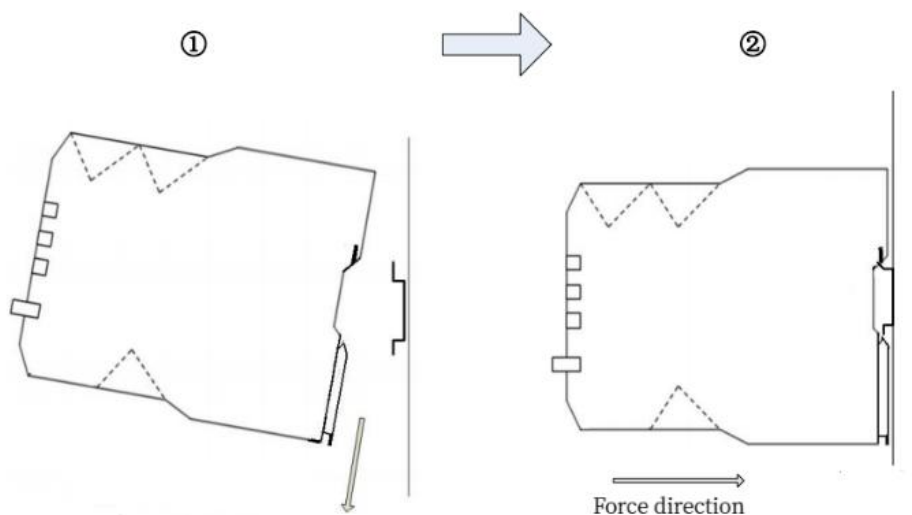
Size (width * height * depth):

0.9 in * 3.9 in * 4.5 in (25 mm * 100 mm * 90 mm)



3.2 Installation Method

Using 1.4 in (35mm) DIN RAIL.





4 Quick Start Guide

4.1 Gateway Configuration

- 1 There are two modes: configuration mode and run mode. The gateway can enter different mode through DIP switch. Set "Function" bit of DIP switch to "on", the gateway is in the configuration mode, and turn off the "Function" bit, the gateway is in the run mode;
- 2 Power off the gateway, connect GT200-PN-CA and PC through Ethernet cable;
- 3 Power on, waiting network indicator of GT200-PN-CA to turn green blinking;
- 4 Configure Settings in SST-TA-CFG CAN Mode: Based on your requirements, use the SST-TA-CFG software (in either Configuration or Run mode) to set the Ethernet parameters (IP address and Device Name) and CAN parameters (bus settings and CAN command configurations).
- 5 Click "Download" button on the toolbar to download the configuration to the gateway. When downloading configuration, it will prompt "Communication with PLC may be disconnected during downloading configuration";
- 6 Configure the modeling in TIA Portal or STEP 7 , including module, IP address of target device and device name;
- 7 Download the modeling configuration to the PLC;
- 8 Waiting for about 10s, GT200-PN-CA will establish PROFINET connection with the PLC.

Note: How to find out how many GT200-PN-CA devices are in the LAN, including MAC address, IP address and name of devices. Users can see [Chapter 4.4](#) Change Device IP and Name for help.

Note: There are 3 necessary conditions which need to happen simultaneously when GT200-PN-CA is communicating with PLC:

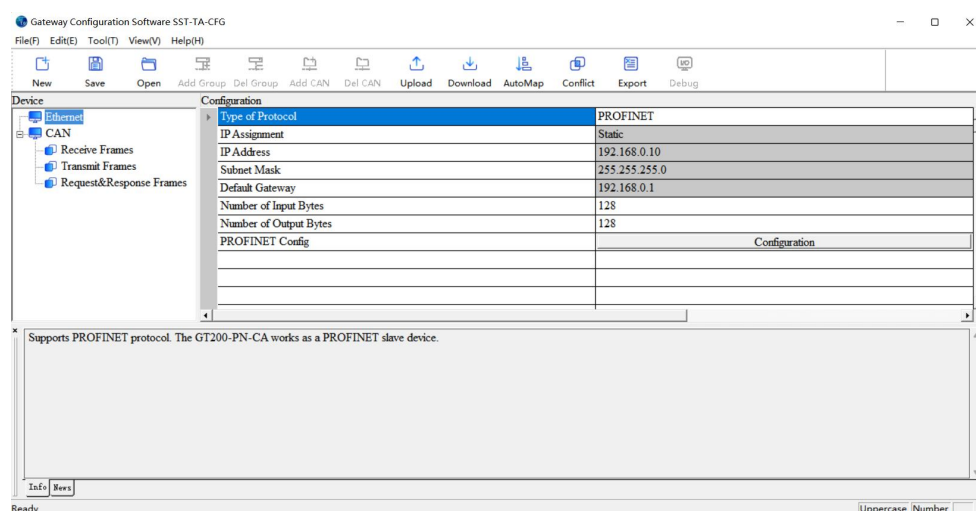
- a) The PROFINET device name must be the same as that of device in PLC modeling.
- b) The PROFINET device IP address must be the same as that of device in PLC modeling.
- c) The configuring module of PROFINET device (configuring through SST-TA-CFG) must be the same as that in PLC modeling.

4.2 Software Configuration

Users need to install the gateway software SST-TA-CFG when configuring the gateway.

Using the SST-TA-CFG gateway configuration software, users can easily configure the GT200-PN-CA. This includes setting Ethernet parameters (IP address and Device Name) as well as CAN settings (CAN parameters and CAN command configurations).

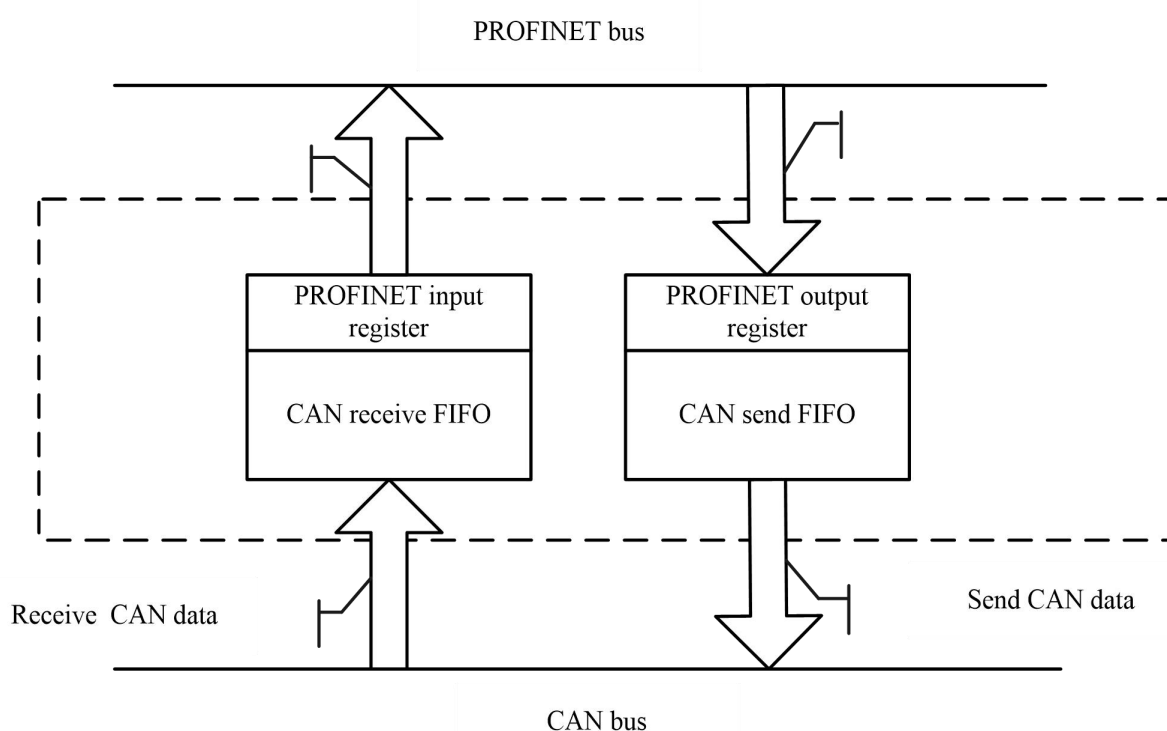
Once the installation is complete, double-click the software icon to enter the main interface:



4.3 Run

The data conversion between the PROFINET network and CAN in the GT200-PN-CA is established through a "mapping" relationship. There are two data buffers within the GT200-PN-CA: an input buffer (384 bytes) and an output buffer (384 bytes).

