

# Modbus TCP / DeviceNet Gateway GT200-MT-DN

## User Manual

V 3.1



*SST Automation*

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## **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.

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# 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 (hold the button for more than 3s if in Operation mode)

- 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 (default mode after power-on, or hold the button for more than 3s if in Pre-operation mode)

- Supports communication with Modbus TCP network.
- The Maximum number of input and output bytes supported by single DeviceNet adapter: 224 bytes and 224 bytes.
- The maximum number of input/output bytes supported by DeviceNet adapter: 1440 bytes.
- Supports connecting up to 64 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.
- Supports No Swap, Two-Byte Swap and Four-Byte Swap.

[5] As DeviceNet Adapter

- DeviceNet supports up to 224 bytes of input or output: 8, 16, 32, 96, 48, 64, 112, 72, 160, 192, 224bytes.
- The module is powered from the DeviceNet network, and the power supply voltage is DC 11-30V.
- Act as DeviceNet adapter. Only supports the group 2 connection. 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.

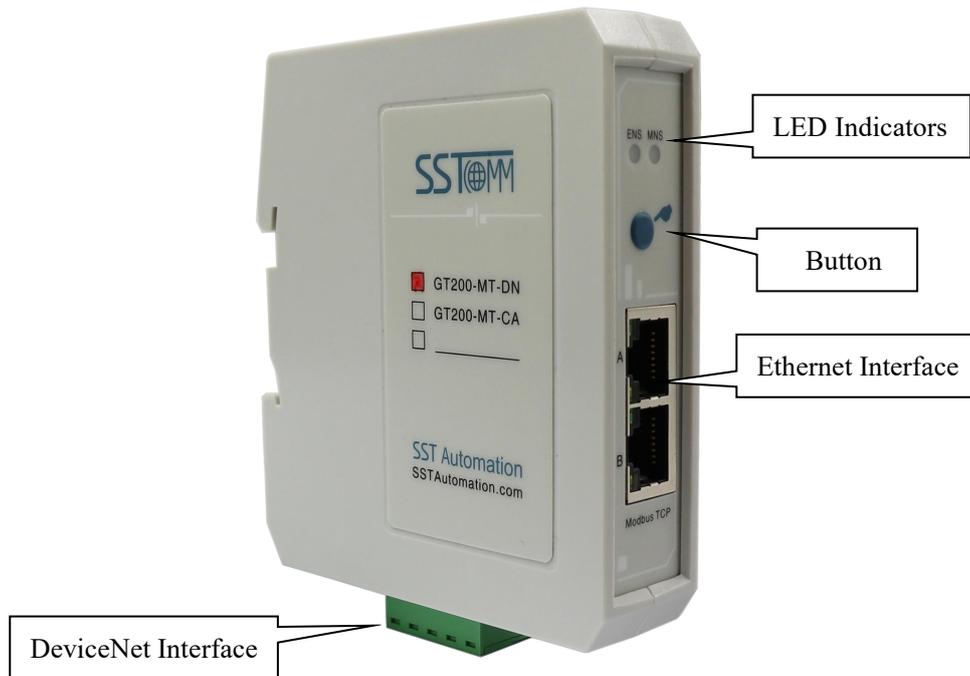
[12] Pollution level: class 3.

## 1.4 Revision History

Revision	Date	Chapter	Description
V3.1	13/1/2025	PART	New DeviceNet modeling software SST-DNET-COM
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.

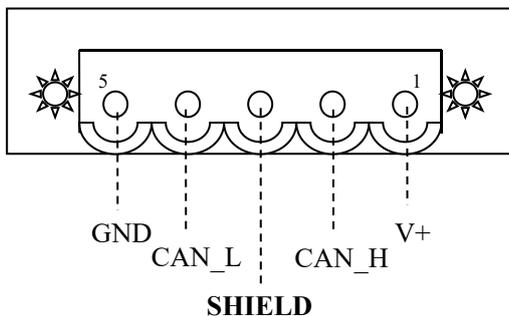
## 2.3 Configuration Button

The configuration button is used to set the optation mode of the GT200-MT-DN and it is in the front of the gateway.The details of the function are shown in the table below.

Action	Function	Escape
Hold the button for 3s until the NS and MS LED are in orange.	Enter Operation mode	The gateway will restart in Pre-operation mode
Double click the button,then hold it for 3s until the NS and MS LED are in orange.	Load the default configuration. default IP :192.168.0.10	The gateway will restart with the configured IP address.
Hold the button before power -on, the NS and MS LED blink in orange.	Search 192.168.0.10 in browse.The username is ‘user’,and the password is ‘sstcomm’,then choose the right firmware program to update.	If success to update,the gateway will restart, or restart it manually.

## 2.4 Interfaces

### 2.4.1 DeviceNet Interface



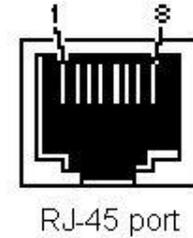
Pin	Description
1	+24V
2	CAN-H
3	SHIELD
4	CAN-L
5	GND

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

## 2.4.2 Ethernet Interface

Ethernet interface uses RJ45 connector and follows the IEEE802.3u 100BASE-T standard..Its pin (standard Ethernet signal) is defined as below:

Pin	Description
S1	TXD+, Transmit Data+
S2	TXD-, Transmit Data-
S3	RXD+, Receive Data+
S6	RXD-, Receive Data-
S4,5,7,8	Reserved

