Modbus TCP / DeviceNet Gateway
GT200-MT-DN

User Manual

V 2.4

SST Automation

Email: support@sstautomation.com

www.SSTAutomation.com

Important Information

Warning

The data and examples in this manual cannot be copied without authorization. SST Automation reserves the right to upgrade the product without notifying users.

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.

Copyright

Trademark

SSTCOMM is the registered trade mark of SST Automation.

Technical Support Contact Information

www.sstautomation.com

www.sstcomm.com

E-mail: support@sstautomation.com

Catalog

1 Product Overview

1.1 Product Function

GT200-MT-DN is a gateway that can exchange data between a DeviceNet network and Modbus TCP clients. It supports connecting devices with DeviceNet interface to Modbus TCP network. This module is a server on the Modbus TCP side and a scanner or adapter on the DeviceNet side.

1.2 Product Features

- DeviceNet Scanner: Supports connecting up to 8 DeviceNet devices to a Modbus TCP network, such as: Robots with DeviceNet interfaces, inverters, welder, motor starting protection devices, intelligent field measurement equipment, etc.
- DeviceNet Adapter: Supports data exchange between DeviceNet scanner and Modbus TCP clients (masters), such as: data exchange between robots, welder, PLCs and other devices with DeviceNet scanner interface and the host computer.
- Users don't need to know the technical details of Modbus TCP and DeviceNet, only refer to this manual and the application cases provided, complete configuration according to requirements, the network can be connected in a short time.
- Transparent communication: According to the mapping relationship between Modbus TCP communication data area and DeviceNet communication data area, users can realize data transparent communication between DeviceNet network and Modbus TCP network.
- Professional and efficient configuration software SST-DNET-COM: The gateway can scan DeviceNet adapters online through this software, quickly obtain its I/O parameters and configure parameters, support online debugging, support offline upload and download, offline configuration, and support DeviceNet scanner/adapter mode switch.

1.3 Technical Specifications

[1] Ethernet interface:

- Supports 2 10M/100M (auto-negotiating) network ports with a built-in switch.
- Supports Modbus TCP protocol and functions as a Modbus TCP server (slave).
- Supports connecting up to 4 Modbus TCP clients.
- Supports function codes: 03H, 04H, 06H, 10H.
- The starting address of the input register is 0 (stores the received CAN frame), and supports the function code 04H.
- The starting address of the output register is 0 (stores the CAN frames that need to be sent), and supports the function codes 03H, 06H and 16H.
- Supports static configuration of IP address and DHCP.

The following function is only valid when entering DeviceNet adapter mode.

- Supports configuring the register starting address.
- Supports function code 03 or 04 to read the input/output data area.
- Supports monitoring DeviceNet adapter connection status.
- Supports data hold or clear when the connection is broken.

[2] DeviceNet interface:

DeviceNet supports two working modes: scanner station and adapter station. DeviceNet scanner station supports pre-operation mode and operation mode.

[3] As DeviceNet Scanner - Pre-operation mode (Configuration switch 1-ON, 2-OFF)

- Supports device search, namely online scanning DeviceNet adapter through SST-DNET-COM software.
- Supports one-click application of the scanned DeviceNet adapter I/O parameter configuration, and reading and writing configuration through SST-DNET-COM software.
- Supports reading and writing DeviceNet adapter parameters.
- Supports reading and writing DeviceNet I/O data (polling).
- Supports reading Change-of-State commands (COS) (up to 14 bytes).
- Supports DeviceNet baud rate: 125K, 250K, 500K.

- Supports reading and writing product information.

[4] As DeviceNet Scanner - Operation mode (Configuration switch 1-OFF, DIP2-OFF)

- Supports communication with Modbus TCP network.
- The Maximum number of input and output bytes supported by single DeviceNet adapter: 128 bytes and 112 bytes.
- The maximum number of input/output bytes supported by DeviceNet adapter: 512 bytes.
- Supports connecting up to 8 adapter devices, I/O transmission cycle and input timeout clearing and holding function of DeviceNet (Configurable Feature).
- Supports reading Change-of-State commands (COS) (up to 14 bytes).
- Supports DeviceNet baud rate: 125K, 250K, 500K.

[5] As DeviceNet Adapter

- DeviceNet supports up to 224 bytes of input or output: 8, 16, 32, 96, 48, 64, 112, 72, 160, 192 and 224 bytes.
- The module is powered from the DeviceNet network, and the power supply voltage is DC 11~30V.
- Supports DeviceNet I/O Poll scanning.
- Supports DeviceNet baud rate: 125K, 250K and 500K.
- Supports No Swap, Two-Byte Swap and Four-Byte Swap.
- Supports monitoring Modbus TCP side connection status,
- Supports data hold or clear when the connection is broken.

[6] Operating temperature: -40 °F~140 °F(-20 °C to 50 °C). Relative Humidity: 5% to 95% (non-condensing)

[7] Power: 24VDC (11V~30V), maximum 80mA (24V).

[8] Built-in electrostatic protection: 15 KV ESD.

[9] External dimensions (W*H*D): 1.0 in*4.0 in *3.6in (25mm*100mm*90mm).

[10] Installation : 35mm DIN RAIL.

[11] Protection level: IP20.

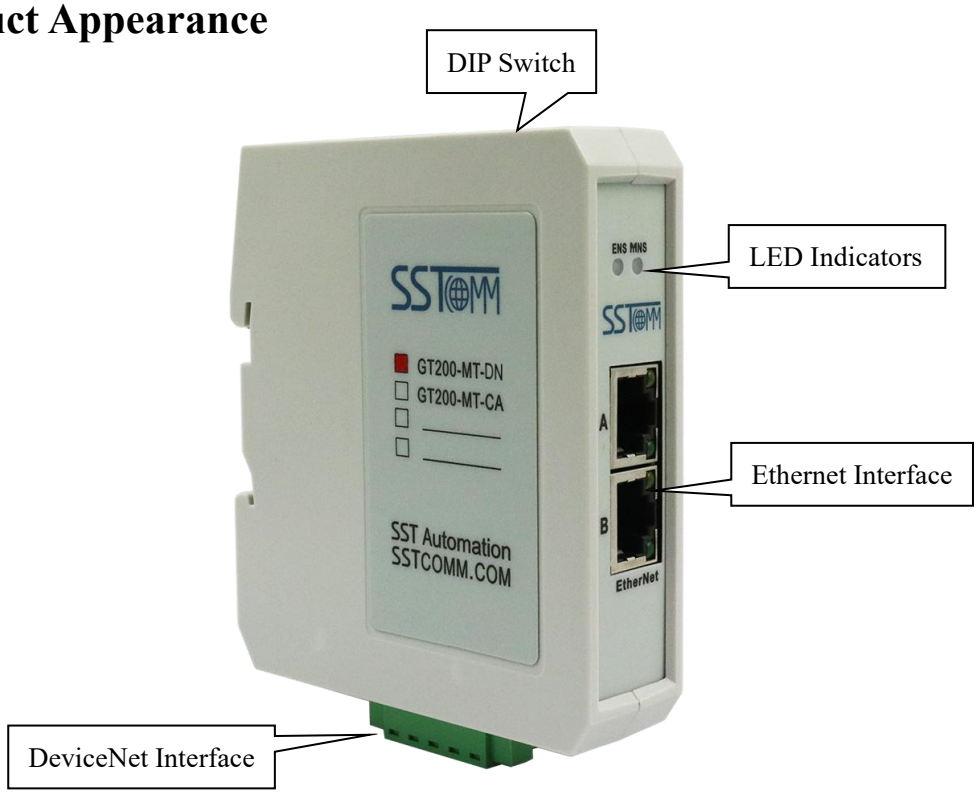
[12] Pollution level: class 3.

1.4 Revision History

Revision	Date	Chapter	Description
V2.4	05/31/2023	PART	I/O transmission cycle can be configurable under DeviceNet master mode
V2.1 Rev A	02/17/2023	PART	Corrected DIP switch definitions in Chapter 2.3.
V2.1	01/31/2023	PART	New functions on DeviceNet adapter mode
V2.0 Rev A	07/25/2022	PART	New DeviceNet modeling software SST-DNET-COM
V2.0	04/02/2021	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.

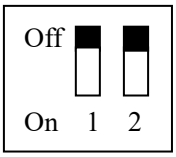
2.2 LED Indicators

Indicators	Status	Description
ENS (Ethernet Status Indicator)	Green	Modbus TCP connection is established
	Green Blinking	Modbus TCP connection is not established
	Red Blinking	DHCP
	Red Blinking Twice	Power-on initialization state
MNS (DeviceNet Scanner - Pre-operation mode)	OFF	Initialization completed. Searching not started yet
	Green Blinking	The scanner is online, but no connection has been established with the adapter
	Green	Connected with the adapter
	Red Blinking	Disconnected from the adapter
MNS (DeviceNet Scanner - Operation mode)	Off	Module is running and initialization has not yet been completed
	Green Blinking	Initialization completed. The scanner is online, but no connection has been established with the adapter
	Green	Connected with the adapter
	Red Blinking	Disconnected from the adapter
	Red	There is no adapter on the DeviceNet network or Detected address conflict or DeviceNet network error (For example, baud rate error)
MNS (DeviceNet Adapter)	Red	DeviceNet network error
	Red/Green Blinking	DeviceNet initialization
	Green Blinking	DeviceNet connection is establishing
	Green	DeviceNet network is normal
ENS Orange MNS Orange (Orange: Red/Green is on simultaneously)	Blinking Alternately	Configuration Mode
ENS Red, MNS Red	Blinking 3 Times Simultaneously	Locating

Note: Configuration Mode: After power on, the orange blinks alternately, indicating that it is in Configuration Mode.

2.3 DIP Switch

The configuration DIP switch is used to set the operating mode of the GT200-MT-DN and is located on the top of the of the gateway. Bit 1 is the Function Bit, and Bit 2 is the Mode Bit.

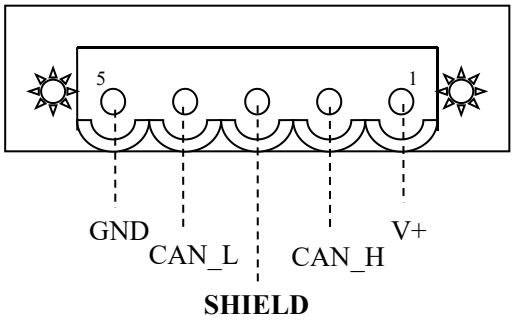


Function (Bit 1)	Mode (Bit 2)	Description (DeviceNet Scanner Mode)	Description (DeviceNet Adapter Mode)
OFF	OFF	Operation Mode Prohibits remote configuration	Operation Mode Allows remote configuration
ON	OFF	Pre-operation Mode Allows remote configuration	Operation Mode Allows remote configuration
OFF	ON	Configuration Mode The IP address is fixed at 192.168.0.10. Allows configuration. Prohibits communication.	
ON	ON	Firmware Update Mode (For use by SST Automation only)	

Note: to apply the mode switching, please restart the gateway.

2.4 Interfaces

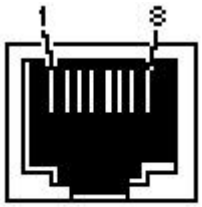
2.4.1 DeviceNet Interface



Pin	Description
1	+24V
2	CAN-H
3	SHIELD
4	CAN-L
5	GND

Note: The GT200-MT-DN is powered by the DeviceNet interface.

2.4.2 Ethernet Interface



RJ-45 port

The Ethernet interface uses an 8-position RJ-45 interface, follows the IEEE802.3u 100BASE-T standard, with 10/100M auto-negotiation. Its pinout (standard Ethernet signal) is defined below:

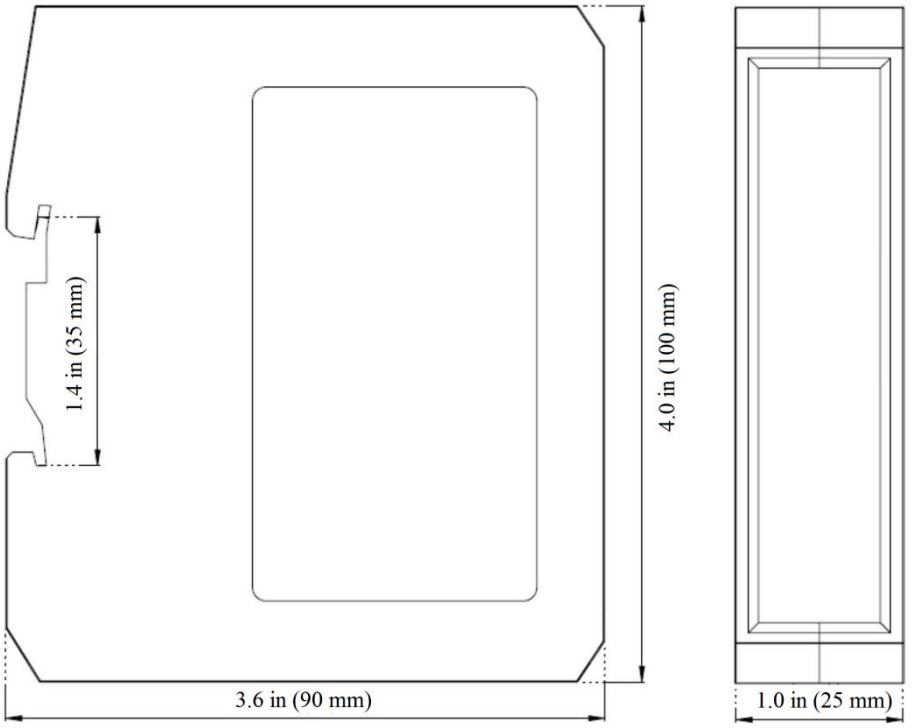
Pin	Description
S1	TXD+, Transmit Data+, Output
S2	TXD-, Transmit Data-, Output
S3	RXD+, Receive Data+, Input
S4	Bi-directional Data+
S5	Bi-directional Data-
S6	RXD-, Receive Data-
S7	Bi-directional Data+
S8	Bi-directional Data-

3 Hardware Installation

3.1 Mechanical Dimensions

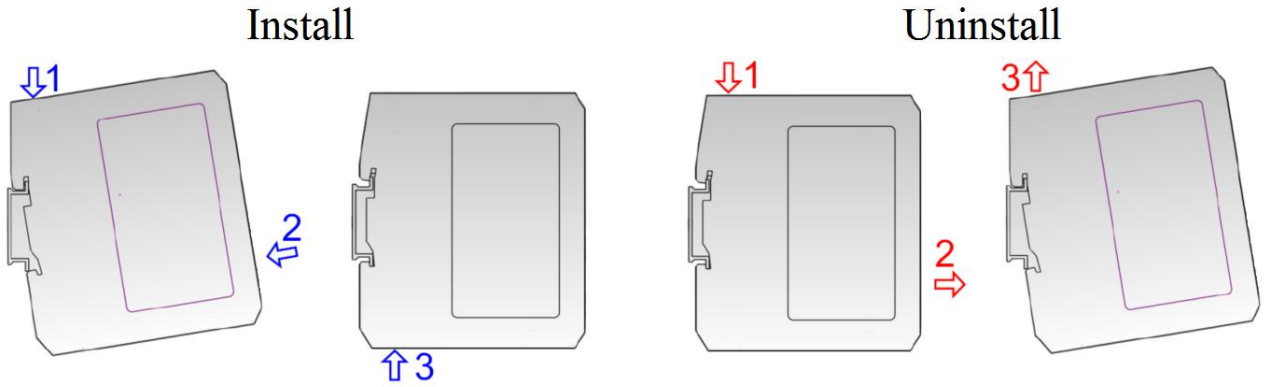
Size (width * height * depth):

1.0 in * 4.0 in * 3.6 in (25 mm * 100 mm * 90 mm)



3.2 Installation Method

Using 35mm DIN RAIL.