CAN mode



How to encapsulate 16 bytes into a CAN frame in PROFINET

➤ PROFINET input:

PROFINET inputs data (that is CAN side receives data). Each CAN frame in PROFINET must have a total of 16 bytes, otherwise it will return a PROFINET exception response.

Byte	0	1	2	3	4-7	8-15
Description	0xFF	Number of data contained in CAN frame	Sequence number	Reserved	Frame header and CAN frame	CAN frame data

If the GT200-PN-CA receives the CAN frame on the CAN network, the sequence number of the input frame is increased by 1. The customer can determine whether these CAN frames are needed according to their needs.

➤ PROFINET output:

PROFINET outputs data (sends CAN frame at CAN side). Each CAN frame in PROFINET must have a total of 16 bytes, otherwise it will return a PROFINET exception response.

Byte	0	1	2	3	4-7	8-15
Description	0xFF	Number of data contained in CAN frame	Sequence number	Reserved	Frame header and CAN frame	CAN frame data

➤ Byte definition description in PROFINET IO

1. Byte0 - Byte3 are control bytes

If the byte0 is zero, it means that the CAN frame of this sequence number is sent once; If the byte0 is not zero, it means that all CAN frames of this sequence number are sent periodically, The sending cycle is determined by the value of byte0, the sending cycle = the value of the byte0 * 10ms. For example, if the value of the byte0 is 10, the sending cycle is 100ms.

Byte 1, the number of data contained in the CAN frame, ranging from 0 to 8.

Byte 2, the sequence number. The initial value of the sequence number in the output frame is not zero. If it is single transmission mode, it must be increased by 1 every time a new frame is sent. In this way, the gateway treats this frame as a new single transmission data. The sequence number will become 0 if it reaches 255 and increase by 1. If the CAN frame is sent periodically, the sequence number may not be increased by 1. If you want to switch from single transmission mode to repeated transmission mode, the sequence number needs to be increased by 1, and the 0th byte is a non-zero value; if you want to switch from repeated transmission mode to single transmission mode, the sequence number needs to be increased 1, and the 0th byte is 0;

2. Byte4 - Byte7 are CAN frame header and CAN frame mode control (29bit CAN ID)

The format of the byte4 is as follows:

Bit	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Description	Reserved	RTR	Reserved	The highest 5 bits of the frame header				

Bit6 of the byte4: RTR. If RTR is 0, it means data frame, if it is 1, it means remote frame.

Bit0-Bit4 of the byte4, to the byte7, are the frame header of CAN2.0A/2.0B.

Byte5:

Bit	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Description	The second highest 8 bits of the frame header							

Byte6:

Bit	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Description	The second lowest 8 bits of the frame header							

Byte7:

Bit	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Description	The lowest 8 bits of the frame header							

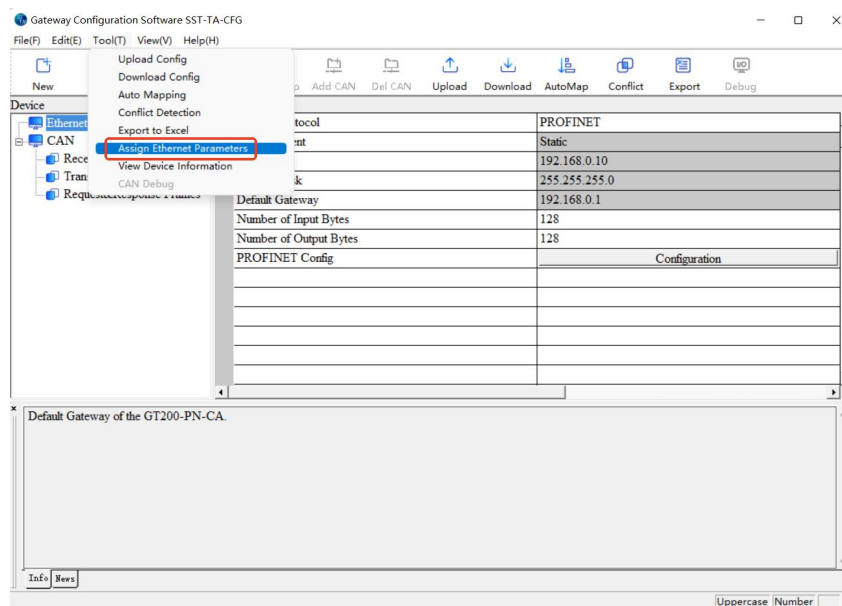
PROFINET Slave

Presuming the input data length users have configured is N1, output data length is N2. GT200-PN-CA will periodically send the data within the address range of [0x0000, N1] to PROFINET network; When receiving data from PROFINET network, GT200-PN- CO will write the data to the address range of [0x0000, N2].

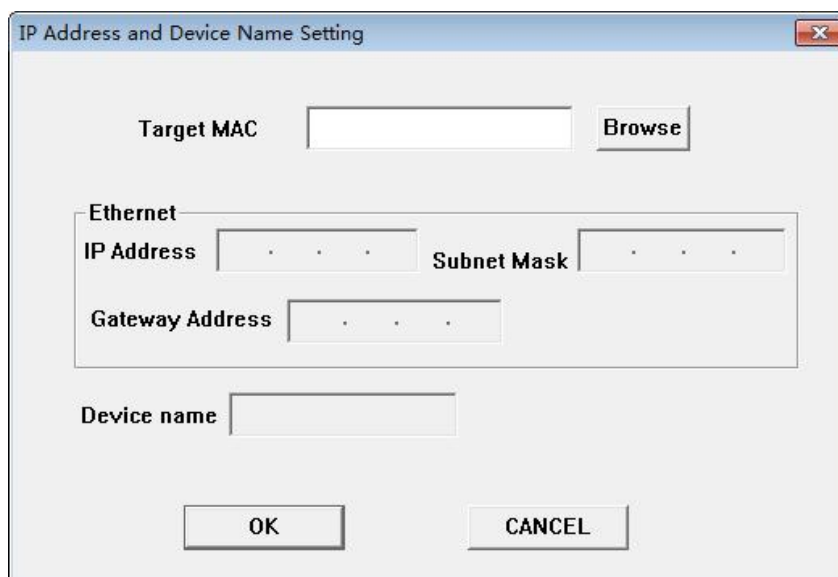
4.4 Change Device IP and Name

4.4.1 Scan Devices on LAN

1. Open SST-TA-CFG, select "Tools" in the menu bar, as shown below.



2. Click "Assign Ethernet Parameters", the following interface will appear



IP Address and Device Name Setting

Target MAC

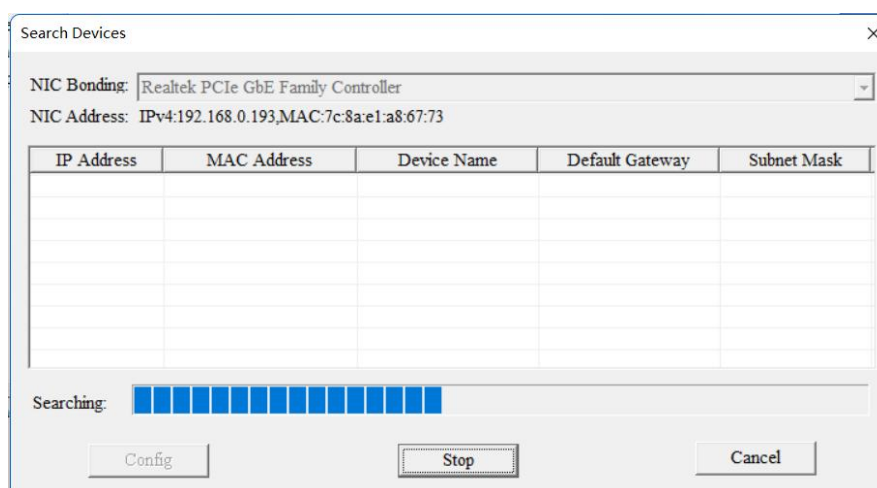
Ethernet

IP Address Subnet Mask

Gateway Address

Device name

3. Click "Browse" and a dialog box will be shown as below:



Search Devices

NIC Bonding: Realtek PCIe GbE Family Controller

NIC Address: IPv4:192.168.0.193,MAC:7c:8a:e1:a8:67:73

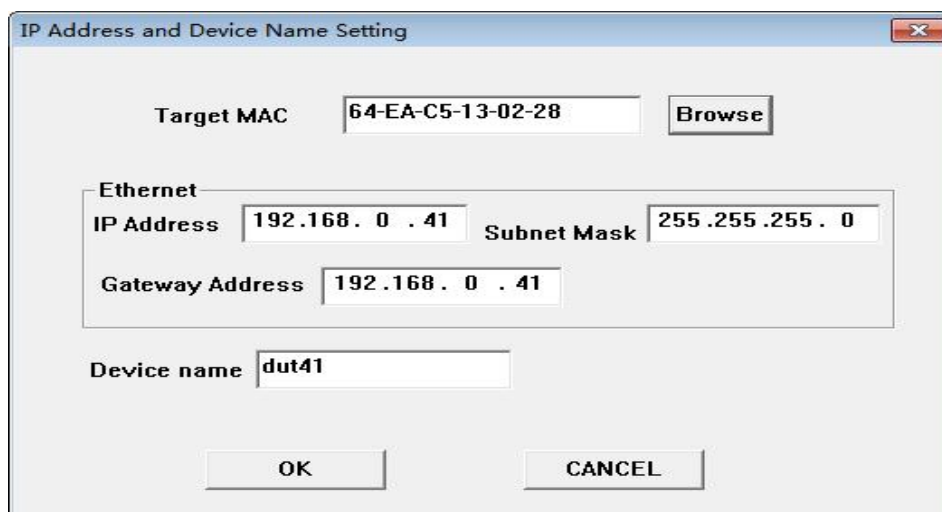
IP Address	MAC Address	Device Name	Default Gateway	Subnet Mask