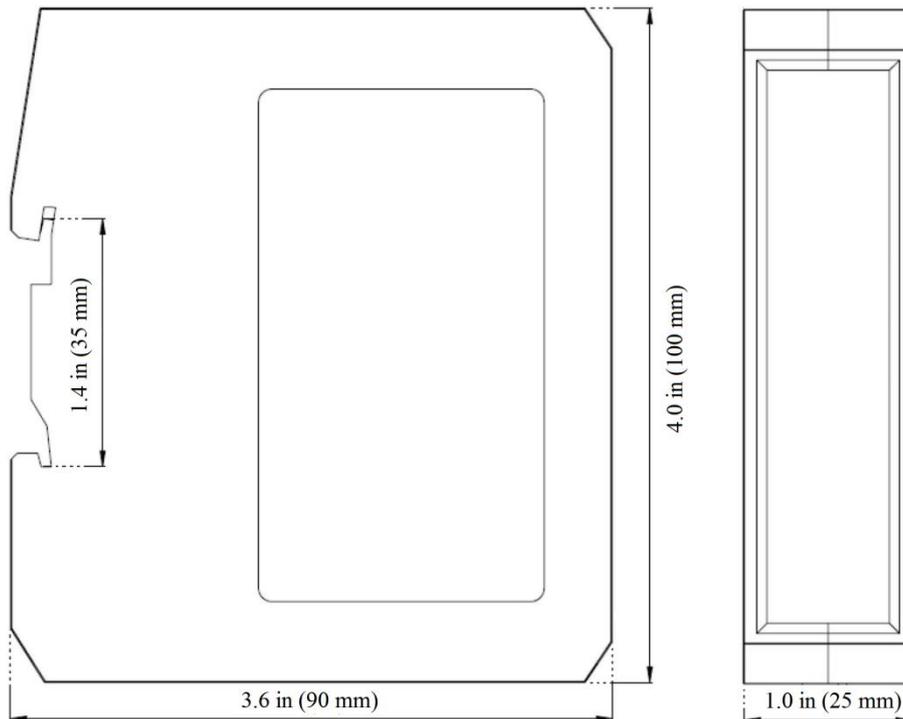


## 3 Hardware Installation

### 3.1 Mechanical Dimensions

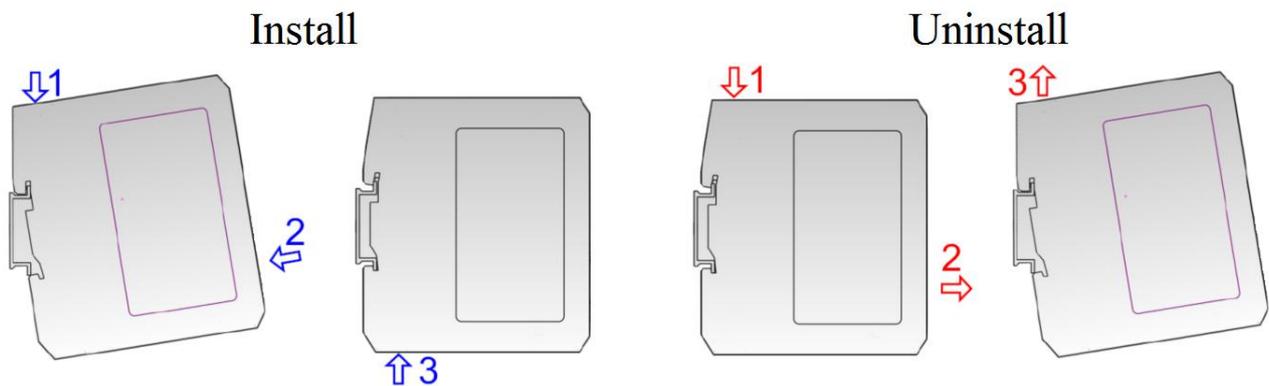
Size (width \* height \* depth):

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 in DeviceNet scanner Operation mode, 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. Once the GT200-MT-DN configuration is complete, mount it onto the standard rail frame. Afterward, power it on to begin operation.

## 5 SST-DNET-COM Software Instructions

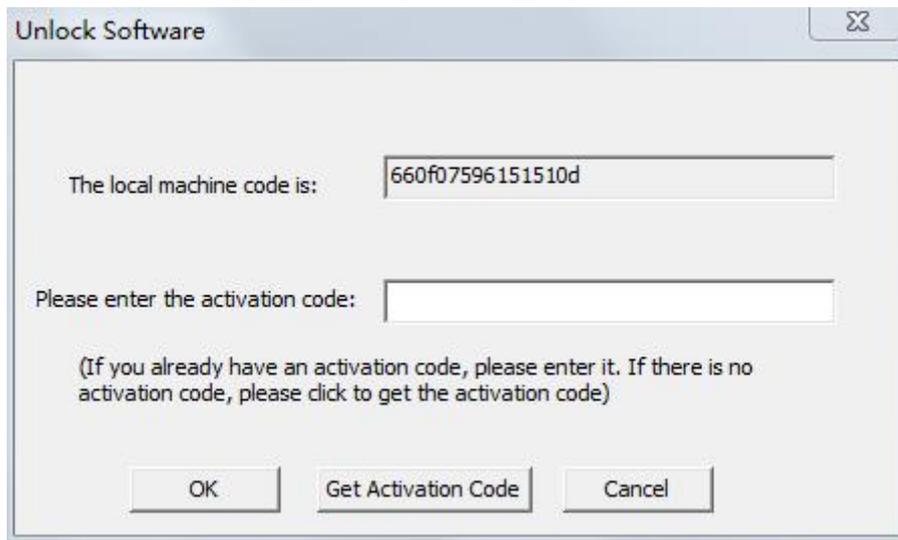
### 5.1 Notes Before Configuration

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 modules.

The following introduction is aimed at helping you quickly get started with 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.