4 Quick Start Guide

4.1 Hardware Connection

1. According to the instructions of the RJ-45 port in Chapter 2, correctly connect the corresponding wiring of each pin of the RJ-45.
2. According to the instructions of the DeviceNet port in Chapter 2, connect the wiring correctly, and note that it is not suitable to power on at this time.
3. Check whether the wiring conforms to the instructions of the manual.
4. Power on the module and it will enter the running state.

4.2 Communication Debugging

1. The default configuration of GT200-MT-DN is DeviceNet scanner mode, the DIP switches are all OFF, and the default IP address is 192.168.0.X. Users can change the operating mode according to the actual application.
2. The gateway uses the network port connection configuration, please refer to Chapter 5 of the manual for details.
3. After the GT200-MT-DN configuration is completed, install GT200-MT-DN on the standard rail frame, power on and use.

5 SST-DNET-COM Software Instructions

5.1 Notes Before Configuration

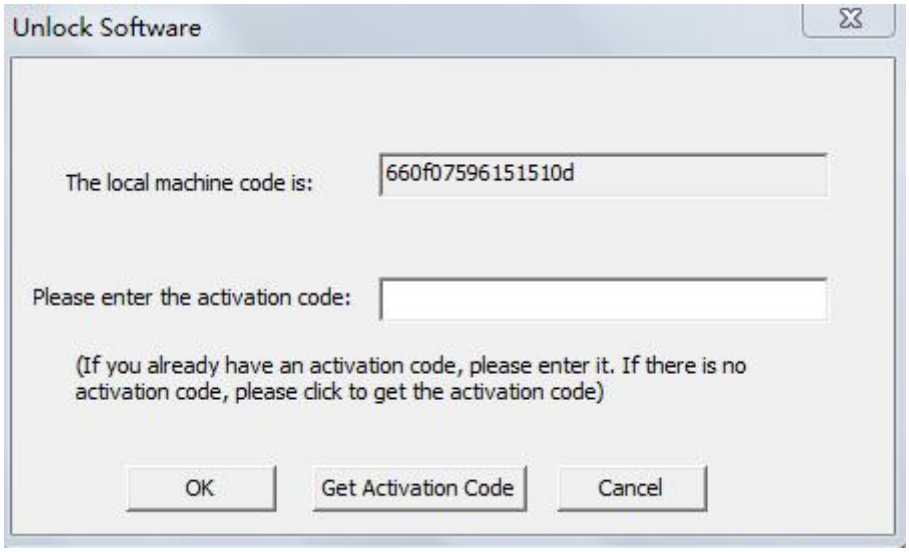
When the DIP switch of GT200-MT-DN is set to "1ON 2OFF", the gateway is in operation mode, and the I/O parameters of the adapter devices on the DeviceNet network can be configured through SST-DNET-COM software.

DeviceNet network configuration software SST-DNET-COM is developed by SST Automation. It needs to be used with SSTCOMM's GT200-MT-DN or other DeviceNet scanner modules.

The following introduction is aimed at helping you get quickly started for using our gateway. More details about using software, please refer to "Help"->"Content" in the SST-DNET-COM software.

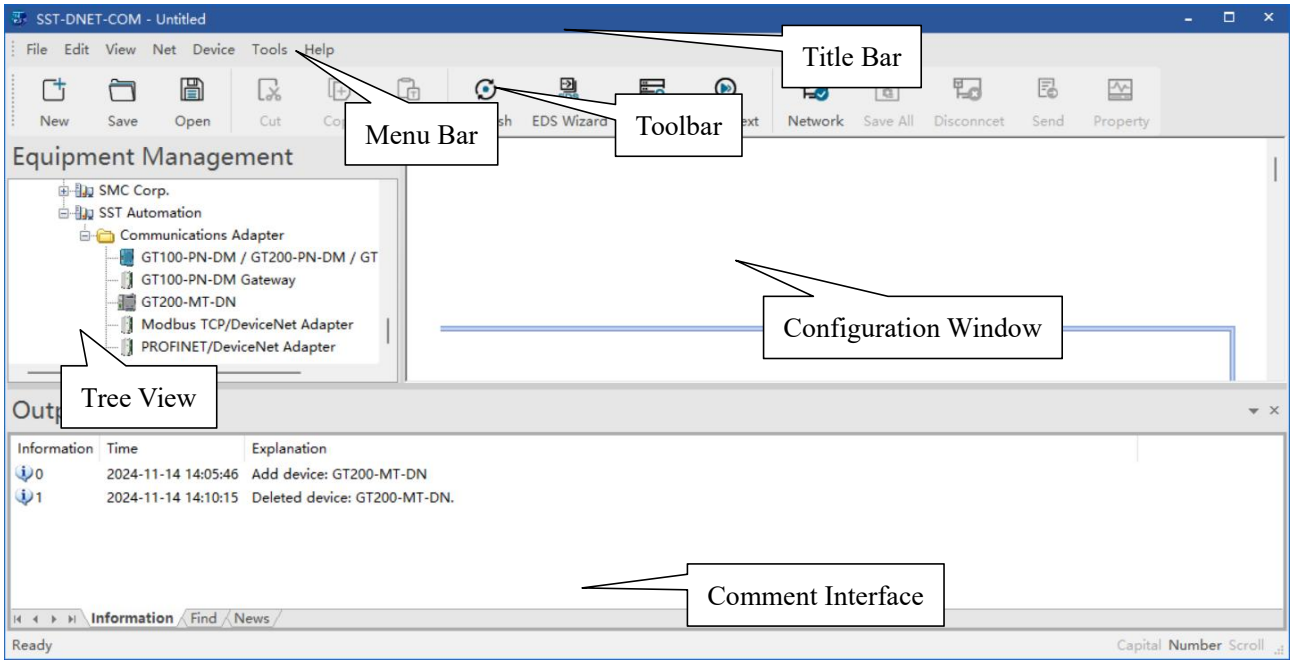
5.2 Software Main Interface

For the first time to use the SST-DNET-COM software, it requires activation code.



Click “Get Activation Code” and it will jump to sstautomation.com for activation.

You can access SST-DNET-COM software after entering correct activation code.



Configuration Window: After establishing the internet connection, display the online device and modify the address and parameters of the device online,check the input and output data. In the offline state, you can view device properties by dragging the device icon to the window.

Tree View: Displays registered DeviceNet devices in different ways: device type, manufacture. Under different manufacturers, different devices are displayed separately according to the device type.

Comment Interface: Dynamic display of network scanning information, registered device information, delete device information, etc. display the results of "find devices", "find next".

5.3 Toolbar

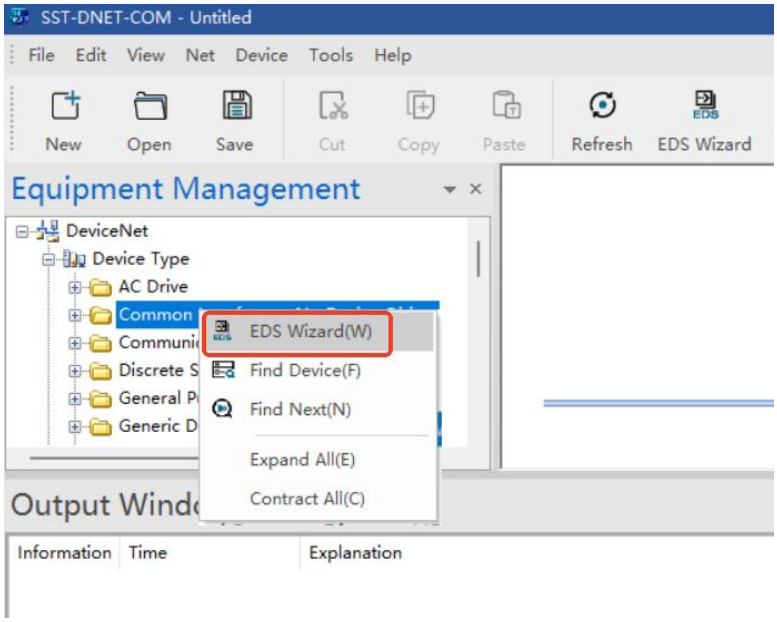
Toolbar is shown as below:

Functions separately from left to right are: New, Open, Save, Print, Cut, Copy, Paste, Refresh, Install EDS file, Find, Find Next, Network, Save All, Disconnect, Send Explicit Message, Property.

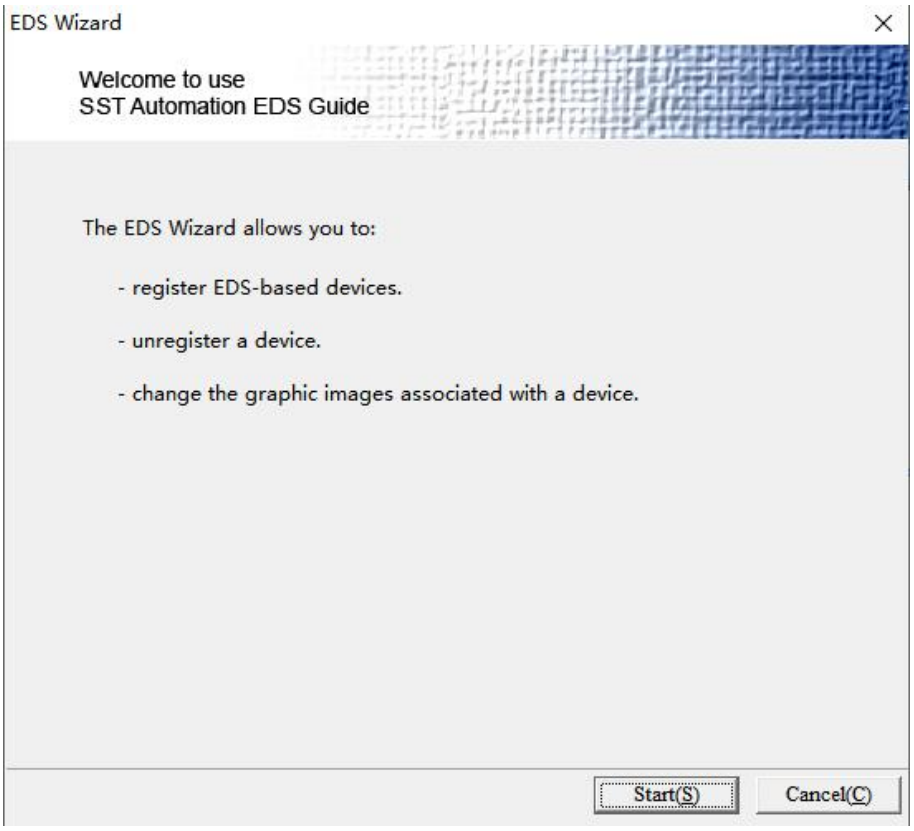
5.4 DeviceNet Device Network Configuration

➢ **Install EDS File**

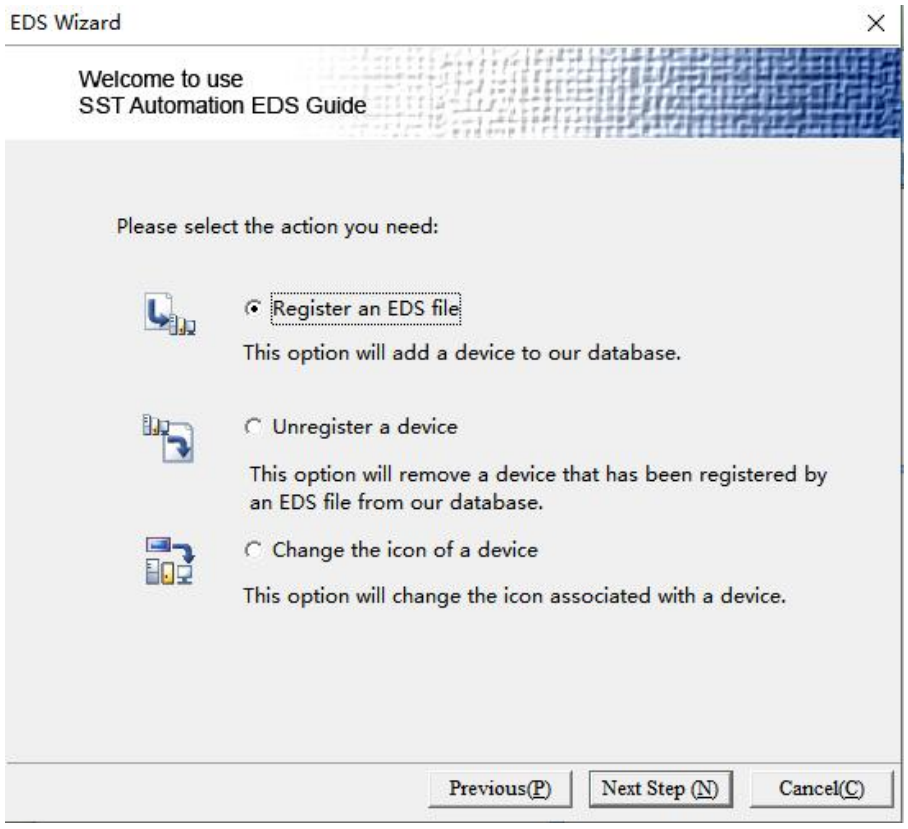
Users can configure different DeviceNet devices by registering new EDS files. To register a new EDS file, select "Tools" -> "Install EDS file", or click "Install EDS file" button in the toolbar. Or directly click the right button in the Equipment management window and select "Install EDS file" which will pop up the EDS Wizard interface. The three ways are as follows:



EDS Wizard interface is shown in the following figure:



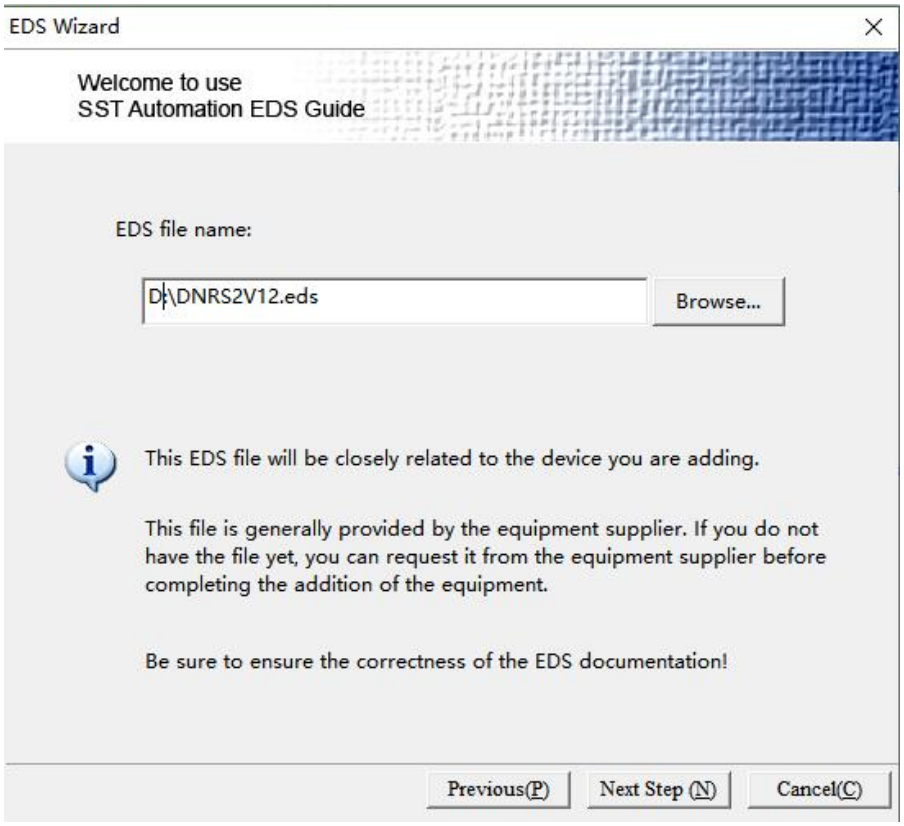
Select "Start "and pop up the following interface:



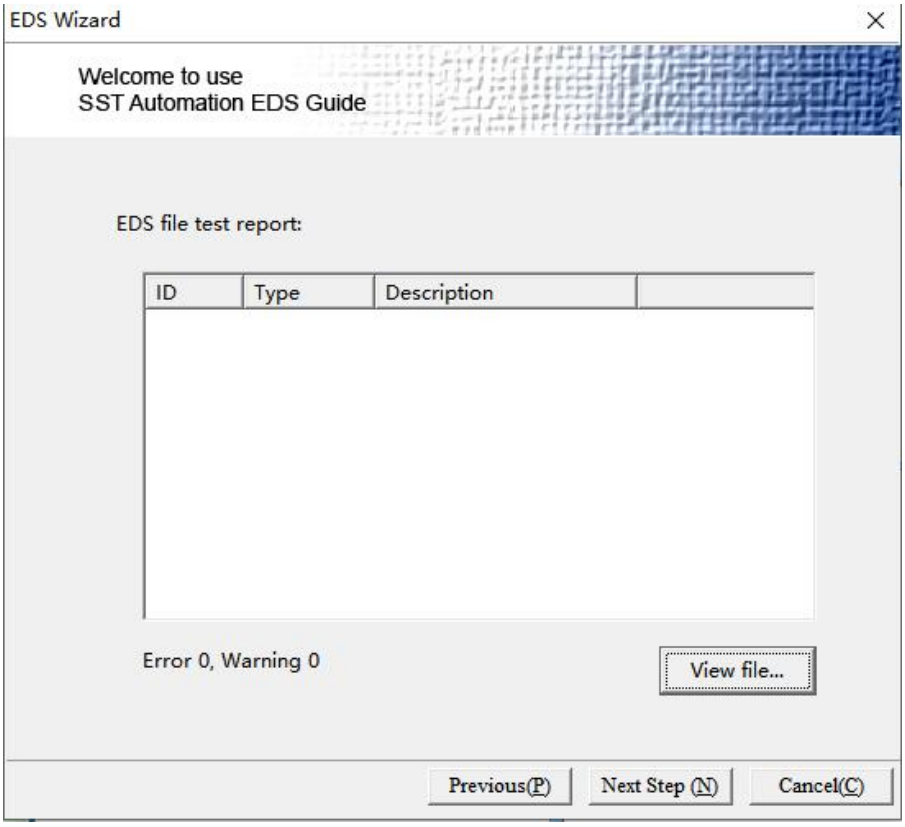
In this interface, users can choose to register an EDS file, log out of an existing device, and change the icon of a device.

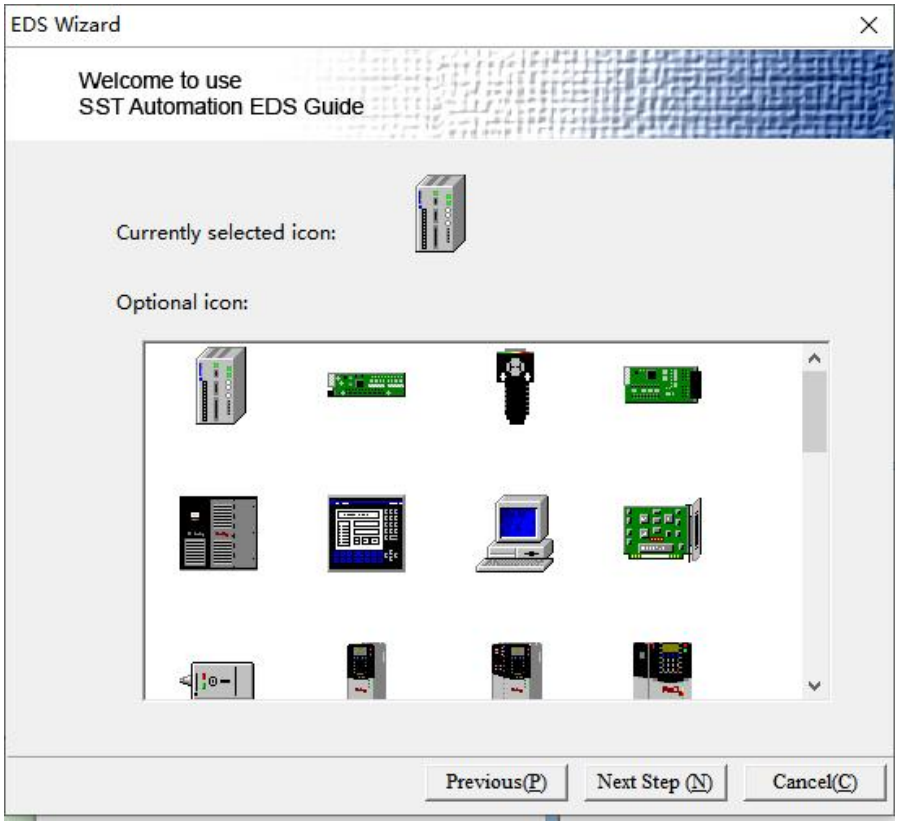
Take "Register an EDS file" as an example to introduce the following steps for registering a new EDS file:

After selecting "Register an EDS file", click "Next Step" and select the storage path of EDS file you want to register in the pop-up interface, as shown in the figure below:



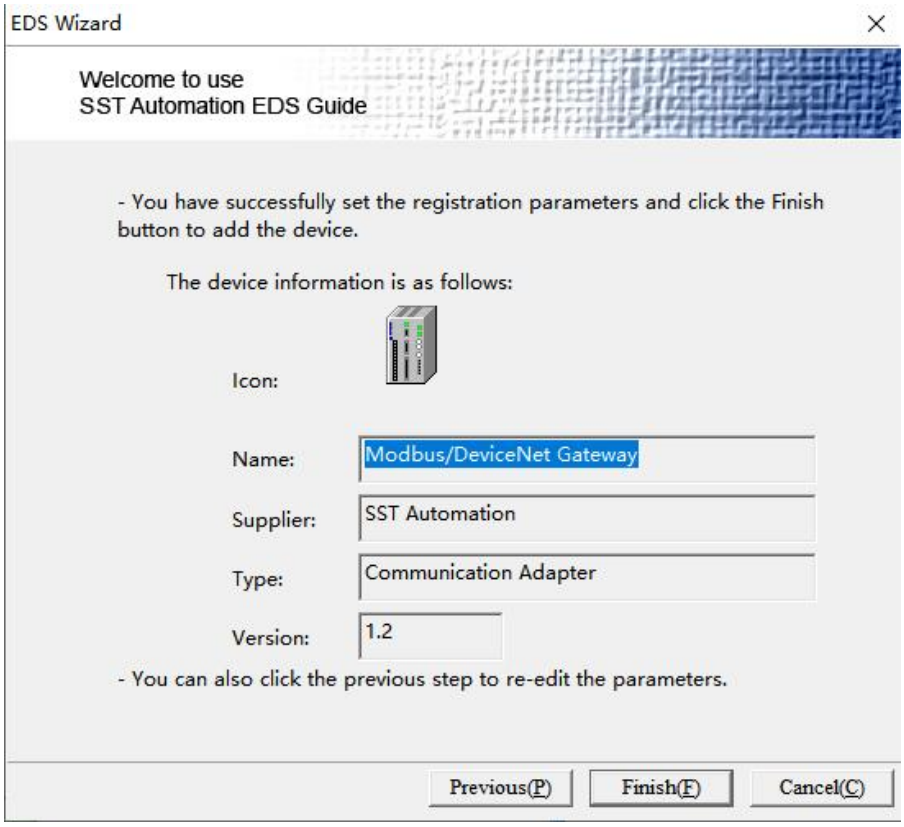
Click "Next Step" to pop up the EDS file test report interface. If there is an error in the EDS file, the error message will be displayed in the interface, and there is no "Next Step" operation. If there is no error in the file, continue the "Next Step" operation, pop-up selection device icon interface as follows:





After selecting a device icon, click "Next Step" to pop up the factory information of the registered device, as

shown in the figure below:



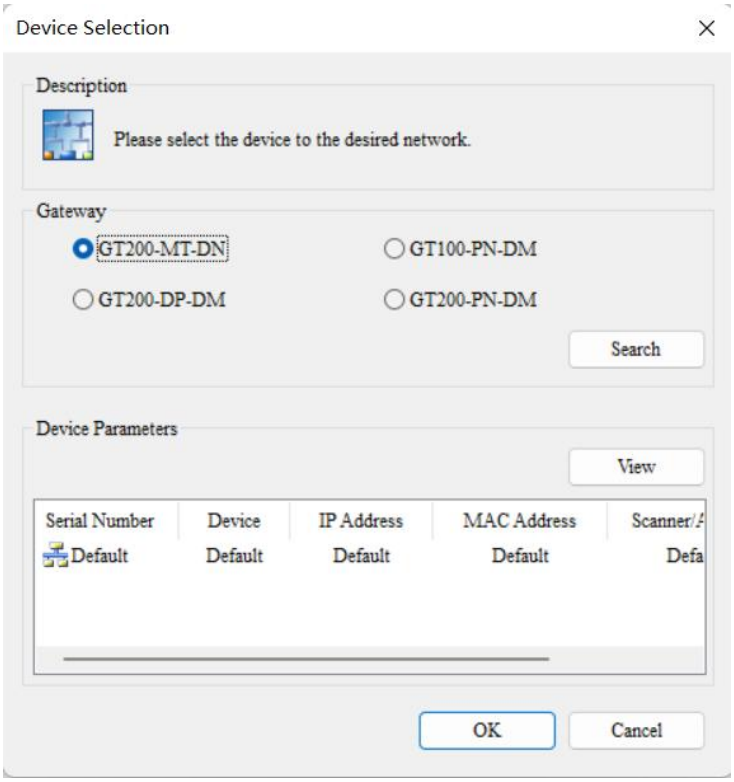
Click "Finish" and the EDS file registration step is over. At this time, you can see the newly registered device in the equipment Management Window.

If you want to change EDS file for the same device, please first find the device in the device management library and right click. After logging out, re-register the new EDS file, or complete the logout operation through the EDS operation.

- PC-DeviceNet Interface Setting

SST-DNET-COM software needs to be used together with the DeviceNet scanner module. First, connect GT200-MT-DN to Ethernet, and then connect GT200-MT-DN's DeviceNet port and user's DeviceNet device to the DeviceNet network. Power Supply of GT200-MT-DN is 24VDC.

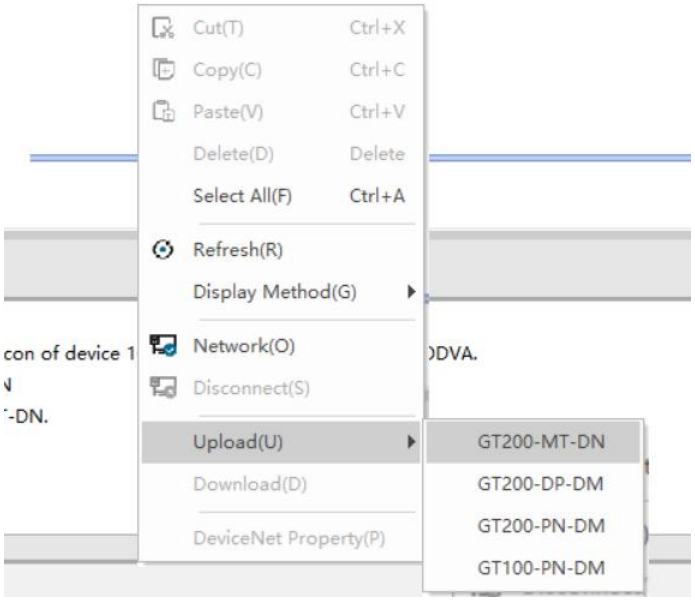
Power on After correctly Connecting to Power Supply, the connection of DeviceNet network can be established by "Internet Connection" in the menu bar or toolbar.Click "Internet Connection" and pop up the path selection interface:

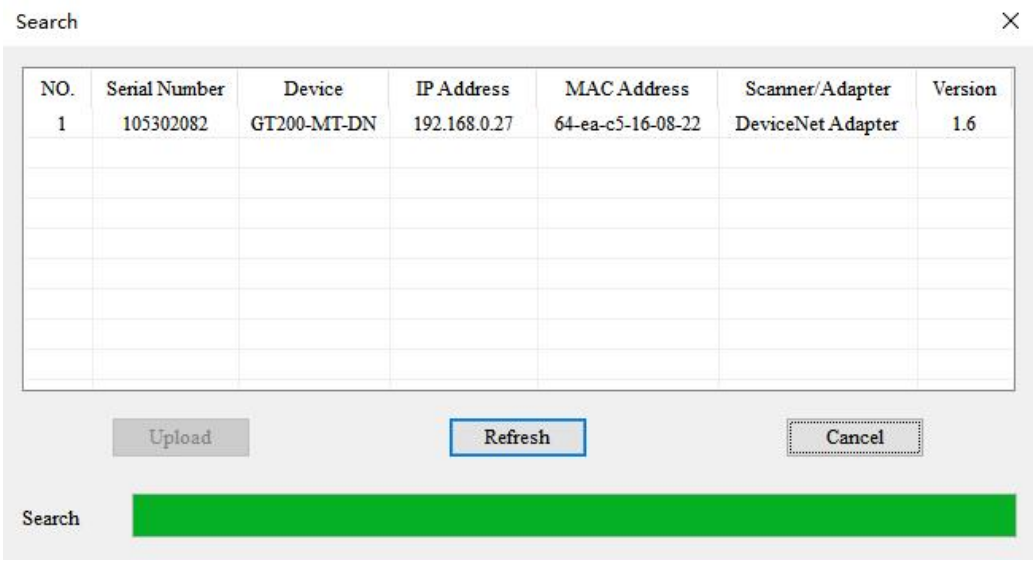


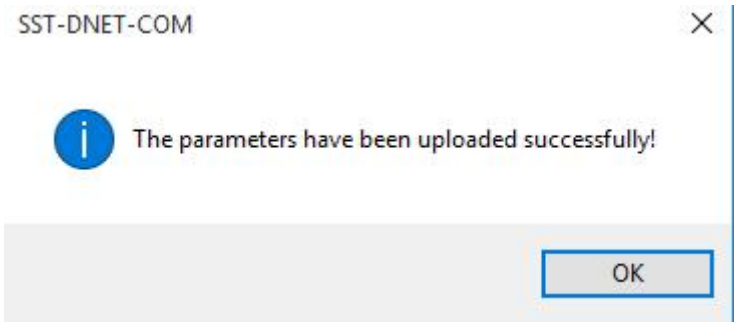
Then click the interface setting, the software will display the searched device in the list, select the scanner station to be configured for the interface setting:

At default, the GT200-MT-DN act as a DeviceNet adapter mode. Please change to the scanner mode if you want to use it as a DeviceNet scanner mode.