Searching:

You can see that there is a device on the LAN, showing the it's "IP address", "MAC address", "Device Name", "Gateway address" and "subnet mask".

4.4.2 Change IP Info and Name

1. Follow the steps in 4.4.1 to search and log in, the interface displays as follows:



IP Address and Device Name Setting

Target MAC: 64-EA-C5-13-02-28 [Browse]

Ethernet

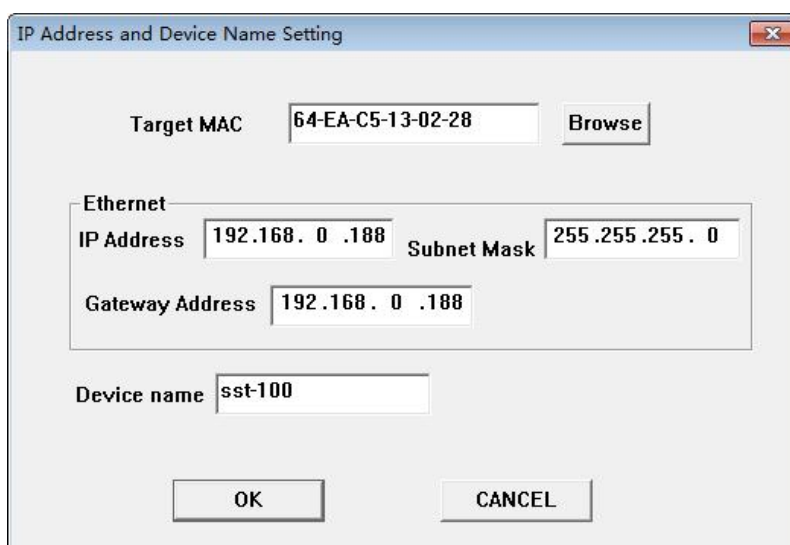
IP Address: 192.168.0.41 Subnet Mask: 255.255.255.0

Gateway Address: 192.168.0.41

Device name: dut41

[OK] [CANCEL]

After logging in, the MAC address of the device will be displayed in the box on the right side of "Target MAC". Modify IP address to "192.168.0.0.41", gateway address to "192.168.0.41", device name to "sst-100". The operation interface is as follows:



IP Address and Device Name Setting

Target MAC: 64-EA-C5-13-02-28 [Browse]

Ethernet

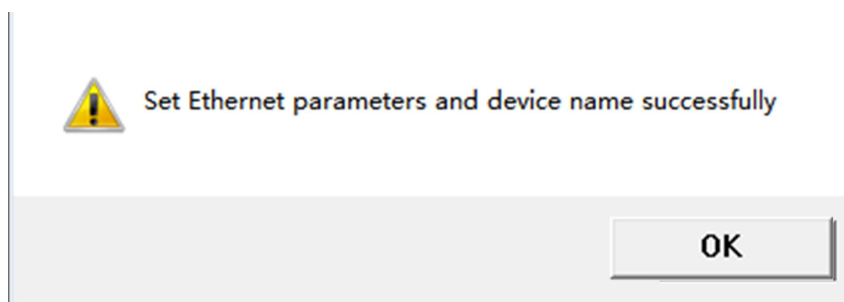
IP Address: 192.168.0.188 Subnet Mask: 255.255.255.0

Gateway Address: 192.168.0.188

Device name: sst-100

[OK] [CANCEL]

If the modification is successful, the following dialog box will appear:



! Set Ethernet parameters and device name successfully

[OK]

Click "OK"

Click "Browse" again, as shown below:

GT200-PN-CA CAN / PROFINET IO Gateway

User Manual

Device Select X

IP Address	MAC Address	Device Name	Gateway Address	Subnet Mask
0.0.0.0	64-EA-C5-10-18-21	sst-100	0.0.0.1	0.0.0.0

Search

You can see the IP address is reset to "0.0.0.0", choose the device and log in, the dialog box is shown as below:

IP Address and Device Name Setting X

Target MAC

Ethernet

IP Address Subnet Mask

Gateway Address

Device name

Set "IP", "Subnet" and "Gateway" to "192.168.0.18", "255.255.255.0" and "192.168.0.0" and you will see the below picture:

IP Address and Device Name Setting

Target MAC

Ethernet

IP Address Subnet Mask

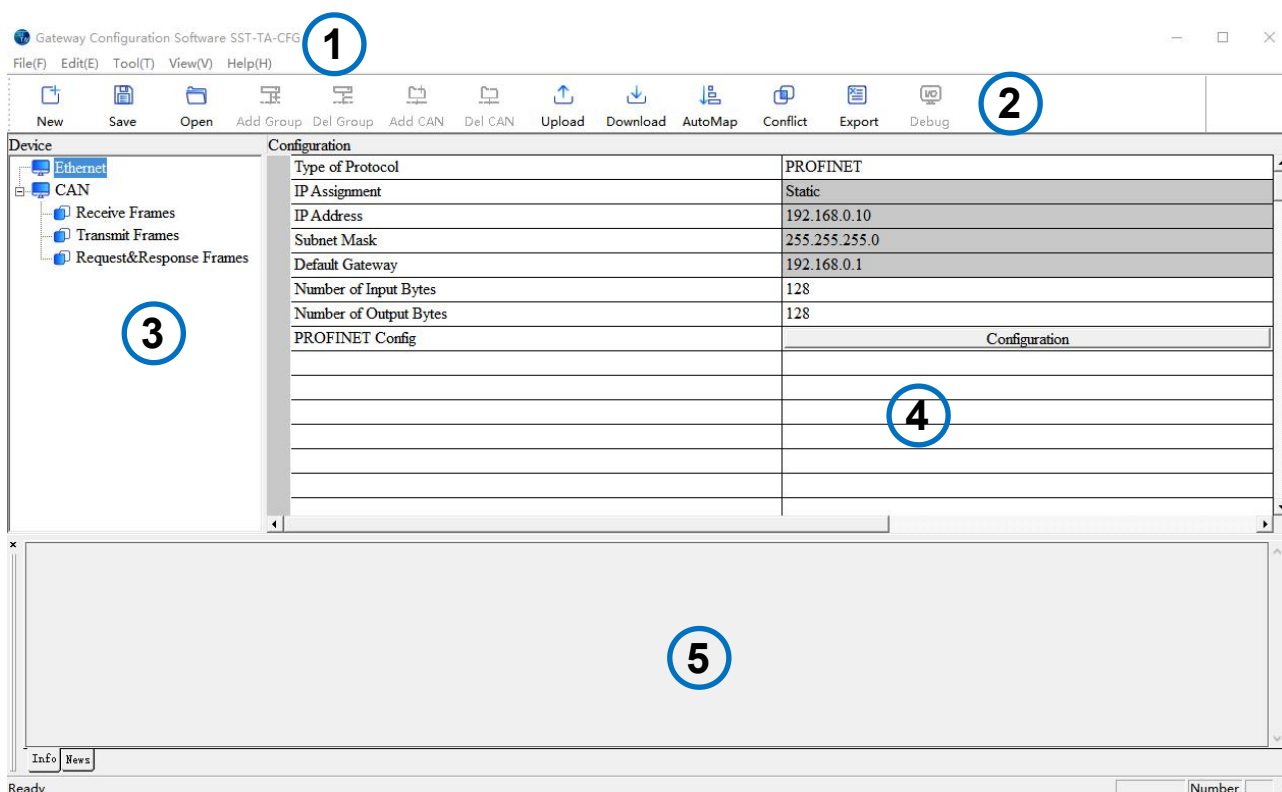
Gateway Address

Device name

Click "OK".