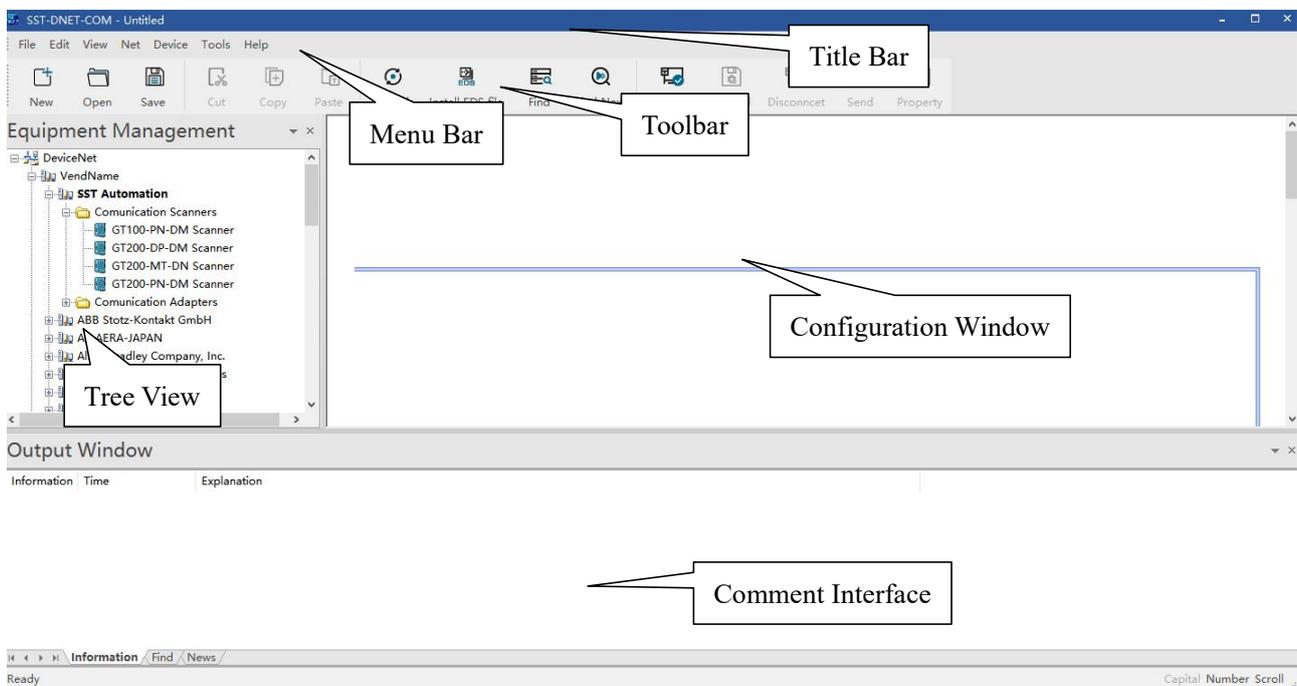


Click "Get Activation Code" and it will jump to [sstautomation.com](http://sstautomation.com) for activation.

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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.

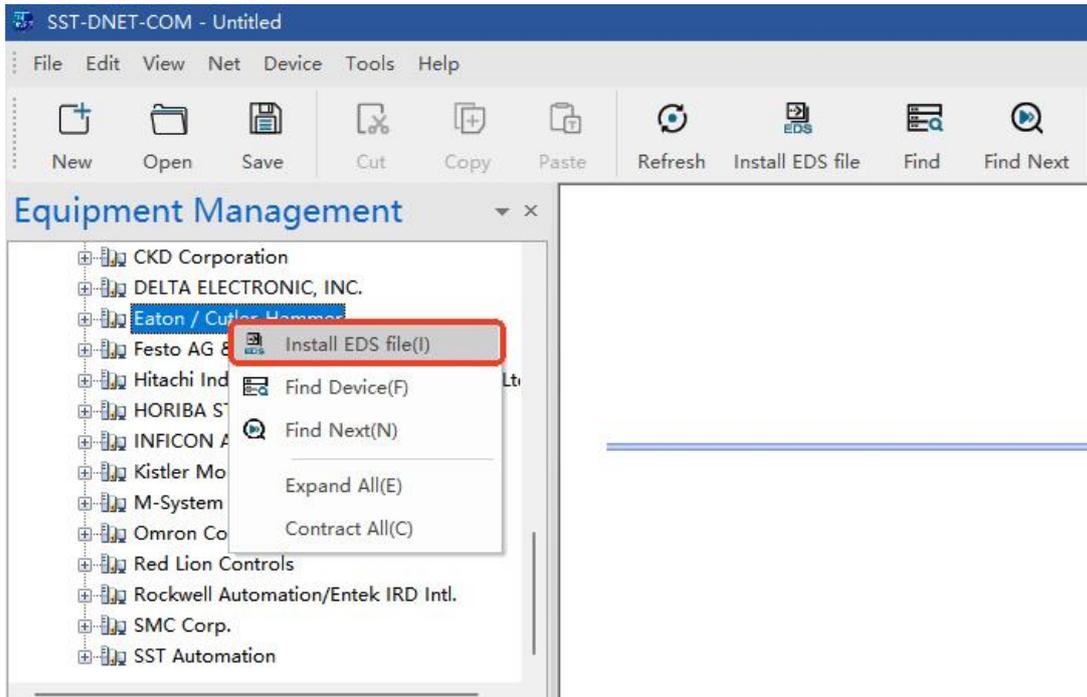
## 5.4 Install EDS Files

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:



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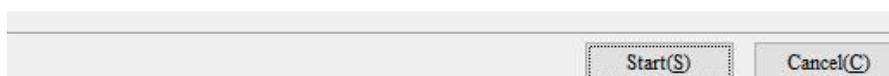


EDS Wizard interface is shown in the following figure:



The EDS Wizard allows you to:

- register EDS-based devices.
- unregister a device.
- change the graphic images associated with a device.



Select "Start "and pop up the following interface:

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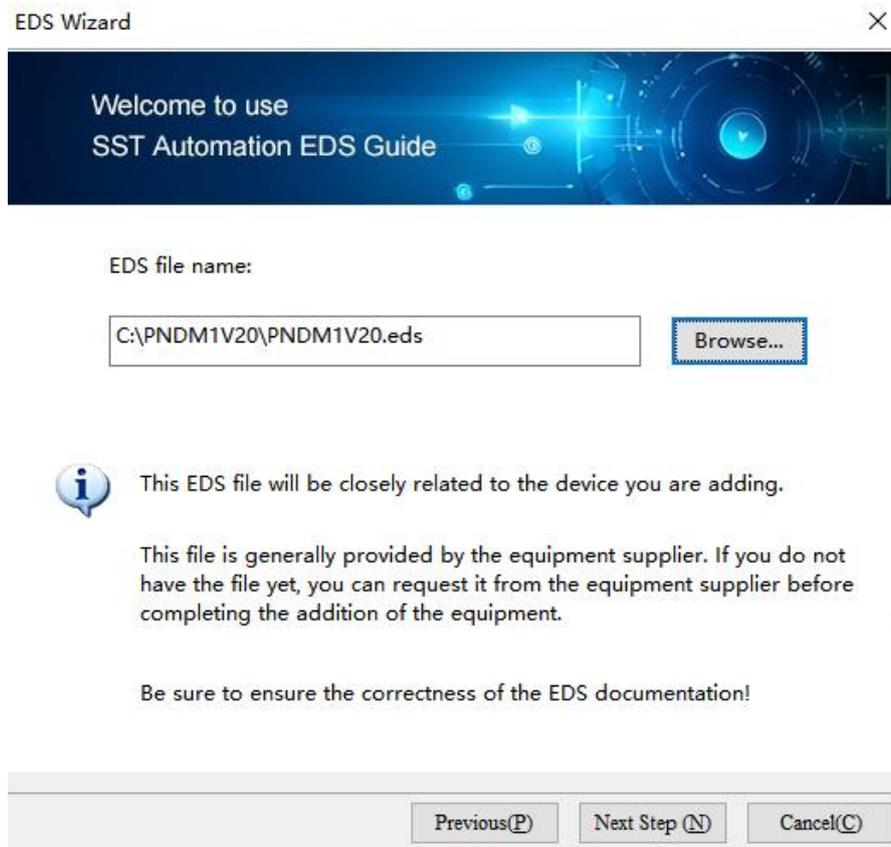