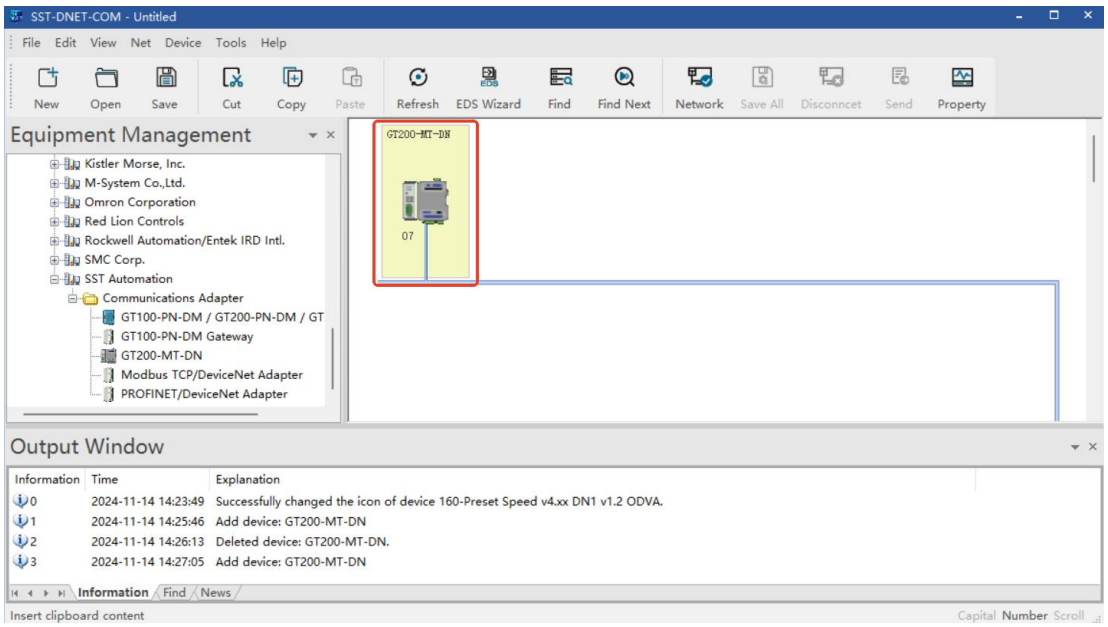
Firstly, upload the gateway by right clicking the blank area.



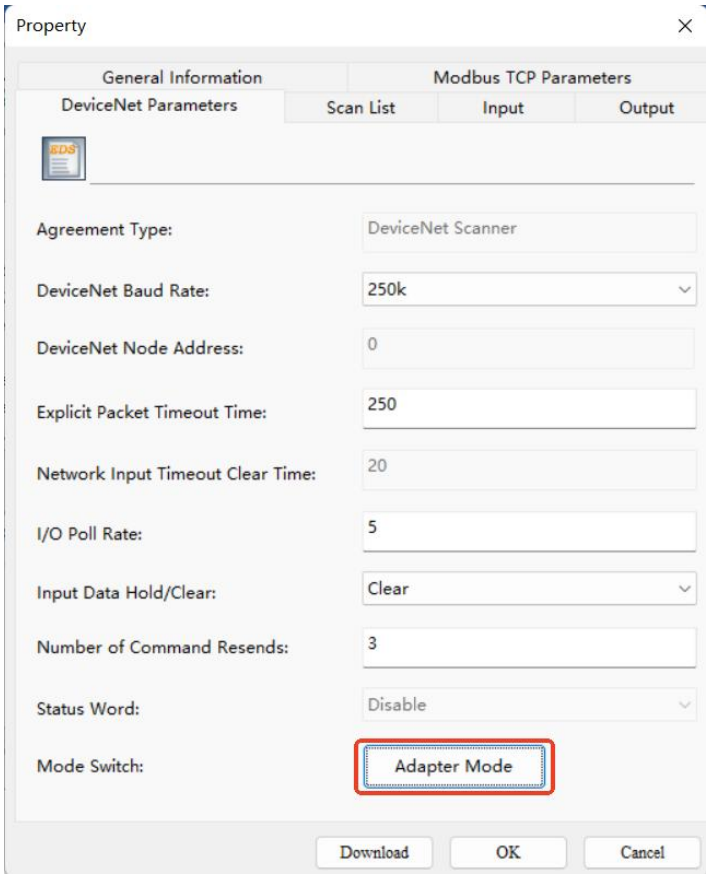




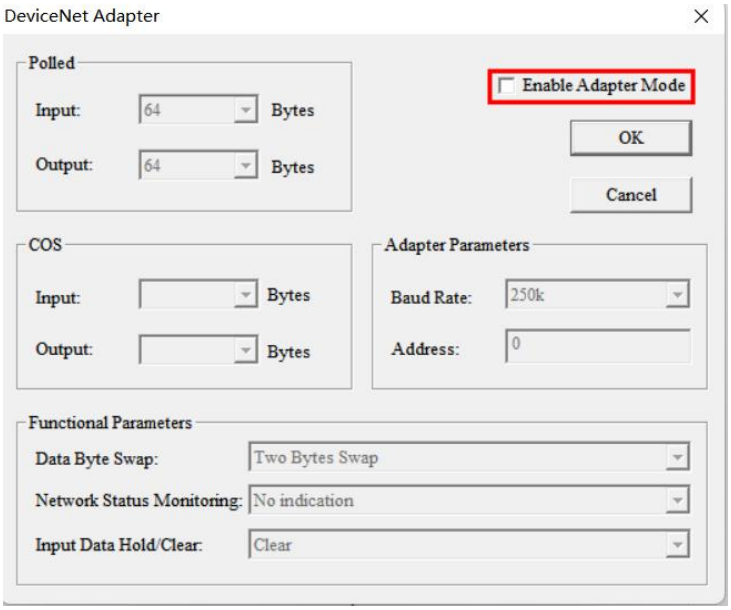
Double click the module,



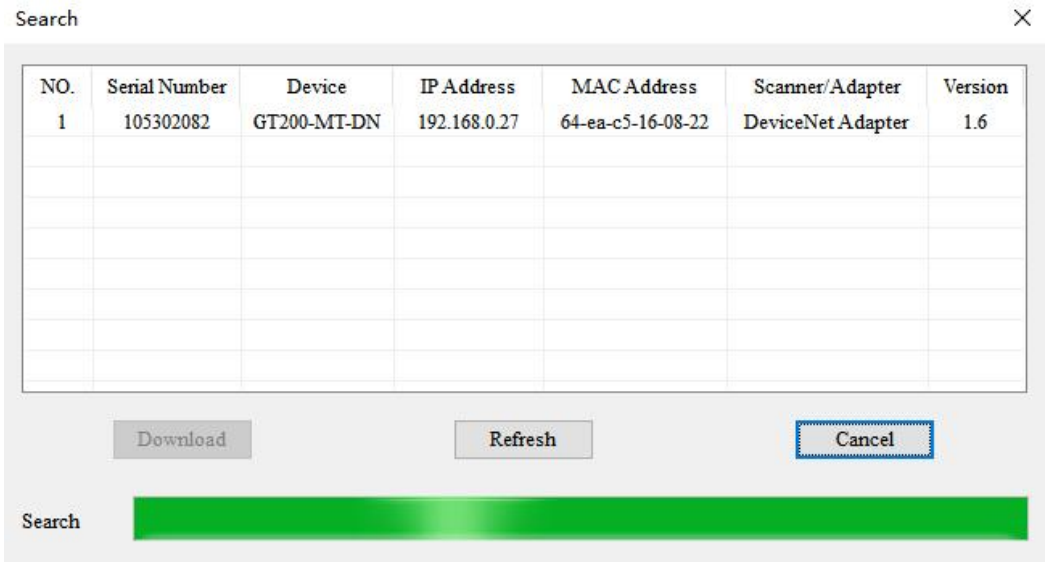
Choose DeviceNet Parameters, click DeviceNet Adapter.

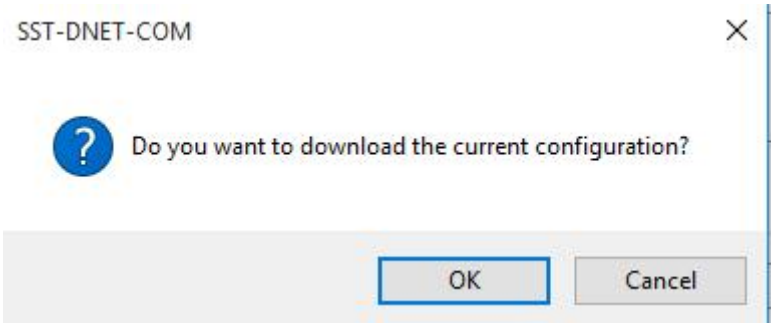


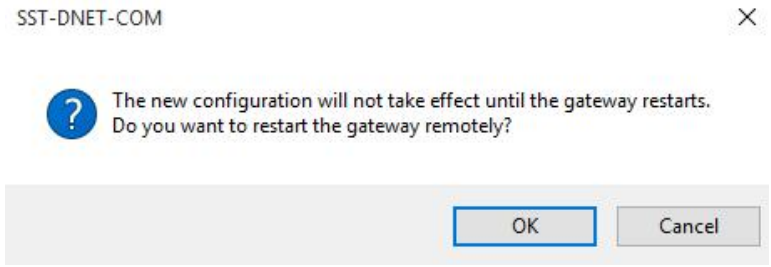
Uncheck the box, and click OK, then click Download button.



Choose the gateway shown, click Selected.

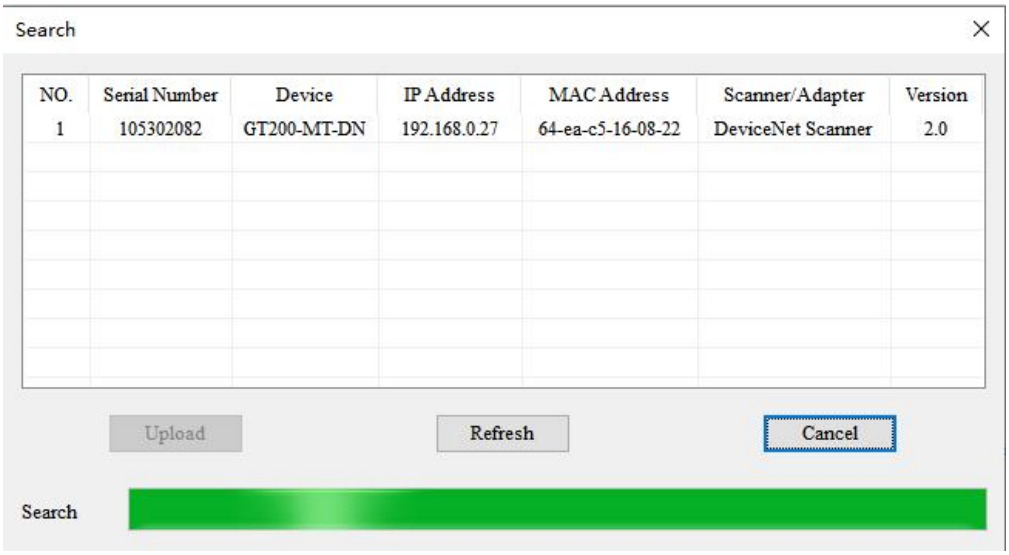


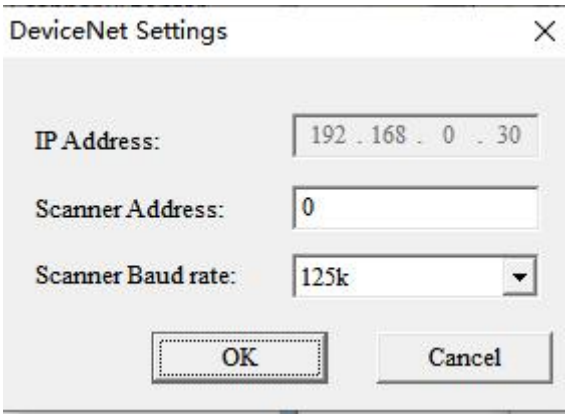




Then the gateway will enter DeviceNet scanner mode.

And re-upload the gateway, it will show the Version 2.0 which means the gateway is in the DeviceNet scanner mode.