5 Software Instructions

5.1 Main Interface



1: Title Bar and Menu Bar

Displays the software title and provides access to all menu functions.

2: Toolbar

Frequently used functions are also available via toolbar buttons.

3: Tree View

The configuration is organized into two main sections:

- Ethernet: Settings related to the PROFINET protocol
- CAN: Settings related to CAN protocol

4: Configuration View

Clicking an item in the tree view displays its corresponding parameter settings.

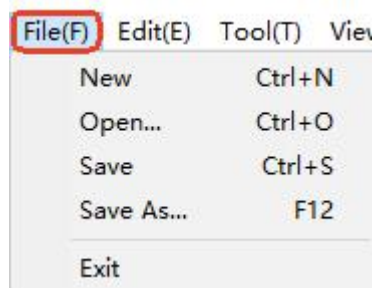
- Grayed-out fields indicate read-only parameters.
- Some parameters use drop-down selection; others require manual entry.

5: Info and News Panel

- Selecting any parameter displays its function description and configuration notes.
- Selecting News shows the latest updates regarding the product.

5.2 Menu Bar Function Description

5.2.1 File

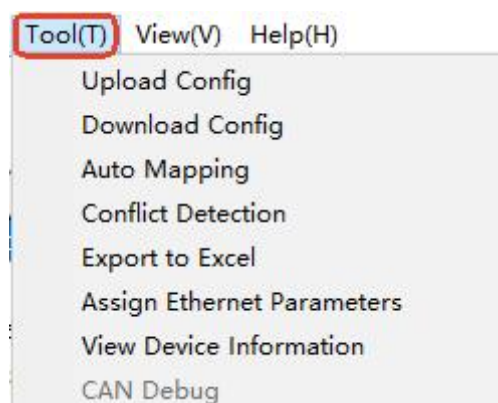


The File menu provides standard project file operations, including New, Open, Save, Save As, and Exit. These operations can also be performed through the toolbar shortcuts.

5.2.2 Edit

The 'Edit' menu functions are currently unavailable.

5.2.3 Tool

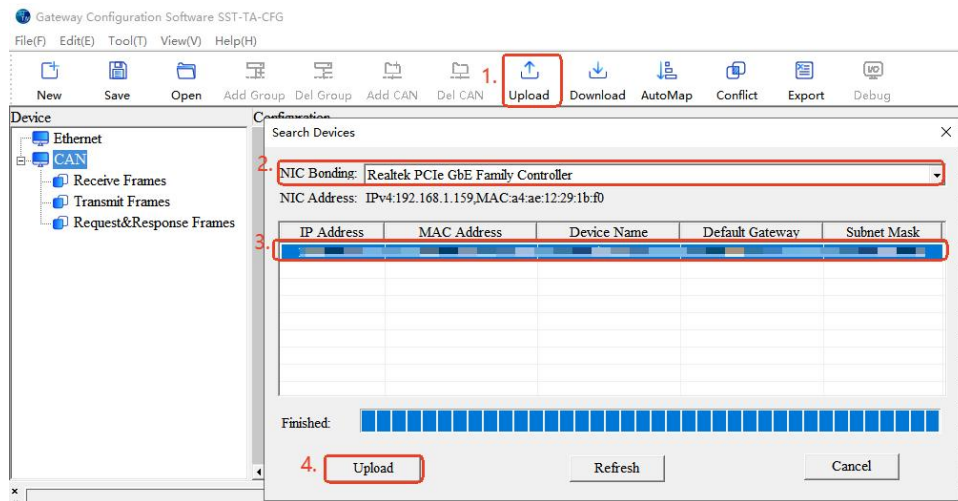


1. Upload Config

Upload config: Uploads configuration data from the gateway into the software interface.

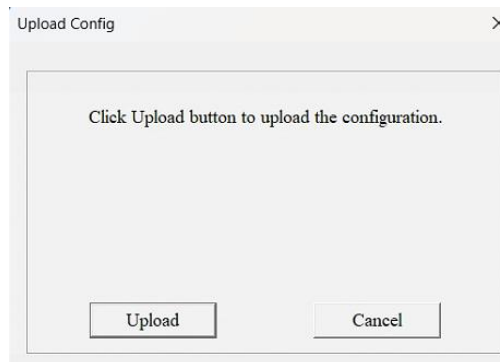
The specific operations are as follows:

- (1) Click the 'Upload' button on the toolbar to open the 'Search Devices' window.

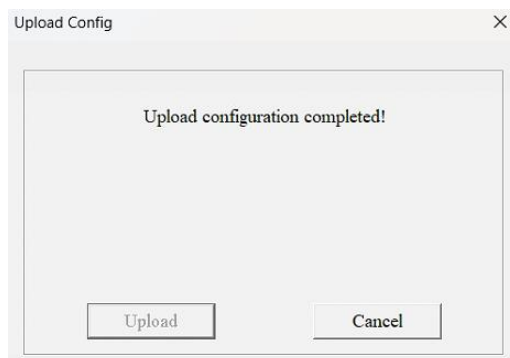


- If no devices are found, refer to the FAQ 'How to Resolve Device Search Issues'.

- (2) Select the appropriate network adapter and target gateway. Then click 'Upload' to open the Upload Config window.



- (3) Click 'Upload' to proceed. Upon successful upload, the configuration appears in the main interface.

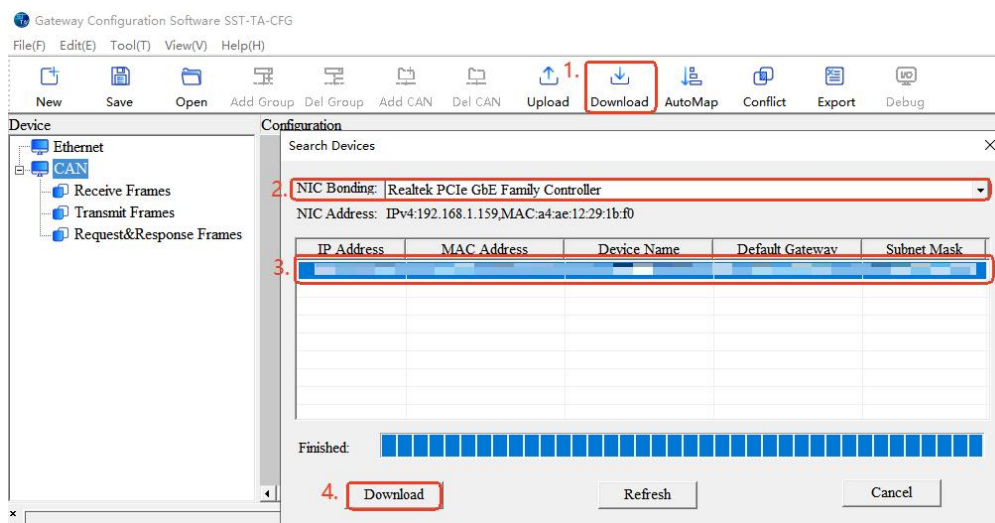


2. Download Config

Download config: Download the current software configuration to the gateway.

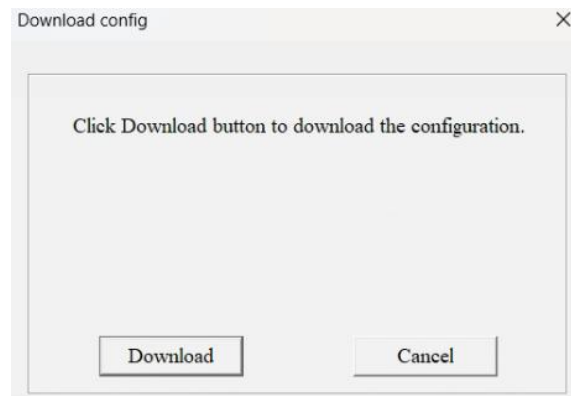
The specific operations are as follows:

- (1) Click the 'Download' button on the toolbar to open the 'Search Devices' interface.