In this interface, users can choose to register an EDS file, log out of an existing device, and change the icon of a device.

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

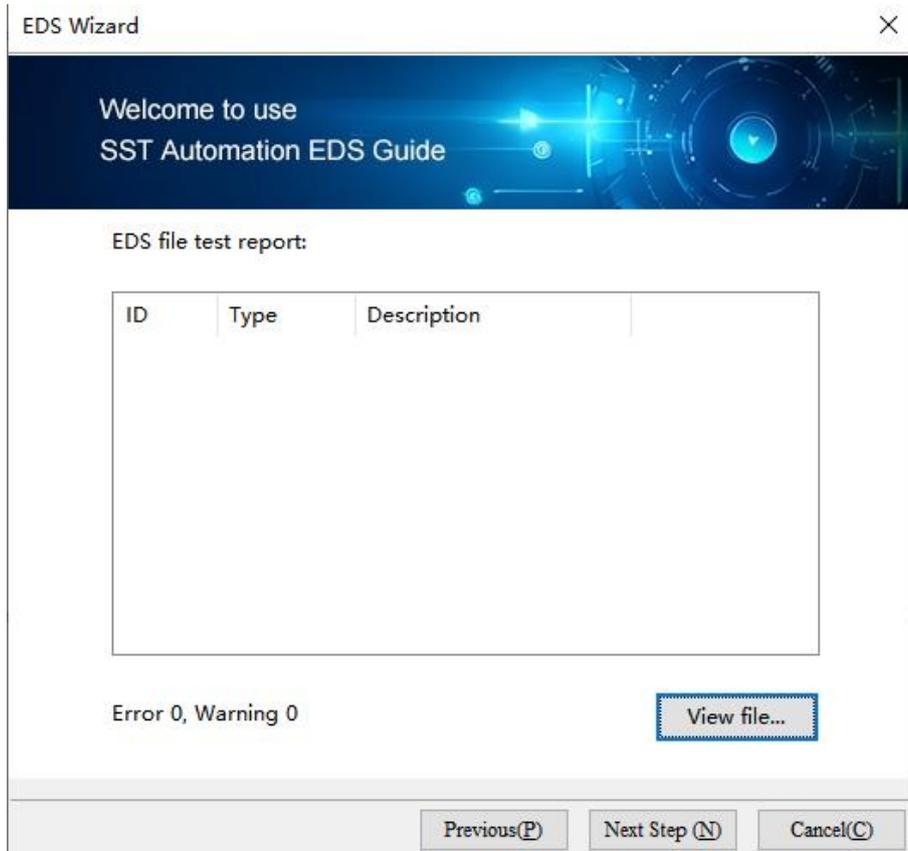
After selecting "Register an EDS file", click "Next Step" and select the storage path of EDS file you want to register in the pop-up interface, as shown in the figure below:

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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:

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After selecting a device icon, click "Next Step" to pop up the factory information of the registered device, as shown in the figure below:



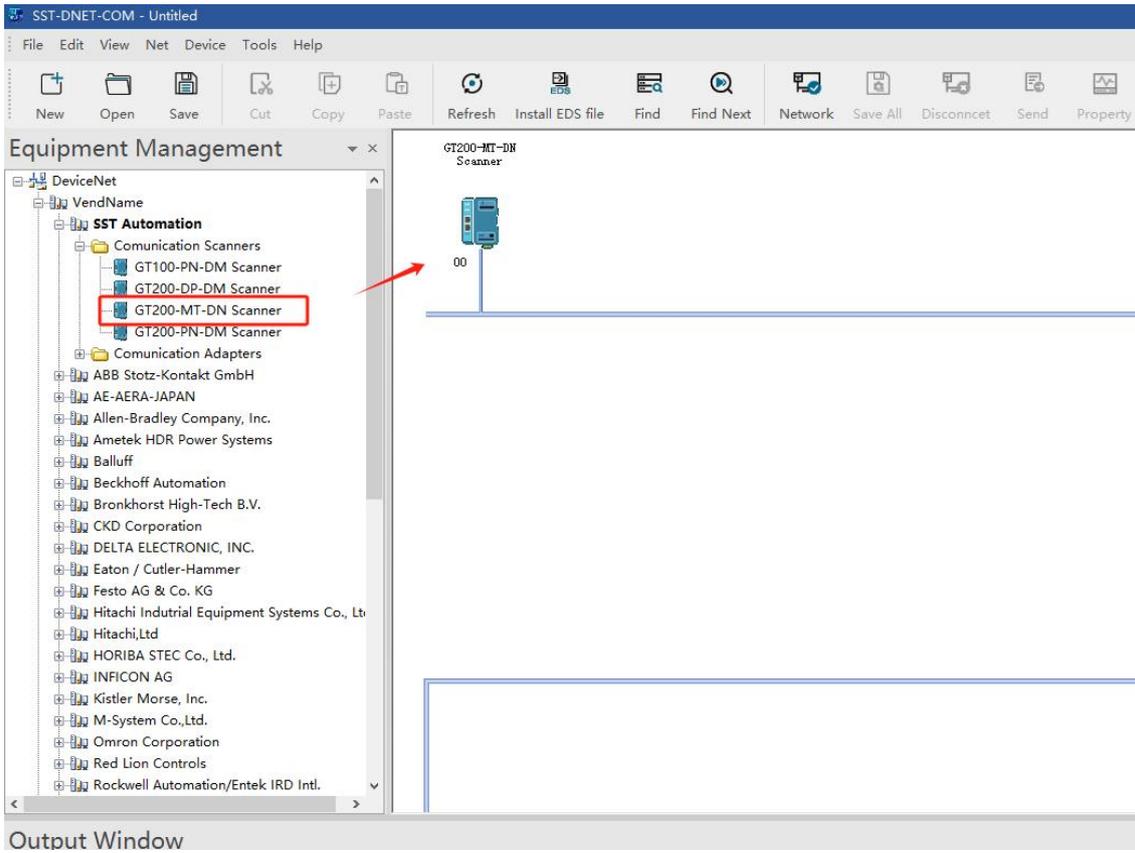
Click "Finish" and the EDS file registration step is over. At this time, you can see the newly registered device in the equipment Management Window.