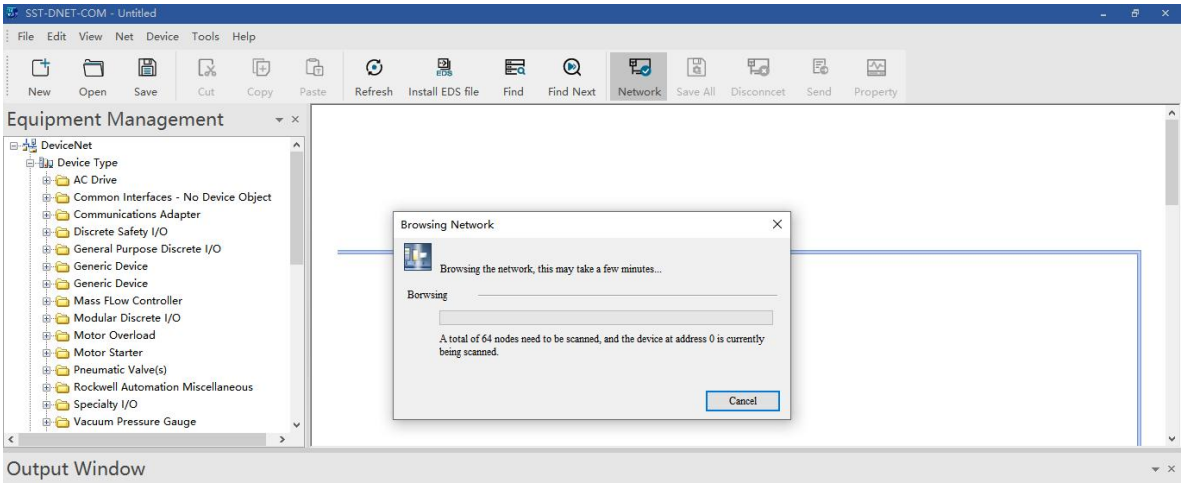




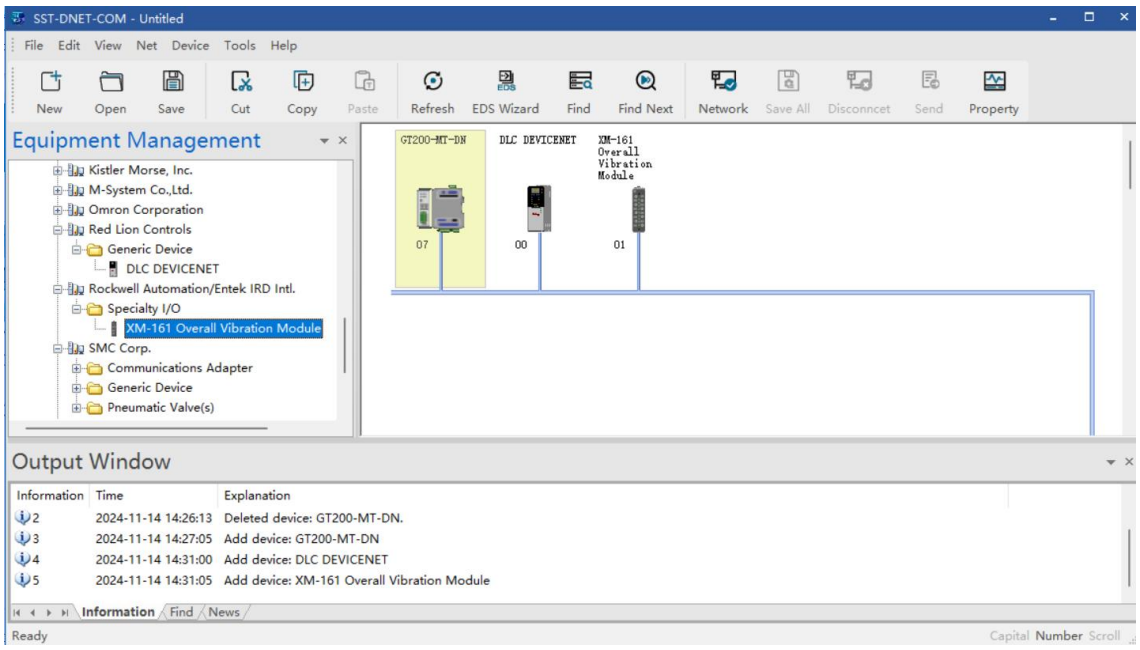
Note: In the interface settings configuration, "IP address" is the IP of the device selected at the time of search. "Scanner Address" is the Address of DeviceNet Scanner Module. Set any value between 0 and 63, which can't conflict with other node addresses on the bus. "Scanner Baud Rate" is the baud rate of DeviceNet scanner module, and has 125K, 250K, and 500K options. Keep Bus Baud Rate Consistent.

5.5 DeviceNet Network Scanning

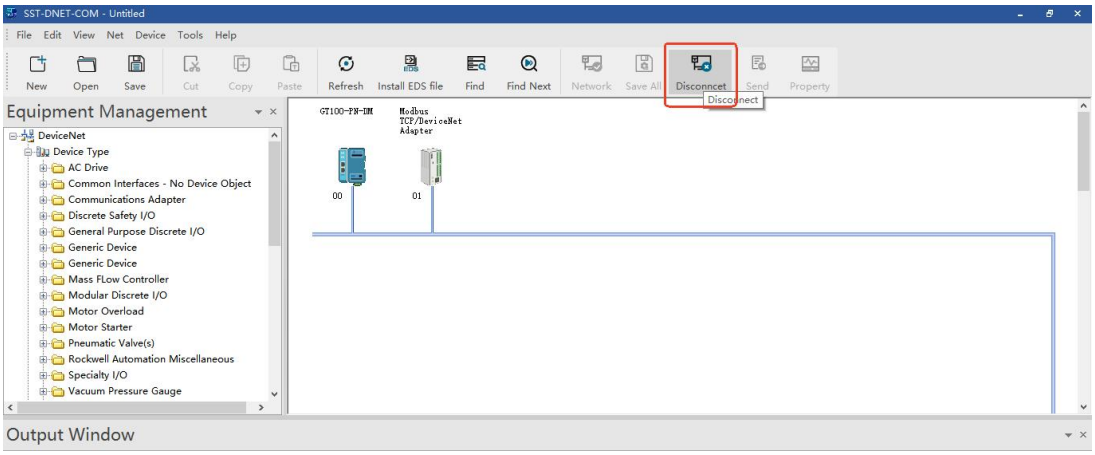
After the interface is set up, the network scanning interface will pop up:



The scanned device is displayed in the main window, as shown in the figure below:



After the DeviceNet network is connected, the user can "Disconnect the network" through the toolbar button, as shown in the figure below:

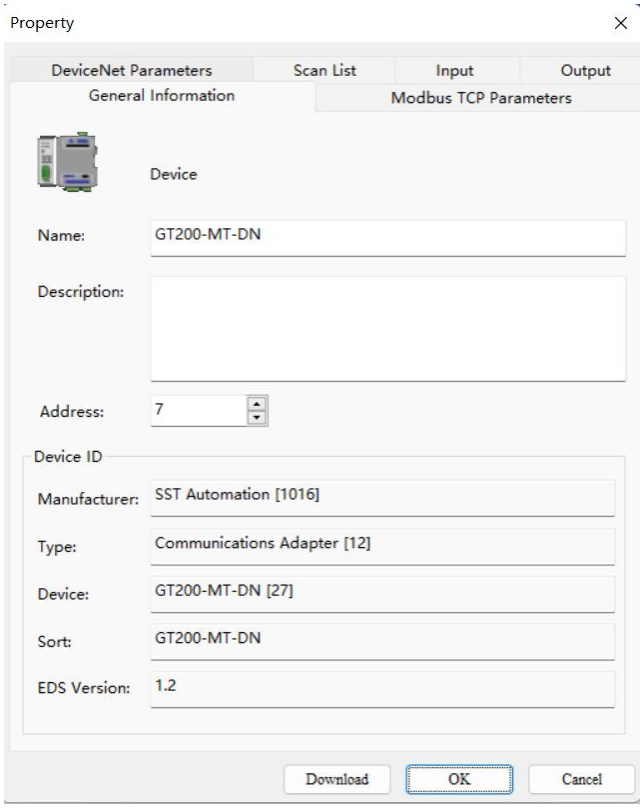


5.6 Equipment Parameter Modification and I/O Data Test

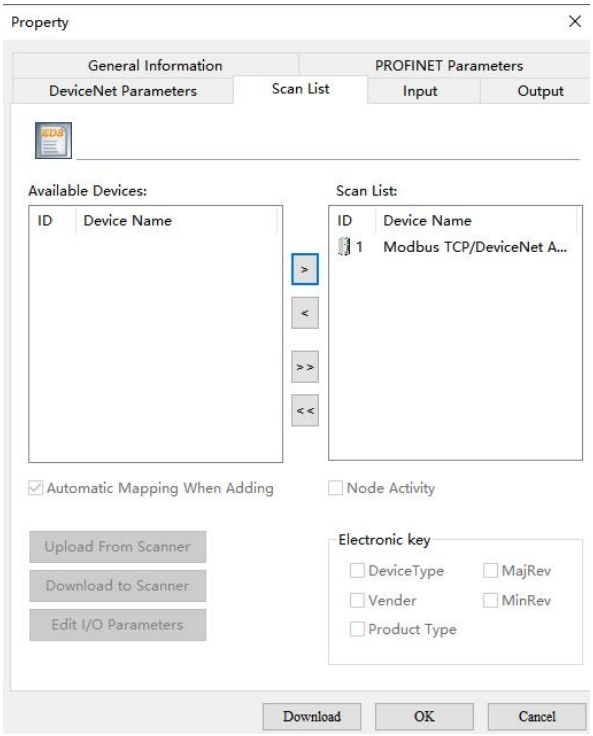
Double-click the scanned network node and appear the device property page.

5.6.1 DeviceNet Scanner Module (Some functions are not opened yet)

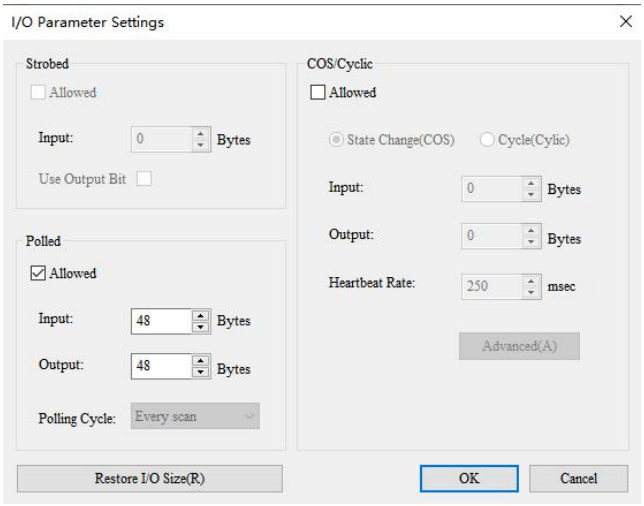
In the "General Information" options Interface, the DeviceNet scanner module address cannot be modified here. It can only be modified in the interface settings, as specified in Chapter 5.4 of this manual, "Device ID" displays the information of the device manufacturer, type, device, sort and version. If you choose to configure GT200-MT-DN, after setting all the parameters, you can click the "Apply" button to download.



In the "Scan List" option interface, users can select devices to add to the "Scan List" of the scanner and set its I/O parameters:

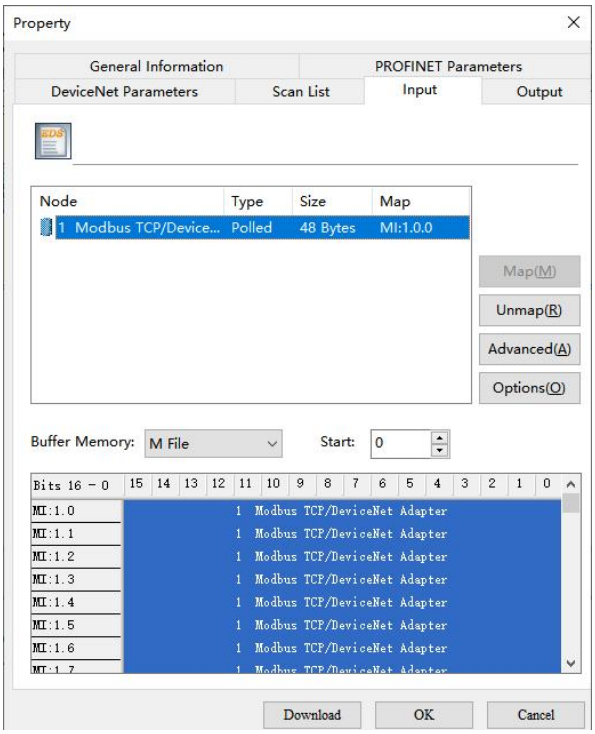


Add adapter station 9 to the scanner station mapping list, and then select adapter station 9 in the "Scan List". After selecting it, click "Edit I / O parameters". This interface sets the number of input and output bytes of the adapter:



Note: If the I/O parameters of the node have been saved in GT200-MT-DN, the scanned I/O parameters are the saved I/O parameters. If the I/O parameters of the node have not been saved in GT200-MT-DN, this I/O parameter is the default value, and users can configure it according to the desired I/O parameters.

In the "Input", and "Output" options interface, the user can map the address of the device added to the scanner and select automatic mapping. In the figure below, the "start" edit box parameter is the starting address of the automatic mapping. The automatic mapping will start with the address set here, where one unit is two bytes, that is, when the "Start" edit box parameter is "1", the automatic mapping will start with the third byte.



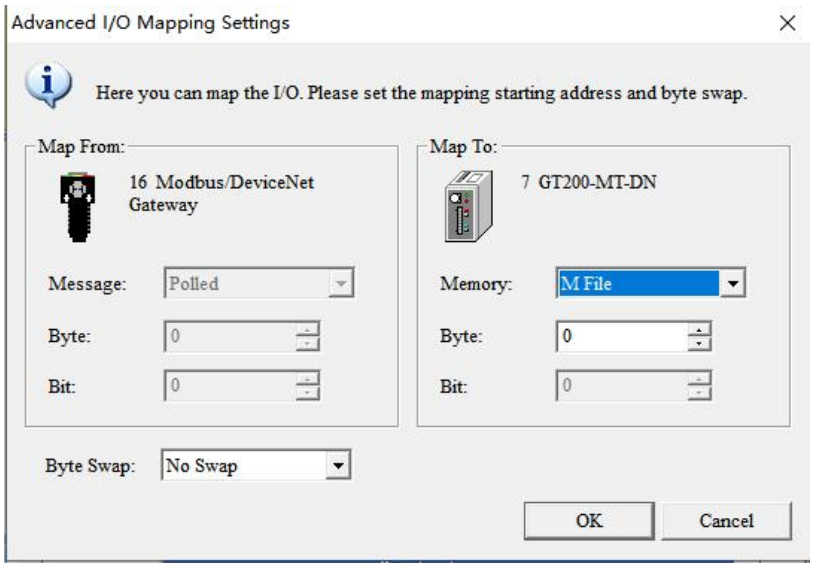
If users need to map manually, they can also click the "Advanced" button to set the starting address in the dialog box shown below.

In the advanced Settings interface, the user can also set the byte exchange mode of this adapter device.There are three types of byte exchange: no-exchange, two-byte exchange, and four-byte exchange. The meanings are as follows:

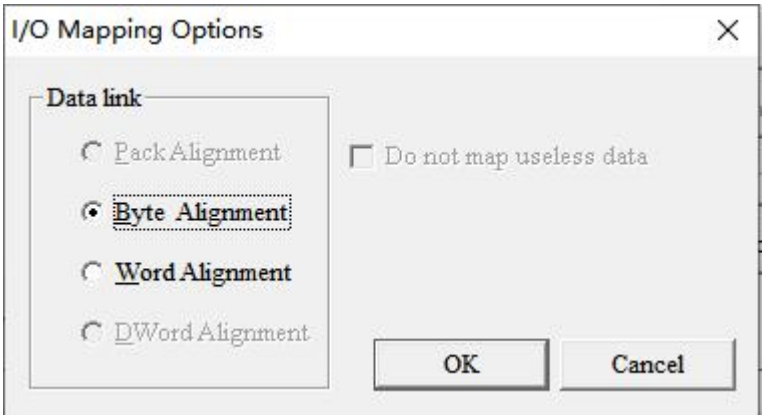
No Swap: Data transfers normally.

Two Bytes Swap: Two-byte exchange in the same register. For example, the result for 1234 after byte swapping is 3412.

Four Bytes Swap: Four-byte exchange in two registers. For example, after byte swapping 12, 34, 56, 78, the result is 78, 56, 34, 12.