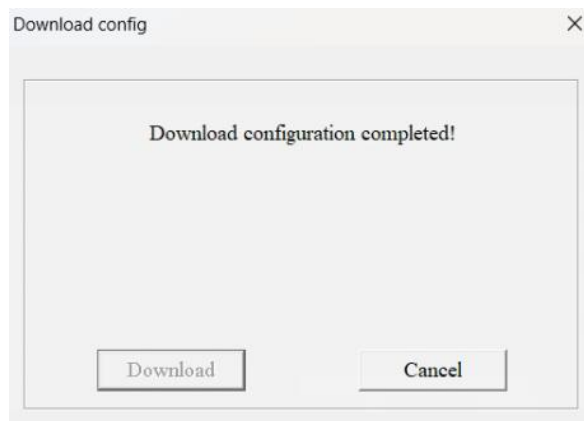


- If no devices are found, refer to the FAQ 'How to Resolve Device Search Issues'.

- (2) Select the appropriate network adapter and target gateway. Then click 'Download' to open the Download Config window.



(3) Click the 'Download' button to execute the operation. After download, the gateway reboots automatically to apply the new configuration.



3. Auto Mapping

Auto Mapping automatically assigns mapping addresses to prevent conflicts. Manual address entry is permitted but must not create overlaps.

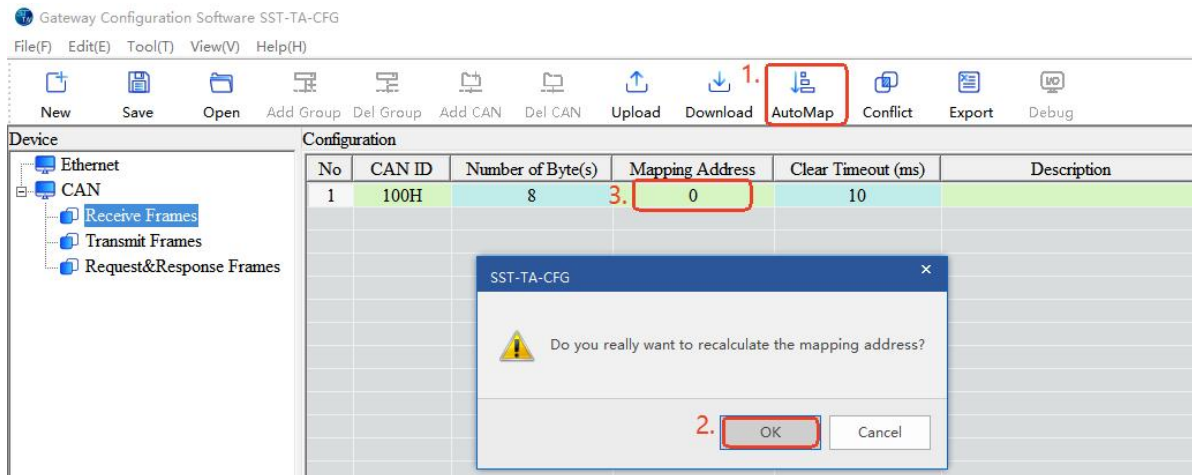
Instructions:

After setting the corresponding byte count in the CAN command interface, you can click the 'Menu Bar-Tool-Auto Mapping'/'Toolbar-AutoMap' button to automatically fill in the value of the Mapping Address. As shown in the figure below:

GT200-PN-CA

CAN / PROFINET IO Gateway

User Manual

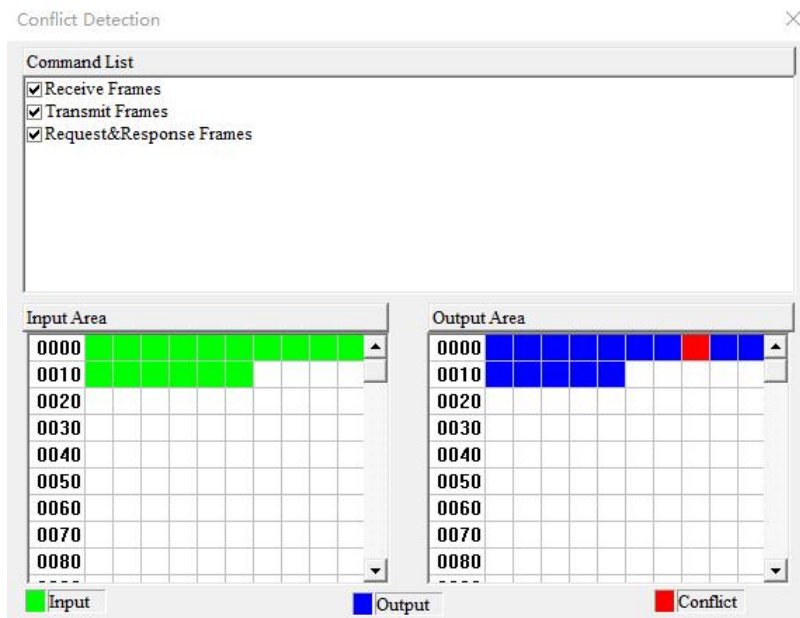


4. Conflict Detection

Conflict Detection checks for address conflicts in the memory mapping area.

Click the 'Menu Bar - Tool - Conflict Detection' / 'Toolbar - Conflict' button to open the conflict detection window.

As shown in the figure below:



Each square represents one byte.

Green – Input buffer, no conflict

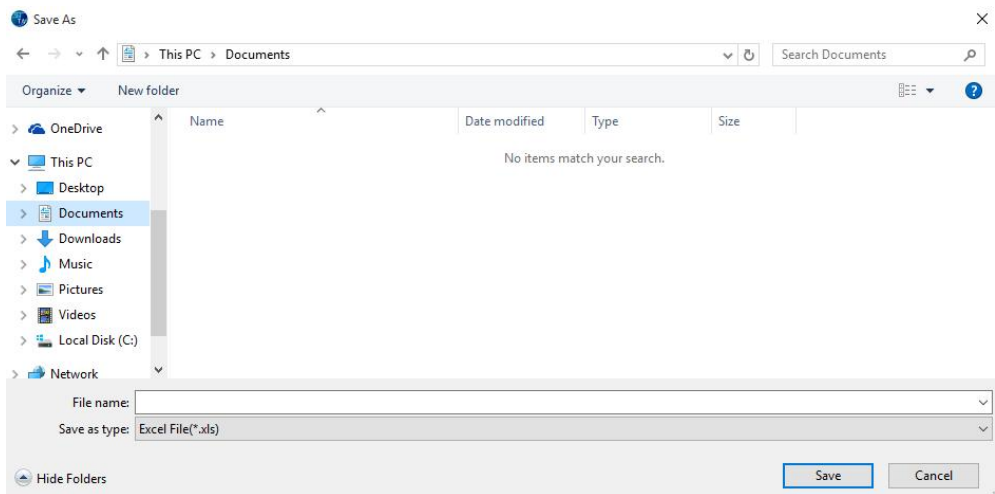
Blue – Output buffer, no conflict

Red – Conflict detected

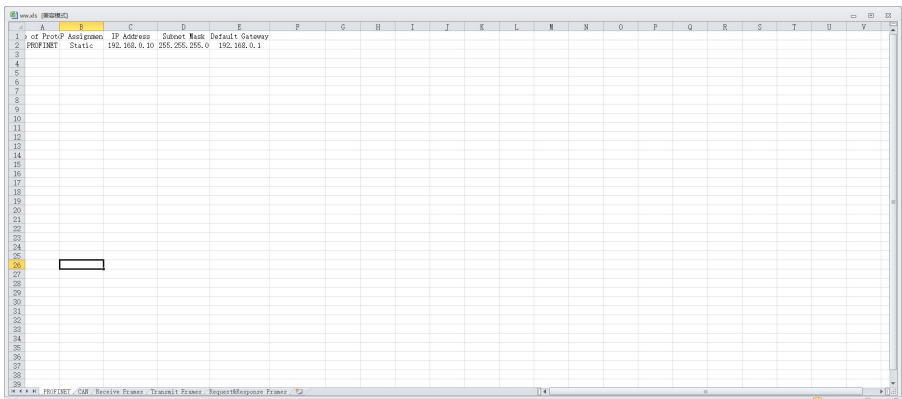
5. Export to Excel

Export to Excel' saves all configuration parameters to an Excel file.

Click the 'Menu Bar - Tool - Export to Excel' / 'Toolbar - Export' button, and the Save As window will pop up. As shown in the figure below:



Select the appropriate path, enter the file name, and click Save. The Excel file opens automatically. Select different worksheets to view specific configuration details:



6. Assign Ethernet Parameters

Assign Ethernet Parameters configures the gateway's PROFINET IP address and device name.