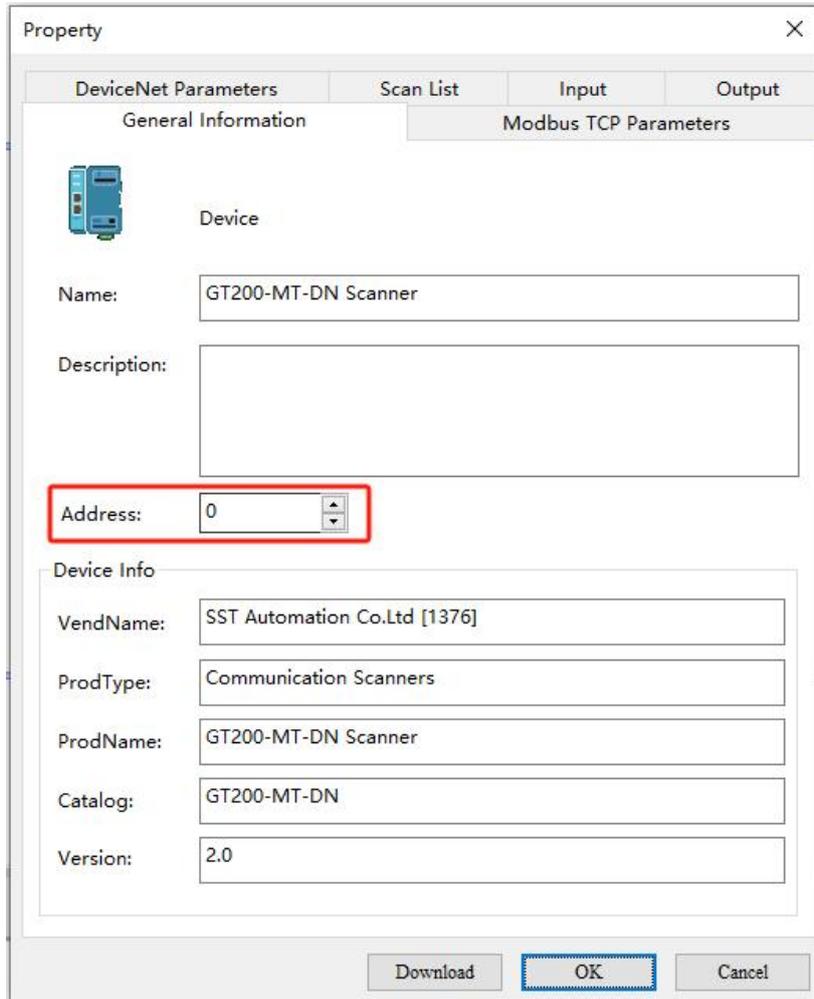
If you want to change EDS file for the same device, please first find the device in the device management library and right click. After logging out, re-register the new EDS file, or complete the logout operation through the EDS operation.

## **5.5 SST-DNET-COM Offline Configuration (DeviceNet scanner Mode)**

Select "GT200-MT-DN Scanner" from the Equipment management on the left side and drag it to the bus on the right side. Double-click the scanned network node to display the device properties page. You can modify the DeviceNet device address to match the actual address, as shown in the figure below:

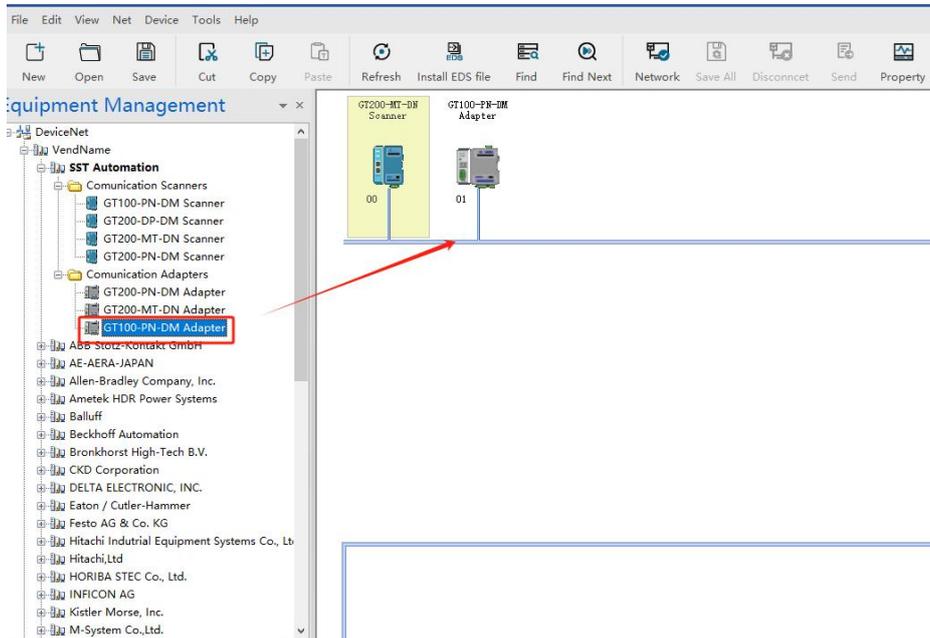
# GT200-MT-DN Modbus TCP/DeviceNet Gateway User Manual