If you need to set the unit that maps the starting address in "Advanced", click the "Options" button to set it. As shown in the figure below, "Byte Alignment" means in one byte and "Word Alignment" means in two bytes:



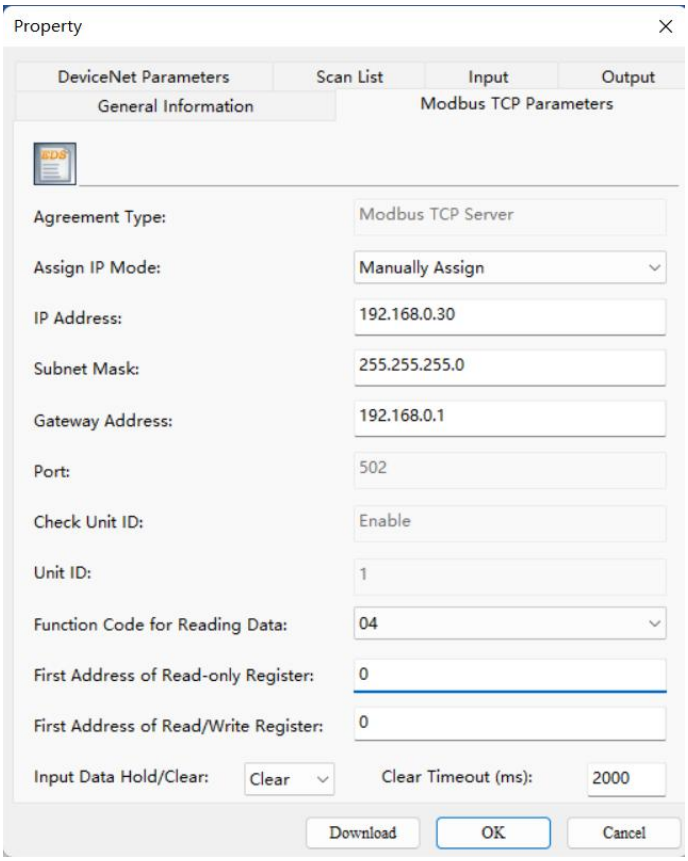
In the "Modbus TCP parameter " interface, if the users want to set the Modbus TCP parameters of GT200-MT-DN, it needs to be set in offline mode. Modbus TCP parameters cannot be modified in the online mode.

Assign IP Mode: Manually Assign and DHCP options.

IP Address: Set the IP address of the gateway.

Subnet Mask: Set the subnet mask.

Gateway Address: Set the gateway address.



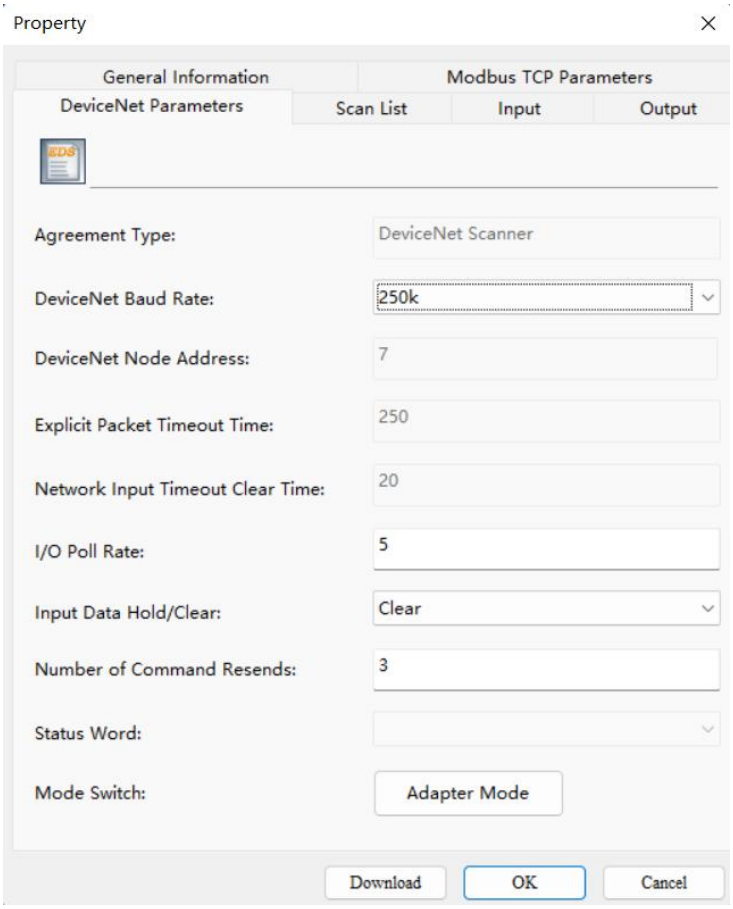
In the "DeviceNet Parameter" interface, users can set the following DeviceNet parameters:

Input Data Hold/Clear: Choose whether the corresponding DeviceNet input data is cleared when the number of DeviceNet command response errors reaches the number of DeviceNet command retransmissions.

Clear: DeviceNet input data is cleared when the Modbus TCP connection is broken.

Hold: DeviceNet input data keeps the correct data received last time.

Number of Command Resends: Set the number of times to resend a command when a DeviceNet command receives an incorrect response. This value can range from 2 to 254 and the default value is 3. This function is enabled on "Clear" mode.



Under pre-operation mode, users can view the DeviceNet adapter information.

5.6.2 DeviceNet Adapter Module

As shown in the figure below, double click the "Modbus TCP/DeviceNet Adapter" device, select "DeviceNet Parameters", click "DeviceNet Adapter" below to enter the adapter mode configuration page, and check "DeviceNet Adapter Mode".

Input and Output: Configure the number of input and output bytes of the DeviceNet adapter station.

Baud Rate and Address: Configure the baud rate and address of the DeviceNet adapter station.

"Data Byte Swap" options:

No Swap: The data is transmitted normally;

Two Bytes Swap: Swap two bytes in the same register, for example: 12 34 after swap, the result is 34 12;

Four Bytes Swap: Four byte swap of two registers, for example: 12 34 56 78 after swap, the result is 78 56 34 12.

Network Status Monitoring options:

No indication: Normal communication between DeviceNet and Modbus TCP.

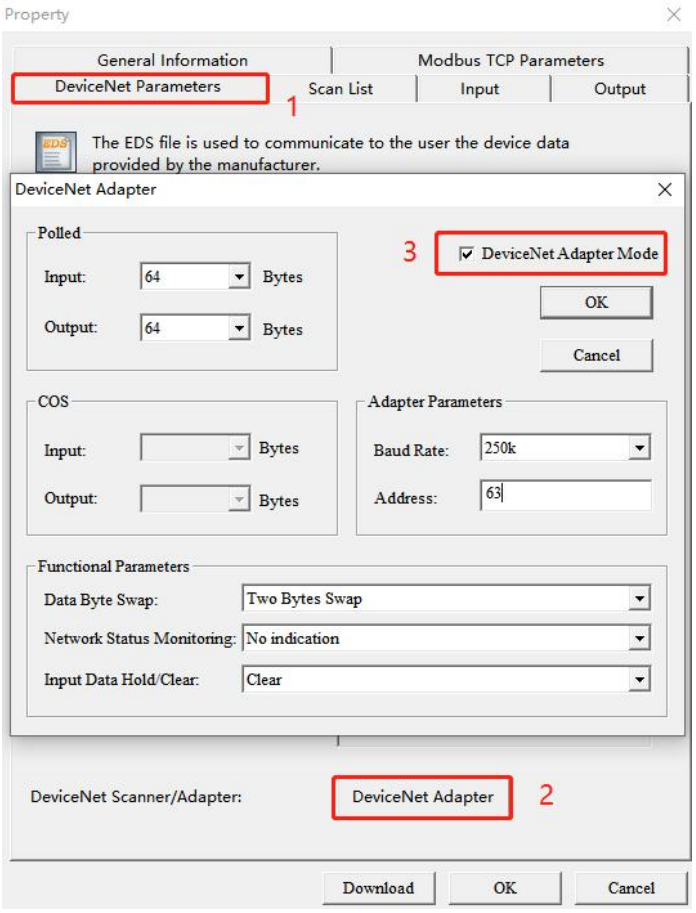
DeviceNet side monitors the Modbus TCP side network: The first 2 bytes of the input data at DeviceNet

terminal are connection status information, and the 2 bytes default to 00. When the connection of Modbus TCP terminal is disconnected, the first byte displays FF, The second byte is reserved.

Modbus TCP side monitors the DeviceNet side network: The first 2 bytes of the input data at the Modbus TCP terminal are connection status information, and the 2 bytes default to 00. When the connection of the DeviceNet terminal is disconnected, the first byte displays FF. The second byte is reserved.

Two networks monitor each other: the input data of DeviceNet end and Modbus TCP end both contain 2 bytes of status information, and the byte definition is the same as above.

Input Data Hold/Clear: Select "Clear", after the connection on the Modbus TCP end is disconnected, the data in the input buffer of the DeviceNet end will be cleared. If "Hold" is selected, when the connection on the Modbus TCP end will be disconnected, the data in the input buffer remains the last received correct data.



"Modbus TCP Parameter" setting interface, if users want to set the Modbus TCP parameters of the GT200-MT-DN side, it needs to be set in the offline mode, and the Modbus TCP parameters cannot be modified in the online mode of operation.

Assign IP Mode: Manually Assign and DHCP optional.

IP address: Set the IP address of the gateway.

Subnet Mask: Set the subnet mask.

Gateway Address: Set the gateway address.

Function Code for Reading Data: There are two options for the function code of Modbus master station reading data: "04 read the input data, 03 re-read the output data; 03 read the input data , 04 re-read the output data."

First Address of Read-only Register: As a Modbus TCP server station, the gateway supports the client station to use the 04/03 function code to read the starting address of the input data.

It needs to be filled in the format of the protocol address (base 0), displayed in decimal, and the range is 0-65423.

For example: 04 function code reads input data, and the PLC address format is 30001, then the protocol address format 0 needs to be filled here.

The 03 function code reads the input data, and the PLC address format is 40001, so the protocol address format 0 needs to be filled here.

First Address of Read/Write Register: The gateway, as a Modbus TCP server station, supports the starting address of the client station to use the 06/16 function code to write data; use the 03/04 function code to read back the starting address of the output data.

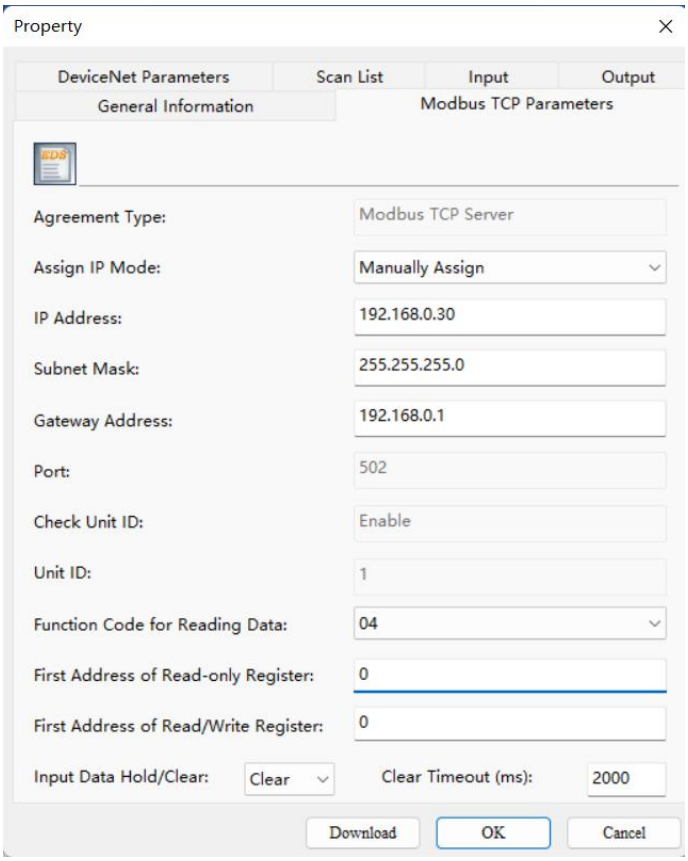
It needs to be filled in the format of the protocol address (base 0), displayed in decimal, and the range is 0-65423.

For example: 03 function code re-reads the output data, and the PLC address format is 40001, then the protocol address format 0 needs to be filled here.

The 04 function code re-reads the output data, and the PLC address format is 30001, so the protocol address format 0 needs to be filled here.

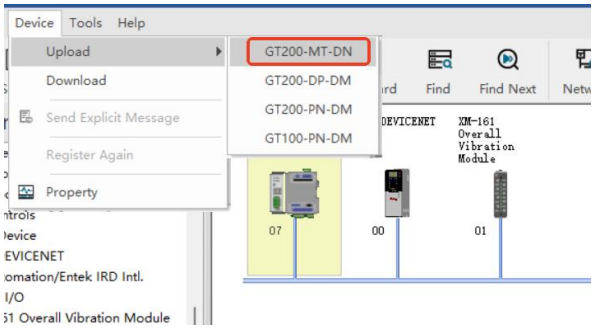
Input Data Hold/Clear: After the Modbus TCP end disconnects or times out, the data processing method of the DeviceNet input end, "hold and clear" is optional;

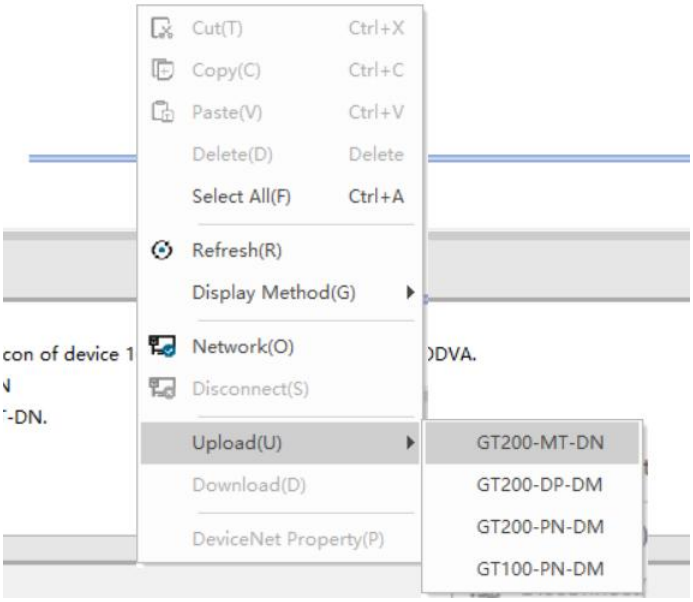
Clear Timeout: When the input data is cleared, the clear timeout time can be set, the range is 500-60000ms.


Property
DeviceNet Parameters
Scan List
Input
Output
General Information
Modbus TCP Parameters
Agreement Type:
Modbus TCP Server
Assign IP Mode:
Manually Assign
IP Address:
192.168.0.30
Subnet Mask:
255.255.255.0
Gateway Address:
192.168.0.1
Port:
502
Check Unit ID:
Enable
Unit ID:
1
Function Code for Reading Data:
04
First Address of Read-only Register:
0
First Address of Read/Write Register:
0
Input Data Hold/Clear:
Clear
Clear Timeout (ms):
2000
Download
OK
Cancel

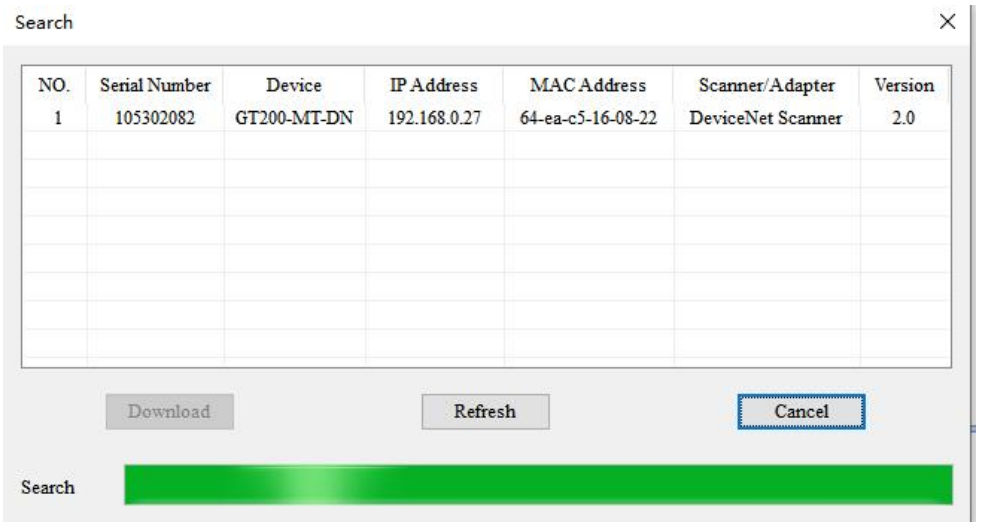
5.6.3 Offline Upload and Download Configuration

The upload device can only be used when the network connection is disconnected. After opening the software, click Device -> Upload -> GT200-MT-DN, or right click in the main window -> Upload -> GT200-MT-DN.