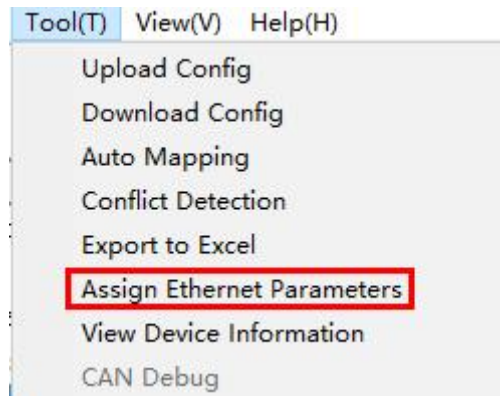
The specific operations are as follows:

(1) Click the 'Menu Bar -Tool- Assign Ethernet Parameters':

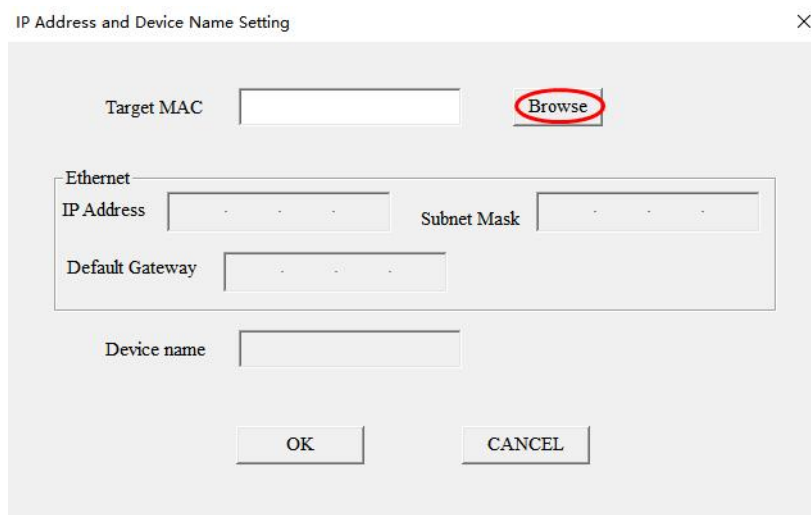
GT200-PN-CA

CAN / PROFINET IO Gateway

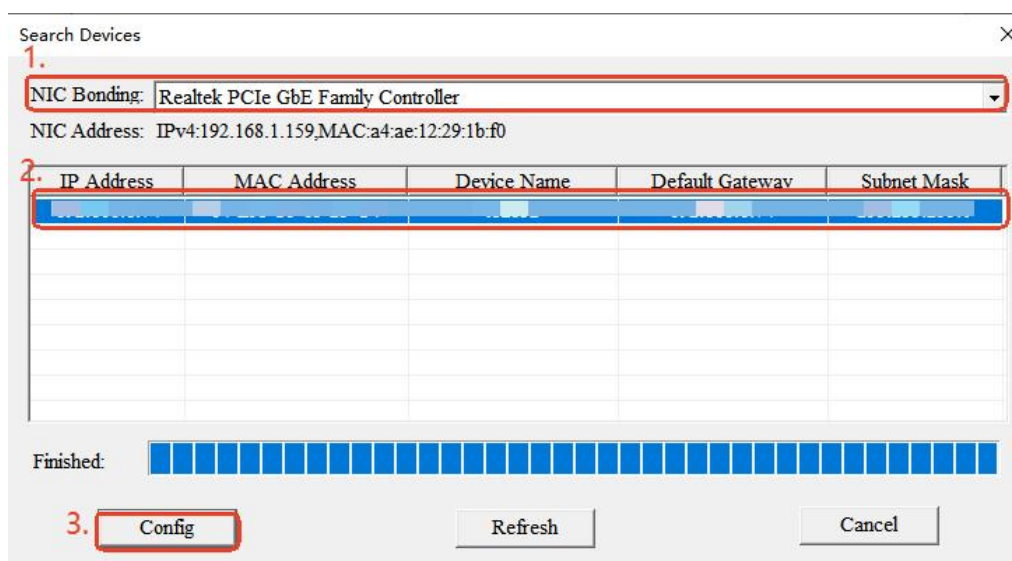
User Manual



(2) Open the 'IP Address and Device Name Setting' interface, click 'Browse':



(3) The Search Devices interface will appear. Select the gateway and click the 'Config' button.



• If no devices are found, refer to the FAQ 'How to Resolve Device Search Issues'.

(4) Modify IP address and device name, then click 'OK'.

GT200-PN-CA

CAN / PROFINET IO Gateway

User Manual

The screenshot shows two windows. The main window is titled 'IP Address and Device Name Setting'. It contains fields for 'Target MAC' (with a 'Browse' button), 'Ethernet' parameters (IP Address: 192.168.1.74, Subnet Mask: 255.255.255.0, Default Gateway: 192.168.1.74), and 'Device name' (dut74). There are 'OK' and 'CANCEL' buttons at the bottom. To the right, a smaller window titled 'SST-TA-CFG' displays a yellow warning icon and the message 'Set Ethernet parameters and device name successfully', with an 'OK' button.

Note:

- The IP address and device name must match the configuration in the PROFINET controller.
- Device name rules :
 - Only lowercase letters + numbers
 - Must start with lowercase letter
 - Valid: dut28, dut28nn32
 - Invalid: 28dut, dut28\$, dut28+uu

(5) After applying settings, search again to confirm the new values.

The screenshot shows the 'Search Devices' dialog box. It has a 'NIC Bonding' dropdown menu set to 'Realtek PCIe GbE Family Controller' and a 'NIC Address' field showing 'IPv4:192.168.1.159,MAC:a4:ae:12:29:1b:f0'. Below this is a table with the following data:

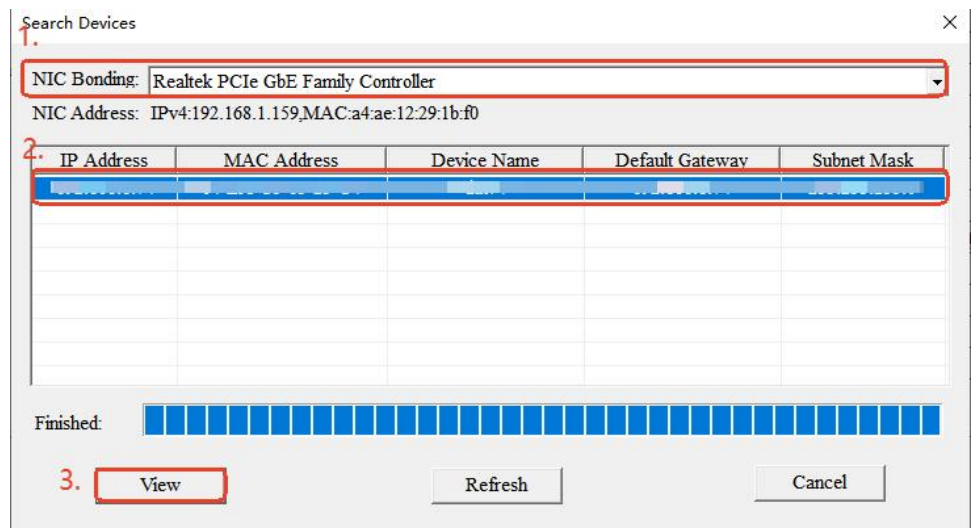
IP Address	MAC Address	Device Name	Default Gateway	Subnet Mask
192.168.1.74	[MAC Address]	dut74	192.168.1.74	255.255.255.0

At the bottom, there is a 'Finished:' progress bar (fully filled with blue) and three buttons: 'Config', 'Refresh', and 'Cancel'.

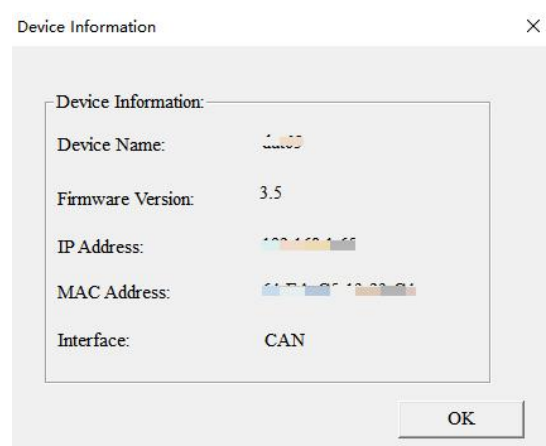
7. View Device Information

Click the 'Menu Bar-Tool-View Device Information' to open the 'Search Devices' window. Select the correct

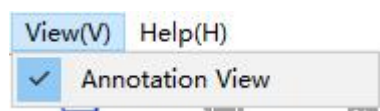
network card on your computer and choose the gateway to view.