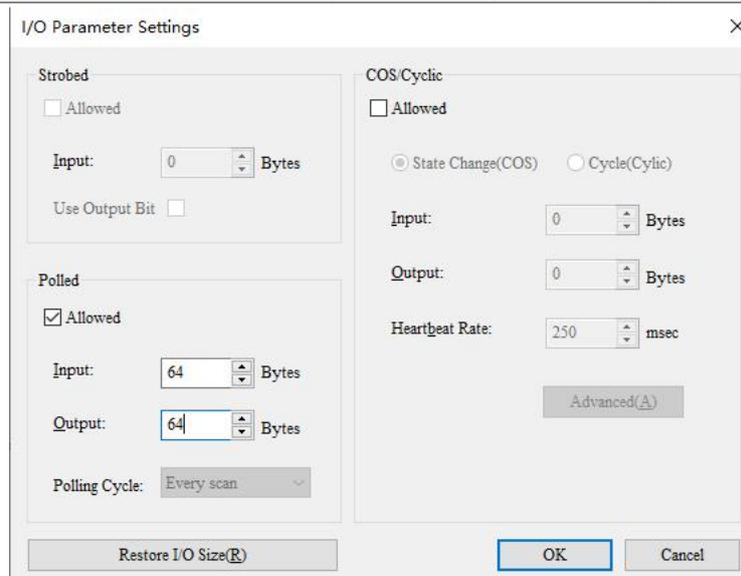
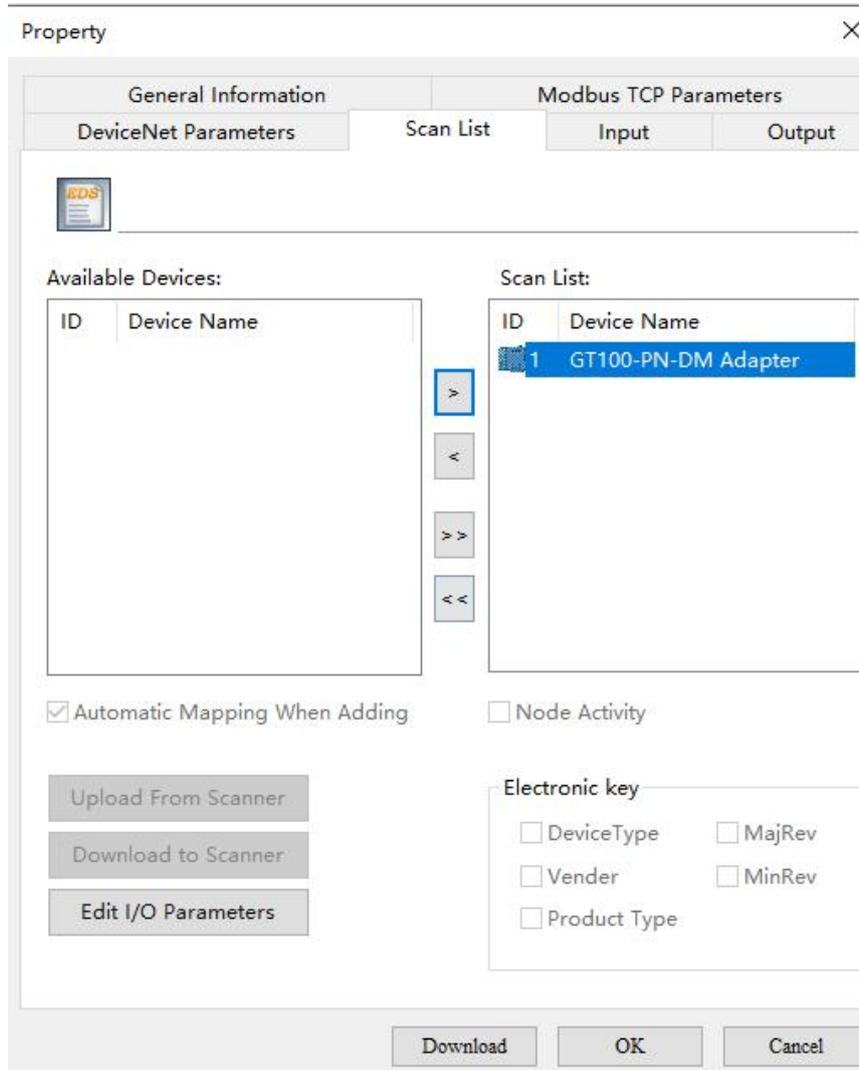
Select DeviceNet adapter devices from the Equipment management on the left side and drag it to the bus on the right side. As shown in the figure below:

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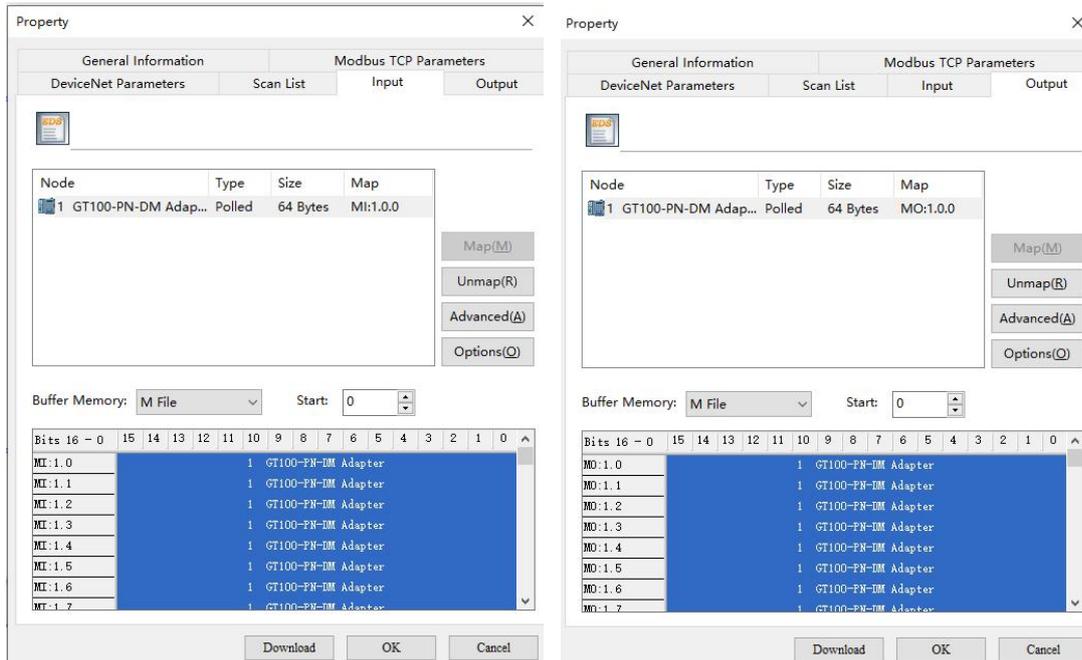
Double-click the GT200-MT-DN gateway icon. In the properties interface, click "Scan List." On the available devices side, select the DeviceNet device and move it to the scan list side. Click "Edit I/O Parameters" to set the device's actual I/O data length, as shown in the figure below:

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After configuring the DeviceNet device I/O data length, click on the input and output interface to perform data mapping. Select the device and click "Map" to map the input/output data, as shown in the figure below:

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In the "DeviceNet Parameters" interface, users can configure DeviceNet parameters. The "Input Data Hold/Clear" option indicates whether the corresponding DeviceNet input data should be cleared to zero when the number of errors in the DeviceNet command response reaches the command retry count. Selecting "Clear" will clear the DeviceNet input data, while selecting "Hold" will retain the last correctly received data. The "Number of Command Respend" specifies the number of times a command is resent in case of a DeviceNet command response error, with an input range of 2–254 and a default value of 3.

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The 'Property' dialog box is shown with the 'Modbus TCP Parameters' tab selected. Under the 'DeviceNet Parameters' sub-tab, the following fields are visible:

- Agreement Type: DeviceNet Scanner
- DeviceNet Baud Rate: 250k
- DeviceNet Node Address: 0
- Explicit Packet Timeout Time: 250
- Network Input Timeout Clear Time: 20
- I/O Poll Rate: 5
- Input Data Hold/Clear: Clear
- Number of Command Resends: 3
- Status Word: (dropdown menu)

Buttons at the bottom include 'Download', 'OK', and 'Cancel'.

After the configuration is complete, click "Download" to download the configuration (it can be downloaded in both commissioning or runtime mode), as shown in the figure below:

The 'Search' dialog box displays a table of discovered devices. The table has the following data:

NO.	Serial Number	Device	IP Address	MAC Address	Scanner/Adapter	Version
1	105302512	GT200-MT-DN	192.168.0.10	64-ea-c5-16-09-d0	DeviceNet Scanner	3.1

Buttons at the bottom include 'Download', 'Refresh', and 'Cancel'. A search bar is located at the bottom left.

SST-DNET-COM



Do you want to download the current configuration?

SST-DNET-COM

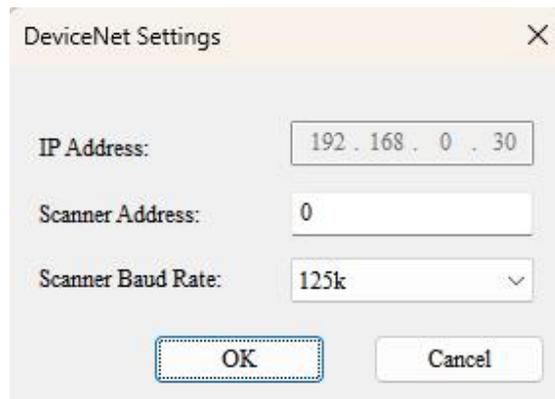


Download successfully!

The new configuration will not take effect until the gateway restarts.  
Do you want to restart the gateway remotely?

## 5.6 DeviceNet Network Scanning

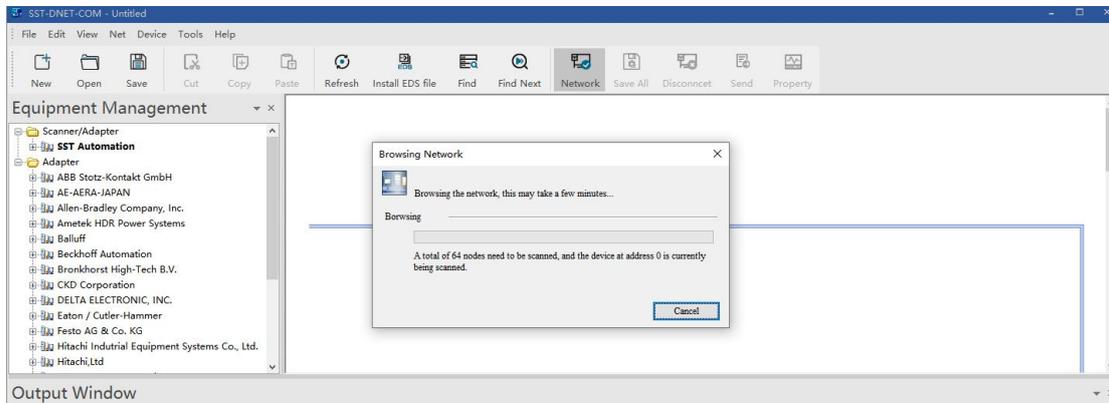
Press and hold the button for 3 seconds to enter the pre-operation mode. Then click Network button to scan DeviceNet adapter.