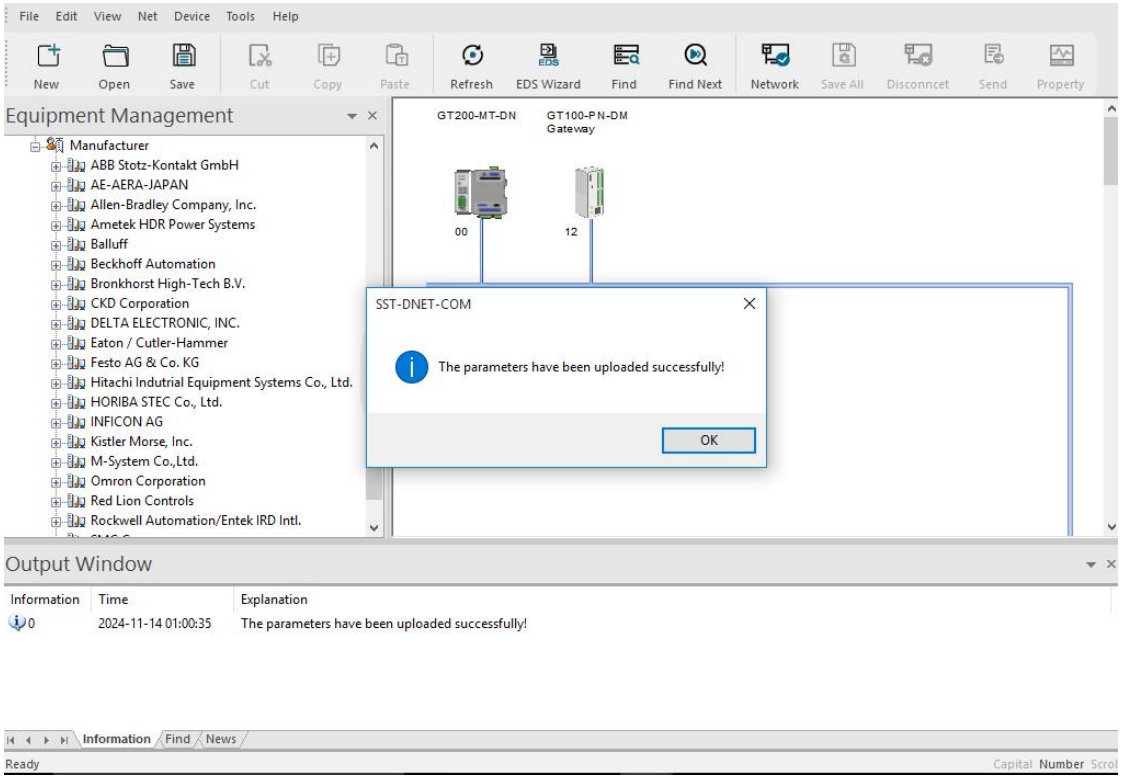


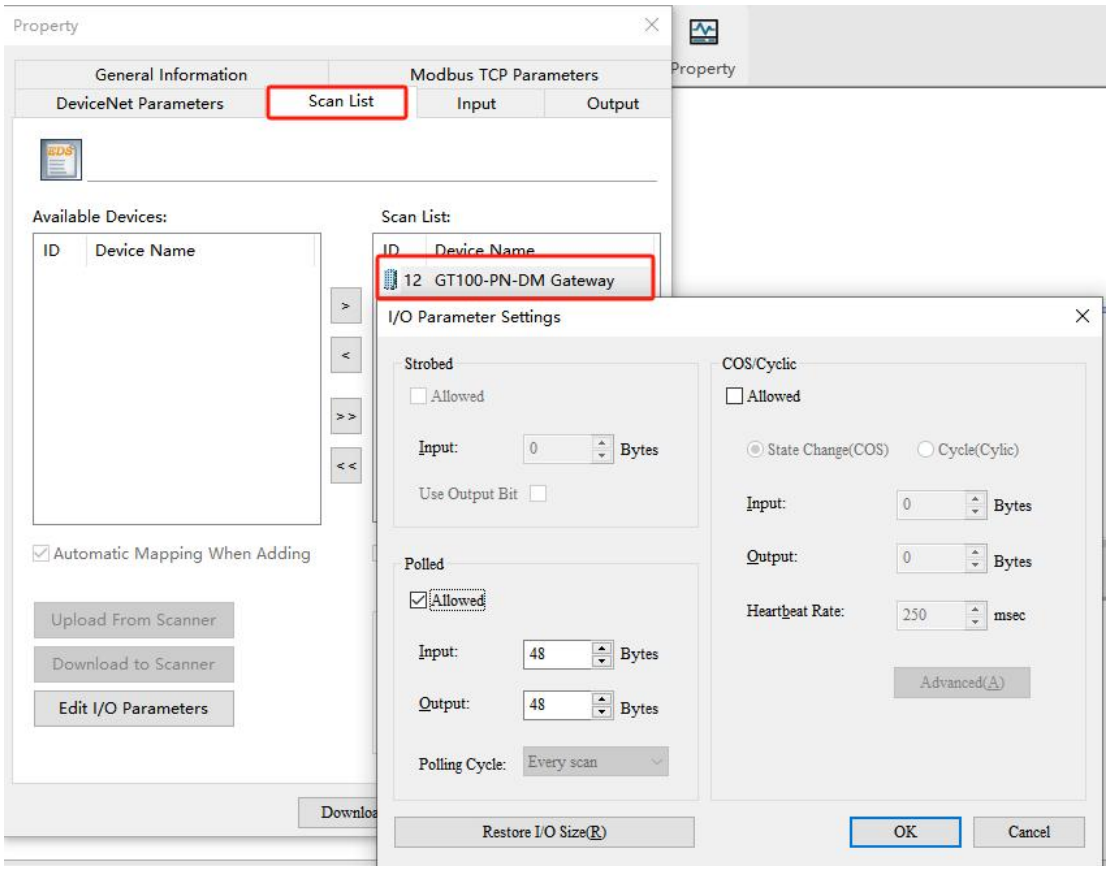


Select a device to upload:



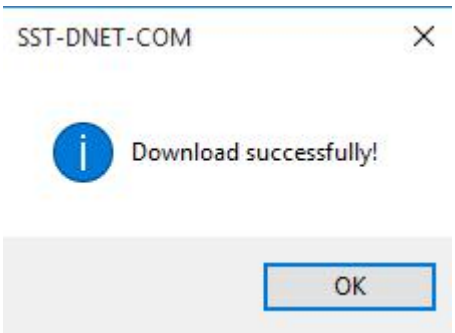
After the upload is complete, the uploaded device is displayed in the main window and prompts that the upload is successful. Double-click the uploaded scanner device to view and modify the configuration information. The node information of the adapter can be viewed and modified in the scan list of the scanner, and the IP address of the Modbus TCP can also be modified, as shown in the following figure:

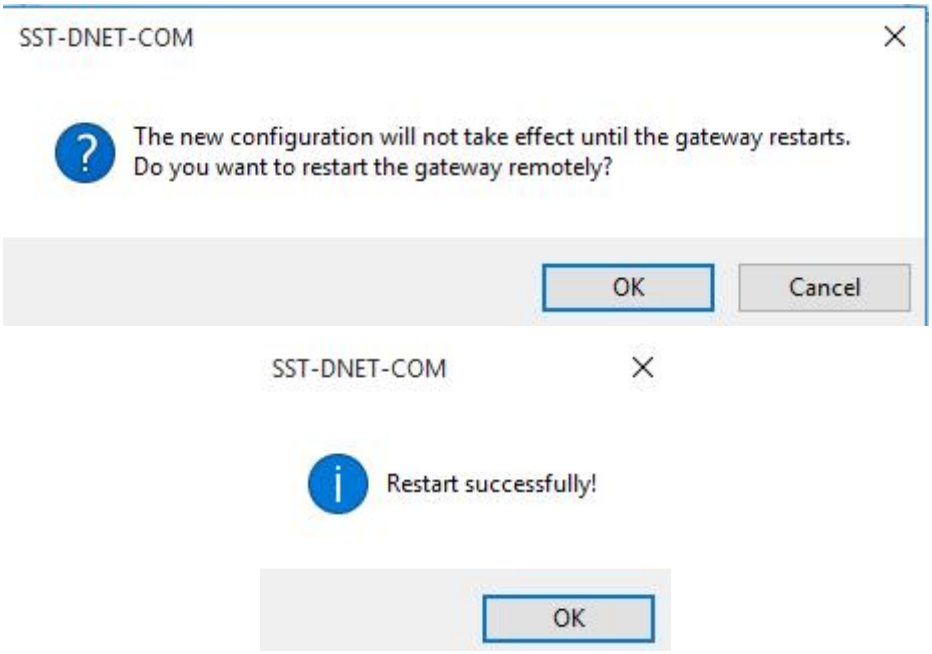




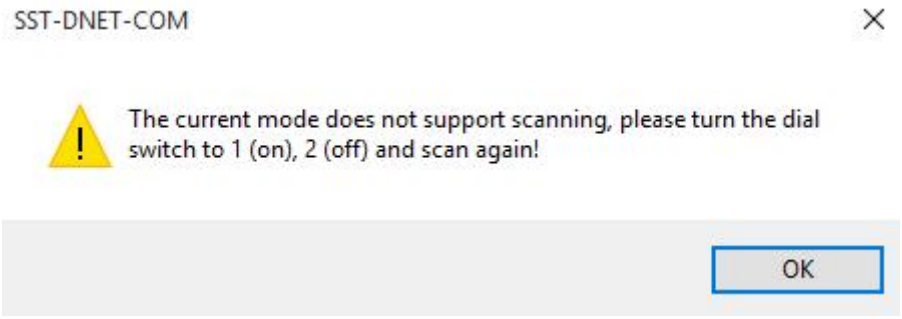
The modified configuration parameters can be downloaded to GT200-MT-DN. GT200-MT-DN as the DeviceNet scanner station only supports Operation mode for downloading configuration parameters, and Pre-operation mode does not support downloading.

When downloading configuration in Operation mode, it prompts that the download is successful and restarts the gateway, as shown in the figure below:





When downloading the configuration in the Operation mode, it prompts that it cannot be downloaded. To download in the Operation mode, please turn the DIP to 1ON 2OFF, as shown in the figure below:



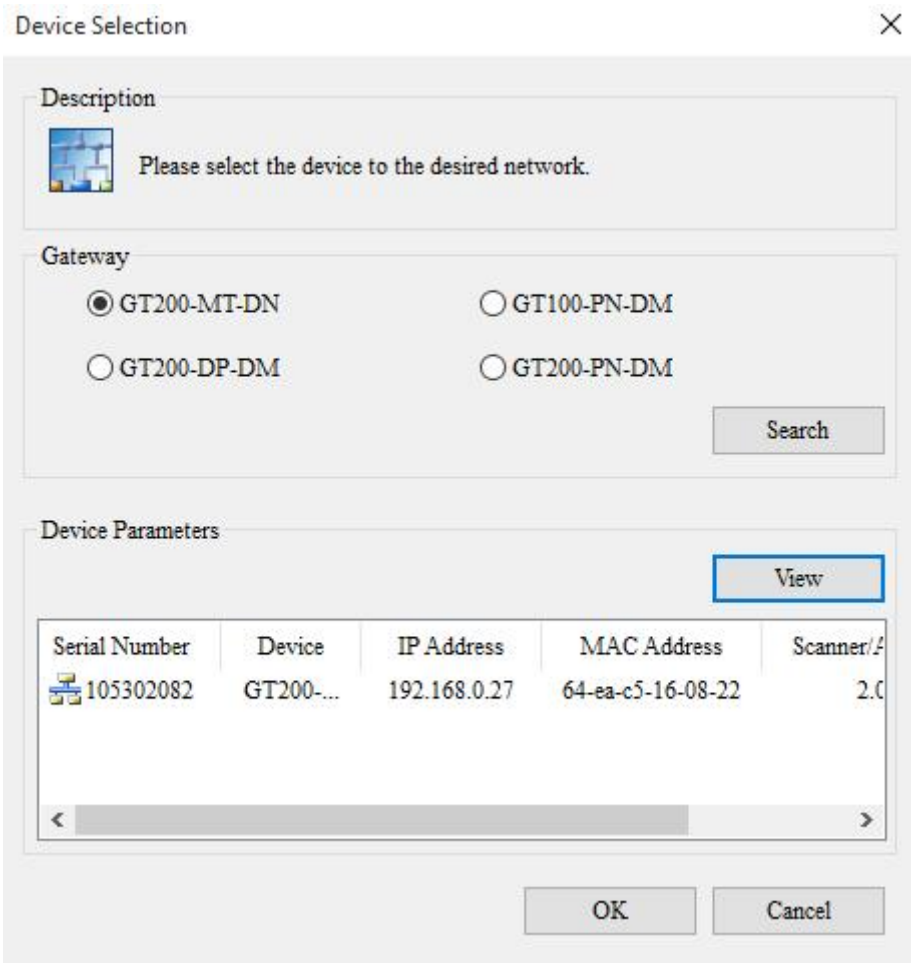
About 5s after the DIP switch is set to 1ON 2OFF, the device can download configuration. After downloading, it will prompt that the download is successful and the downloaded configuration will take effect after restarting the device, and it will prompt that the DIP switch should be set back to 1OFF 2OFF.