The device information is displayed as follows:

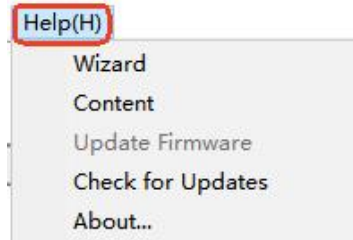


5.2.4 View



Menu Bar-View, 'Annotation View' is checked by default, and the software interface displays 'Annotation View' by default.

5.2.5 Help



1.Wizard:

Wizard launches a step-by-step configuration guide.

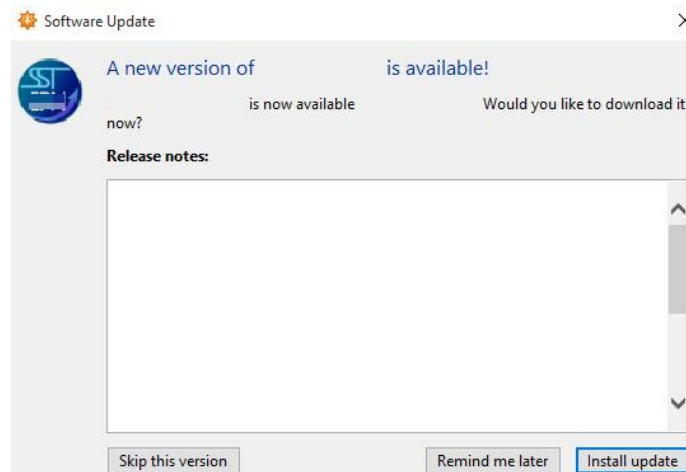
2.Content:

Click 'Content' to open the software manual and view the instructions for using the software.

3.Check for Updates:

Check for Updates searches for and installs the latest software version.

When the computer with the configuration software is connected to the network, clicking 'Menu Bar - Help - Check for Updates' will display whether the current software version is the latest and if a new version is available.



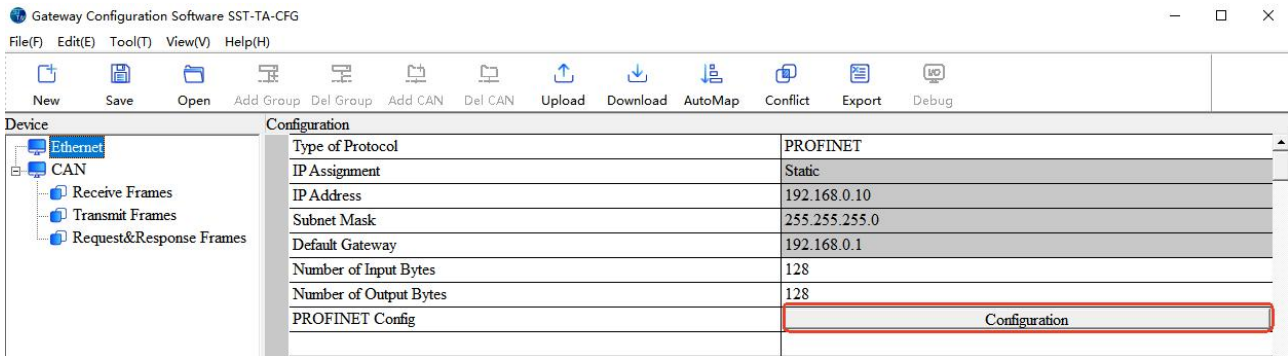
Click the 'Install Update' button to begin the process of uninstalling the current version and installing the updated version. Follow the prompts to complete the update.

4.About:

Click 'About' to view detailed information about the configuration software version and other related details.

5.3 PROFINET Settings Instructions

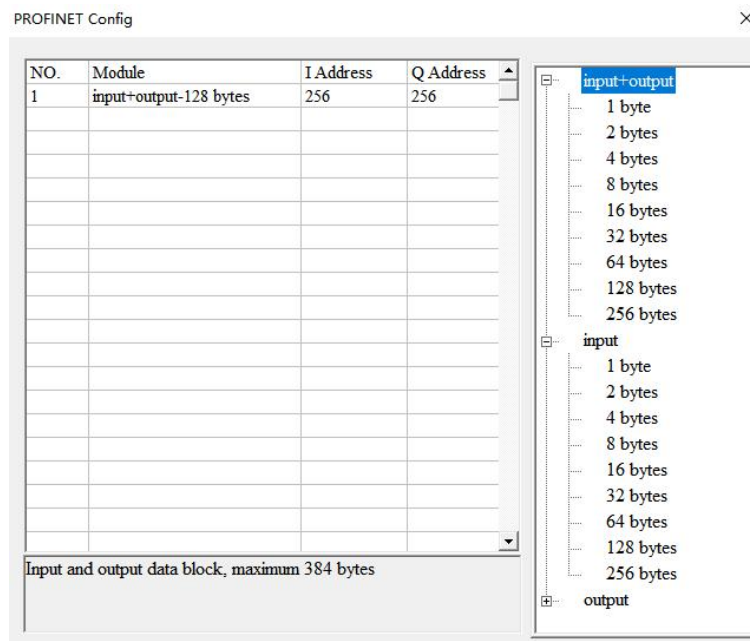
PROFINET configuration requires setting the I/O data length, IP address, and device name.



1. Number of Input/Output Bytes:

The Number of Input/Output Bytes field is display-only. Click the 'Configuration' button to set up the input/output data blocks (as shown in the figure below). Once configured, the corresponding byte length will be automatically displayed here.

The PROFINET Config dialog appears as shown below:



Adding a Data Block:

To add a data block, drag it from the right panel or double-click it.

Deleting a Data Block:

To delete a data block, select it and press the Delete key on your keyboard.

Editing the I/Q Address:

To edit the I/Q address of a data block, select it in the left list and double-click it. This will open the 'Base Address Edit' dialog for configuration.

Note:

①The data blocks configured here must correspond exactly to the input/output data blocks set in the PLC configuration software.

②Maximum I/O capacity depends on the 'Run Mode':

In Basic mode, the maximum capacity is 128 bytes each for input and output.

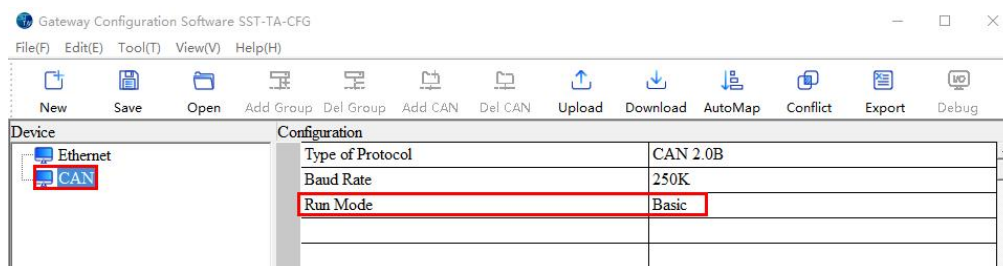
In Advanced mode, the maximum capacity is 384 bytes each for input and output.

2.Setting the Gateway's PROFINET IP Address and Device Name.

For detailed instructions, please refer to section 3.2.3, Tool '[6.Assign Ethernet Parameters](#)'.

5.4 CAN Settings Instructions

5.4.1 Run Mode: Basic



1.Type of Protocol: Supports CAN 2.0A (CAN Standard Frame Format) and CAN 2.0B (CAN Extended Frame Format).

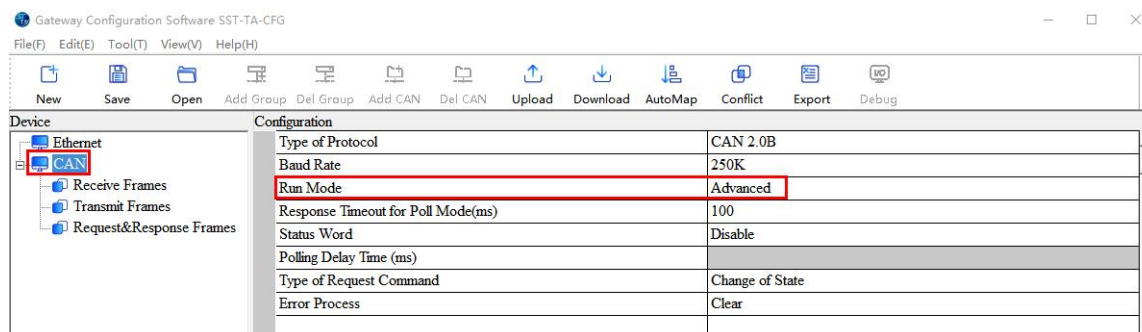
2.Baud Rate: Select the CAN communication baud rate. Supported rates are: 10K, 20K, 50K, 100K, 125K, 250K, 500K, and 1M. The default value is 250K.