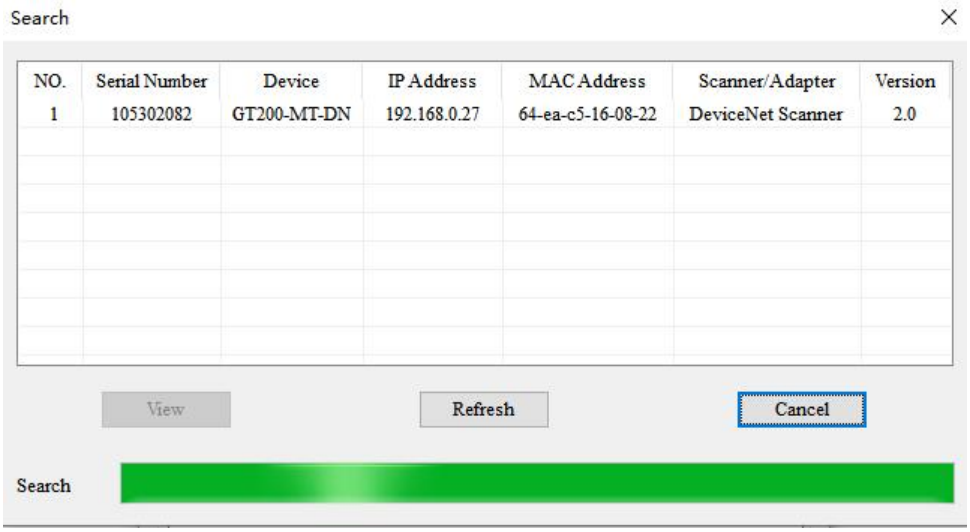
Note: If users open the SST-DNET-COM software, drag GT200-MT-DN from the device management window on the left to the main window, double-click the dragged device, and open the general, scan list, input, output, Modbus TCP parameters, DeviceNet parameters, etc., modify the required parameters and download.

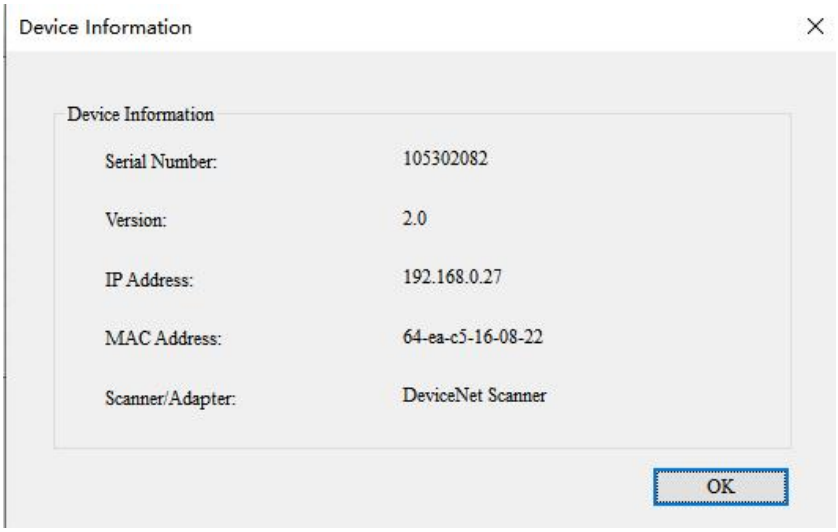
5.6.4 View Device Information

Users can check whether the current device is in scanner or adapter mode in SST-DNET-COM, click "Network

Connection" -> " GT200-MT-DN" -> "View Device" -> "View".

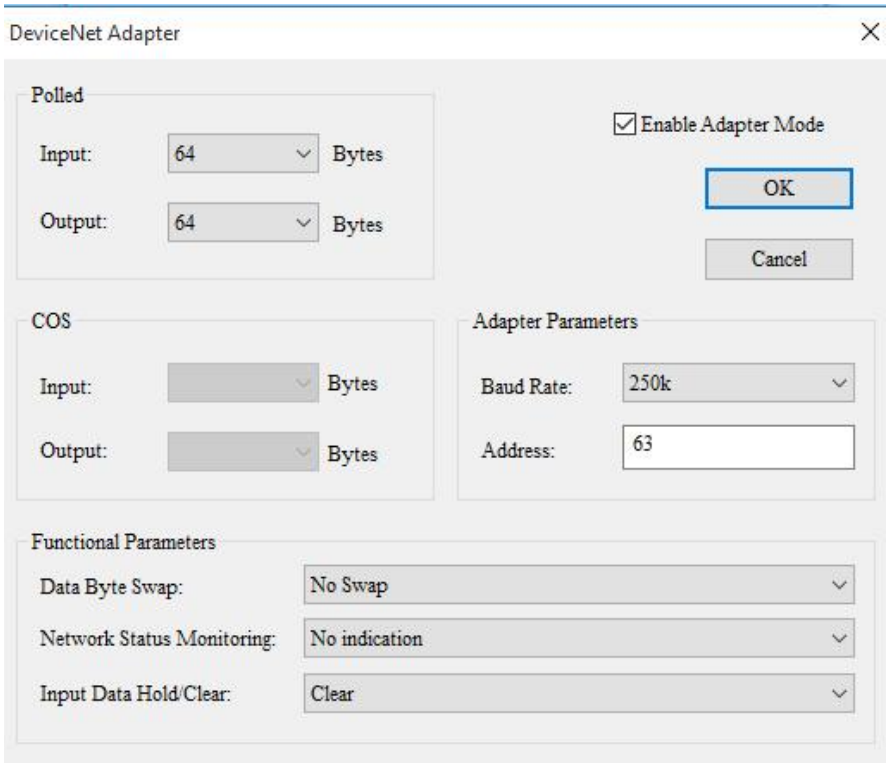


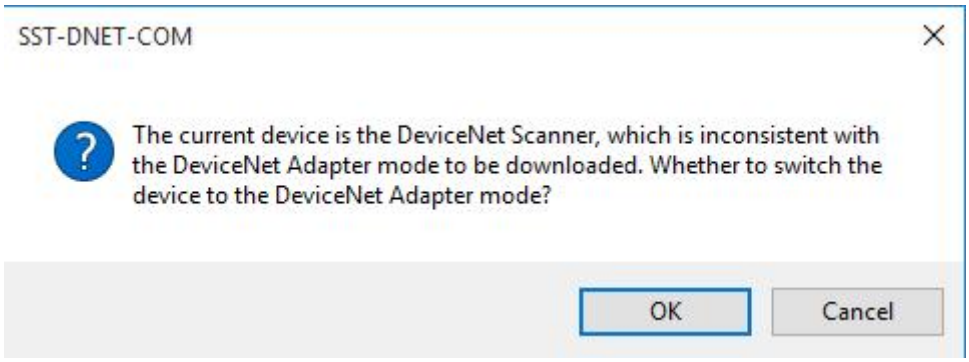




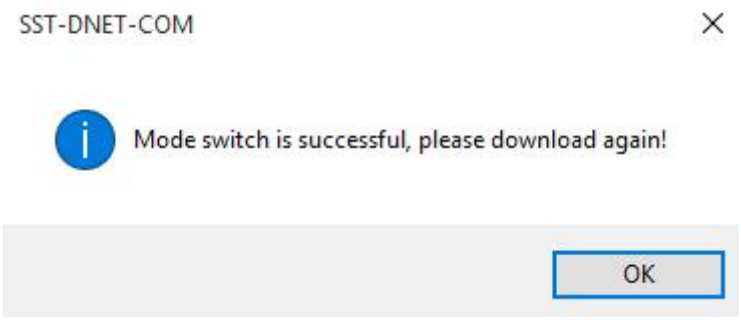
5.6.5 Switching of Working Mode

Please switch the DIP to 1OFF 2OFF before switching the working mode. Open the property bar of GT200-MT-DN, click "DeviceNet Parameters" -> "DeviceNet Adapter" -> "DeviceNet Adapter Mode"(Checking it means adapter mode, not checking means scanner mode), then set the number of input and output bytes, baud rate and adapter address of the adapter, and click "OK "->"Download", SST-DNET-COM will prompt whether the mode does not match, whether to switch, as shown in the figure below:

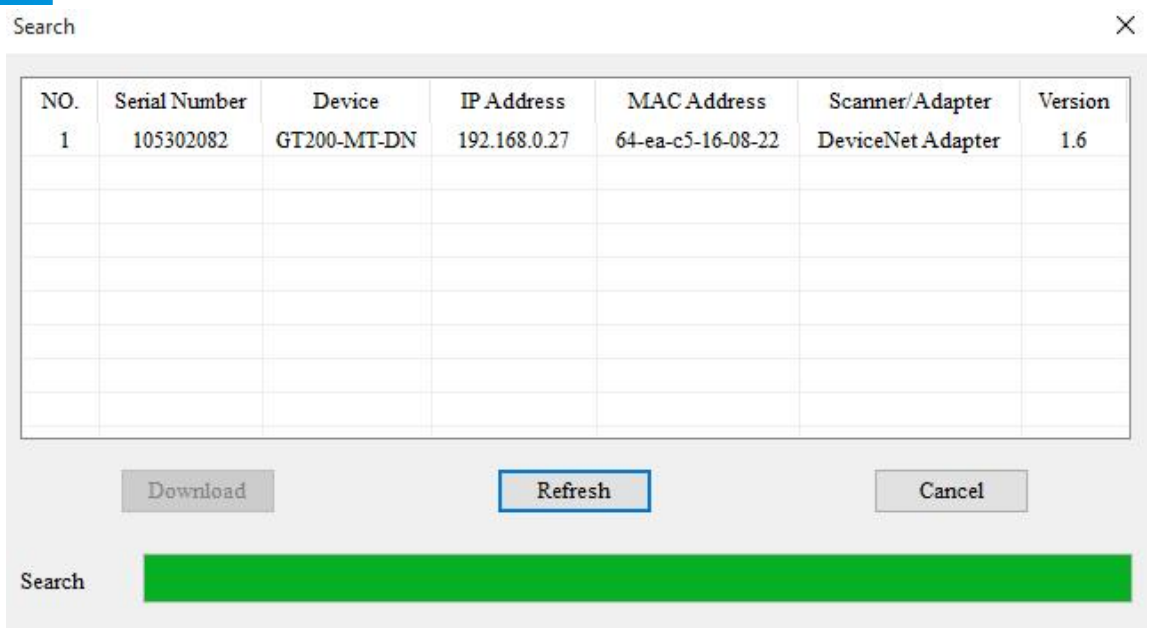




Click "OK" to switch the mode, prompting that the switch is successful, please download again, as shown in the figure below:



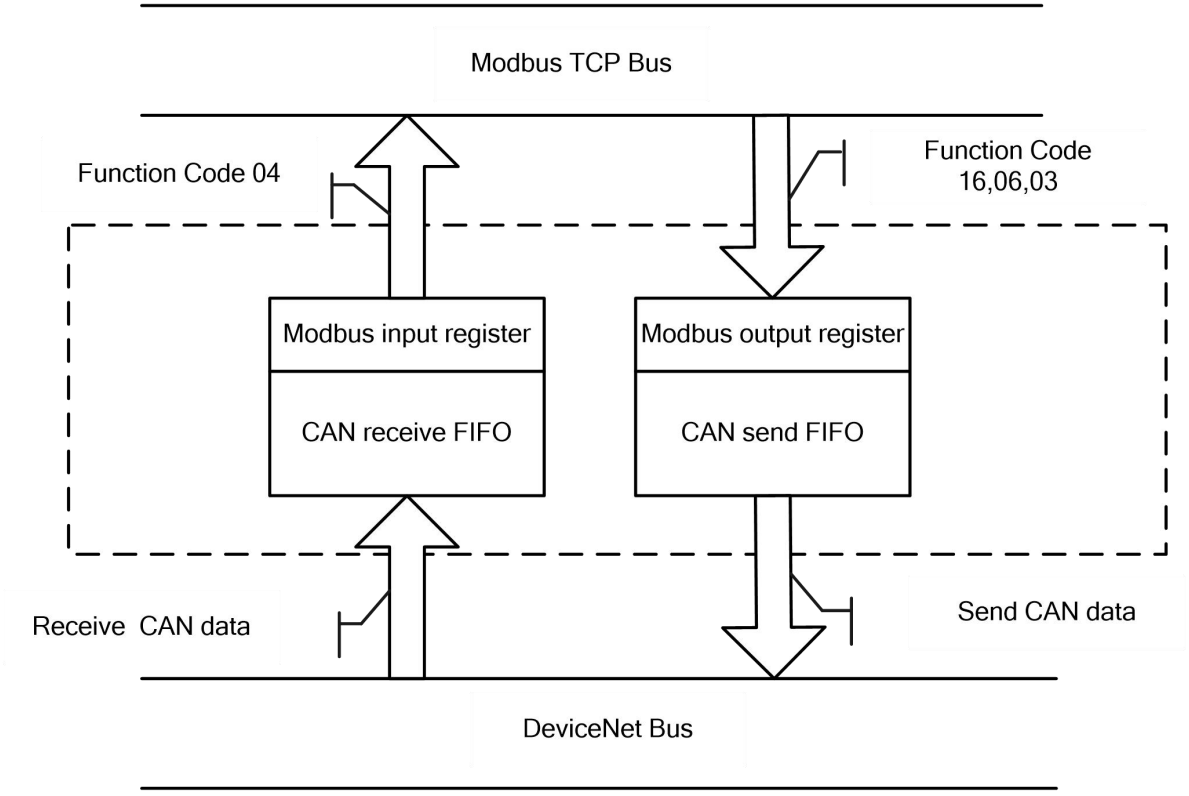
Click Apply/Download again, it prompts that the download is successful and restart.


Search
NO.
Serial Number
Device
IP Address
MAC Address
Scanner/Adapter
Version
1
105302082
GT200-MT-DN
192.168.0.27
64-ea-c5-16-08-22
DeviceNet Adapter
1.6
Download
Refresh
Cancel
Search

6 Working Principle

6.1 Data Exchange

GT200-MT-DN has two data buffers, one is sending buffer. the other is receiving buffer.



6.2 Terminating Resistor

In the case of high baud rate (1M, 500k), the CAN network needs to connect a 120Ω terminal resistor at the two farthest ends of the network.

7 DeviceNet Network Configuration Instructions (DeviceNet Adapter)

7.1 I/O Configuration

The configuration instructions in AB PLC when GT200-MT-DN is used as a DeviceNet adapter.

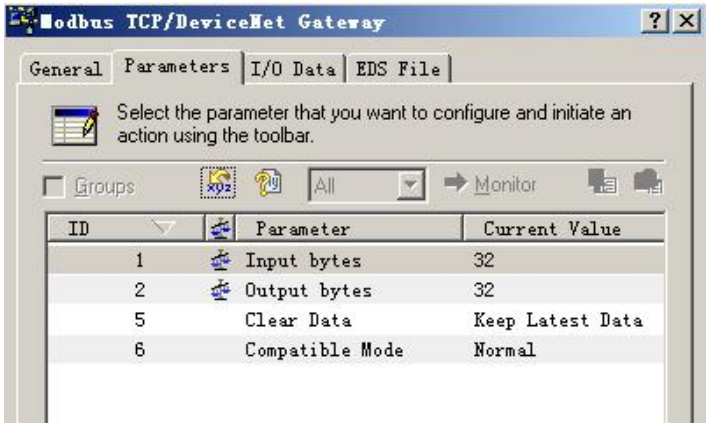
I/O input:

DeviceNet I/O input bytes can be configured as 8, 16, 32, 48, 64, 72, 96, 112, 160, 192, 224 bytes.

I/O output:

DeviceNet I/O output bytes can be configured as 8, 16, 32, 48, 64, 72, 96, 112, 160, 192, 224 bytes.

7.2 DeviceNet Parameters



Input Bytes: DeviceNet I/O connection input bytes.

Output Bytes: DeviceNet I/O connection output bytes

The above two parameters must be consistent with the configuration input/output bytes in the DeviceNet scanner scan list of configuration software such as RSNetWorx, otherwise the connection will fail.

Keep Latest Data: "Keep Latest Data" means to keep the latest updated data of the disconnected side network, and it is not cleared.