3.Download Configuration

Once all configuration information is set, download the configuration to the gateway. After the download is complete, the gateway will automatically restart to apply the new configuration.

To verify the gateway's configuration, click the 'Toolbar - Upload' button to view the configuration stored in the gateway.

5.4.2 Run Mode: Advanced



1. CAN Parameter Configuration

(1)Set the basic parameters: Type of Protocol and Baud Rate.

(2)Request&Response Frame Settings:

GT200-PN-CA

CAN / PROFINET IO Gateway

User Manual

· Response Timeout for Poll Mode(ms): The response timeout setting for Request/Response sending command.
Range: 0-60000 ms.The default value is 100 ms.

· Polling Delay Time(ms): After a Request/Response request command is sent and a response with the corresponding CAN ID is received, the gateway must wait for a defined interval before sending the next Request/Response command. This interval is called the Polling Delay Time. Range: 0–60000 ms. The default value is 10 ms.

· Type of Request Command: Request/Response request command type: Change of State or Cyclic.

(3)Set advanced features:

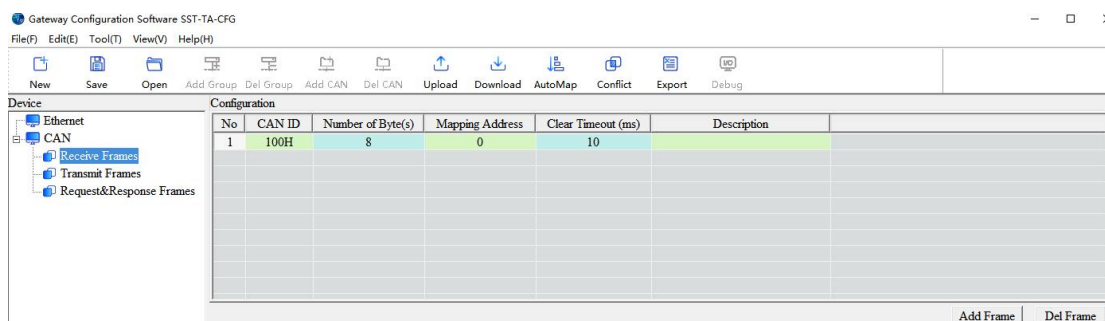
· Status Word: When enabled, displays the status of received CAN frames. When a corresponding frame is received, the corresponding bit in the status word is set to 1; otherwise, it is set to 0.

· Error Process: Defines data handling when a Request/Response times out:

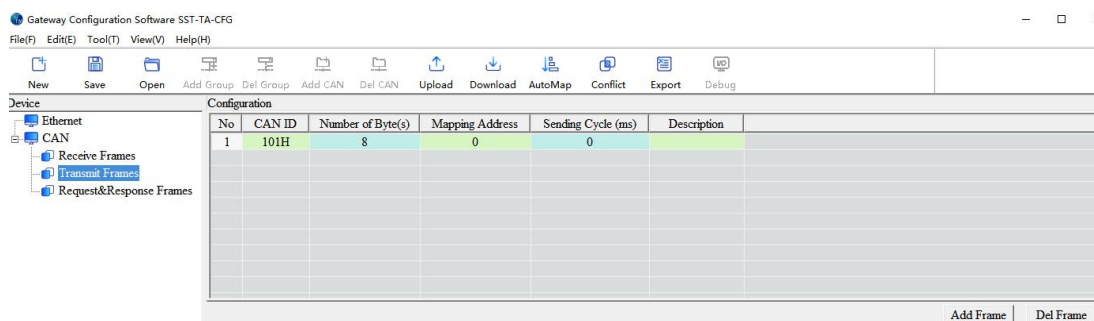
Clear: Clears the last received data if no response is received within the timeout period.

Hold: Retains the last received data if no response is received within the timeout period.

2. CAN command configuration



Receive Frames

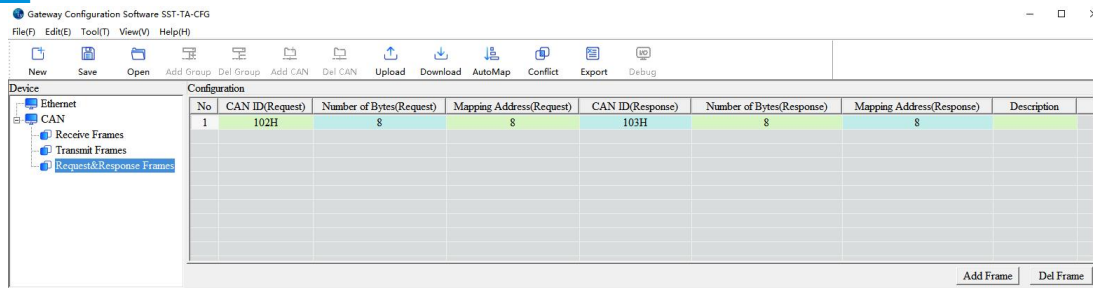


Transmit Frames

GT200-PN-CA

CAN / PROFINET IO Gateway

User Manual



Request&Response Frames

- **Add/Delete Frames:**

Add Frame: On any CAN frame page, click 'Add Frame' to create a new frame.

Delete Frame: Select frames and click 'Del Frame' for batch deletion.

- **CAN command setting instructions:**

CAN ID: Displayed in hexadecimal format. The default starting ID is 100H, and the ID for each newly added frame is automatically incremented by 1.

Range of CAN 2.0A : 0x000 - 0x7FF.

Range of CAN 2.0B: 0x00000000 - 0x1FFFFFFF.

Number of Bytes: Range: 1 - 8.

Mapping Address: This command reads or writes the starting address (in decimal) for the gateway's internal I/O buffer used in data mapping. The valid range of this address depends on the total configured input/output byte count in PROFINET. This address can be manually entered or automatically filled in by clicking the 'AutoMap' button on the toolbar after filling in the 'Number of Bytes'.

Clear Timeout: If a receive frame is not received within the timeout period, its corresponding memory data will be cleared. Range: 0-60000 ms. Default Value is 10 ms.

A value of 0 disables the Clear Timeout function. Any non-zero value enables it.

Sending Cycle: Transmission Period for Transmit Frames. Range: 0-60000 ms. Default Value is 0 ms.

A value of 0 enables Change of State transmission, where the frame is sent only upon a data change.

Any non-zero value enables periodic transmission, and the value itself defines the transmission period in milliseconds.

Note: This setting interacts with the CAN baud rate and total number of transmit commands. For systems without strict real-time requirements, it is advisable to set this parameter to 0 to operate in Change of State mode.

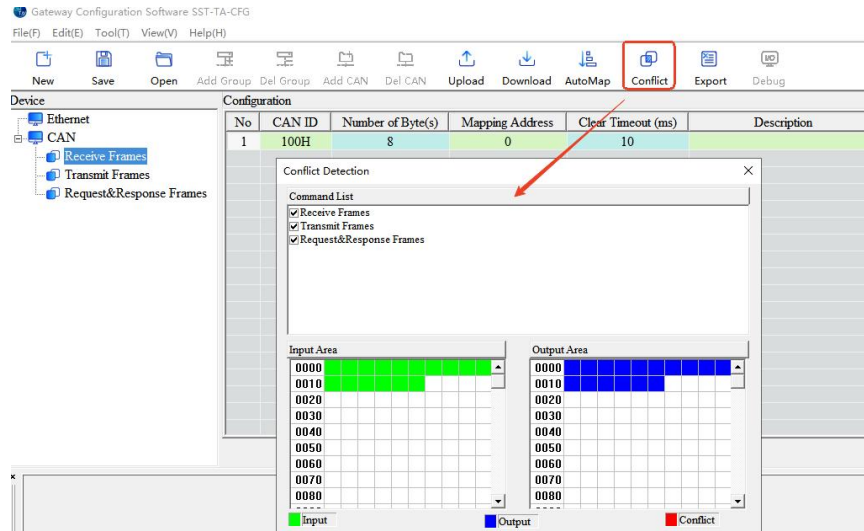
3.Auto Mapping and Conflict Detection

GT200-PN-CA

CAN / PROFINET IO Gateway

User Manual

To check for conflicts in the manually entered mapping addresses, click 'Conflict Detection'. Alternatively, click 'Auto Mapping' to have the software automatically assign conflict-free mapping addresses.



4.Download Configuration

Once all configuration information is set, download the configuration to the gateway. After the download is complete, the gateway will automatically restart to apply the new configuration.

To verify the gateway's configuration, click the 'Toolbar - Upload' button to view the configuration stored in the gateway.