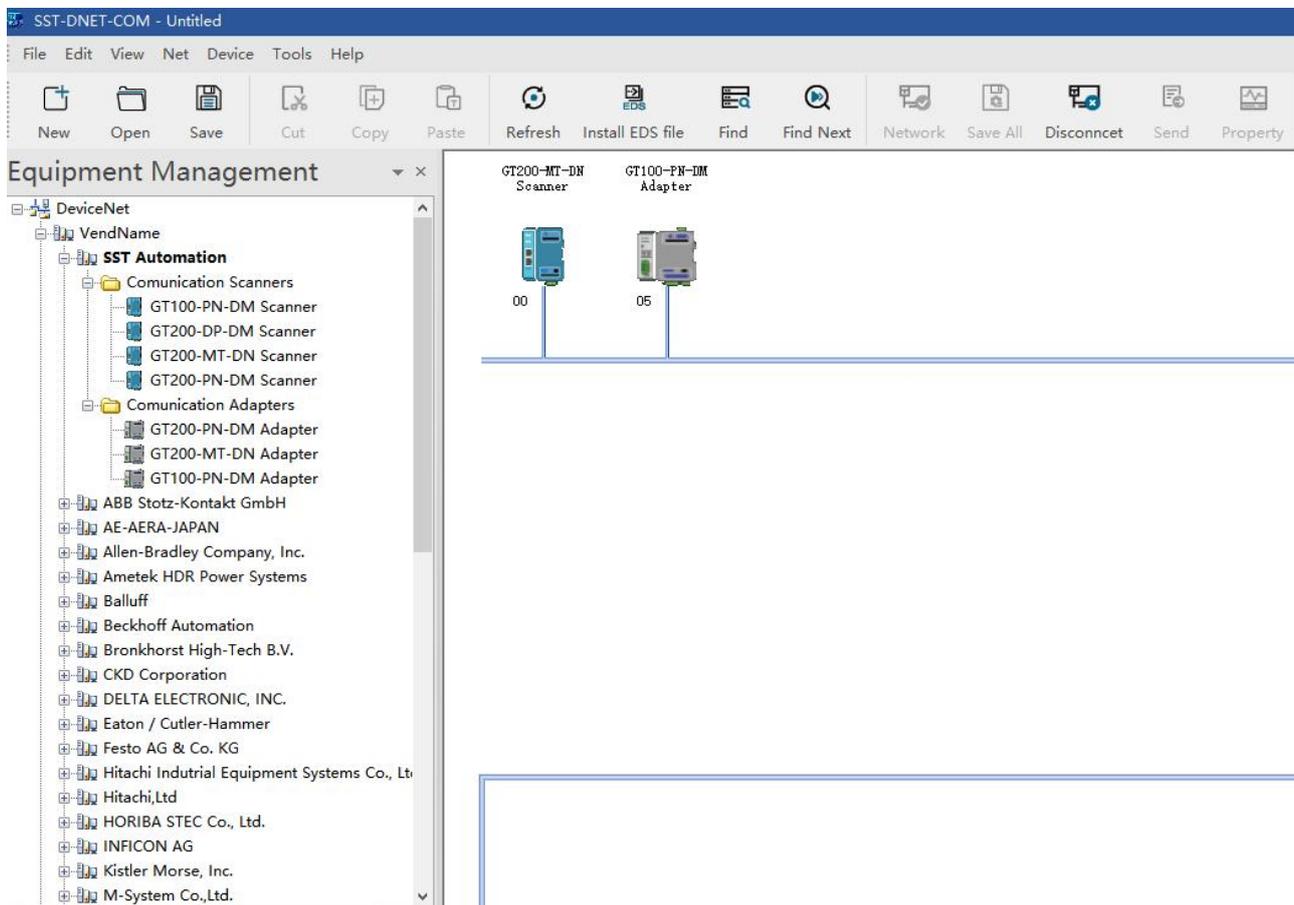
**Note:** In the DeviceNet Settings interface, "IP address" is the IP of the device selected at the time of search. "Scanner Address" is the Address of DeviceNet Scanner Module. Set any value between 0 and 63, which can't conflict with other node addresses on the bus. "Scanner Baud Rate" is the baud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

# GT200-MT-DN Modbus TCP/DeviceNet Gateway User Manual

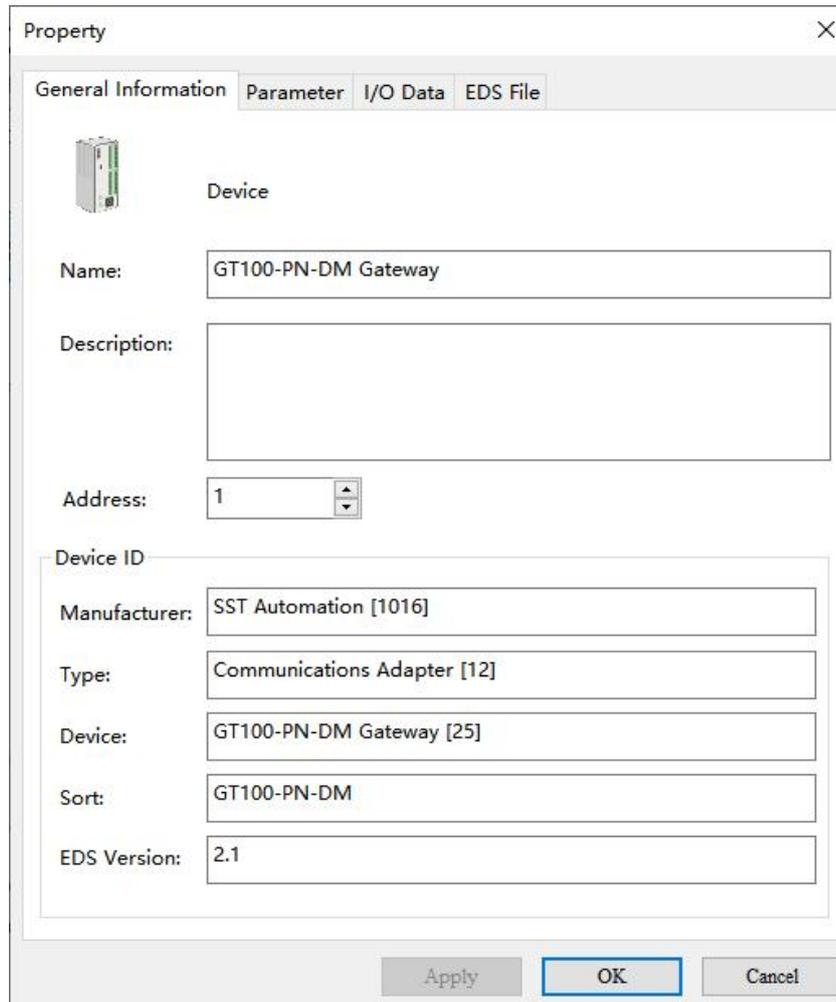
After the interface settings are completed, the network scanning interface will pop up:



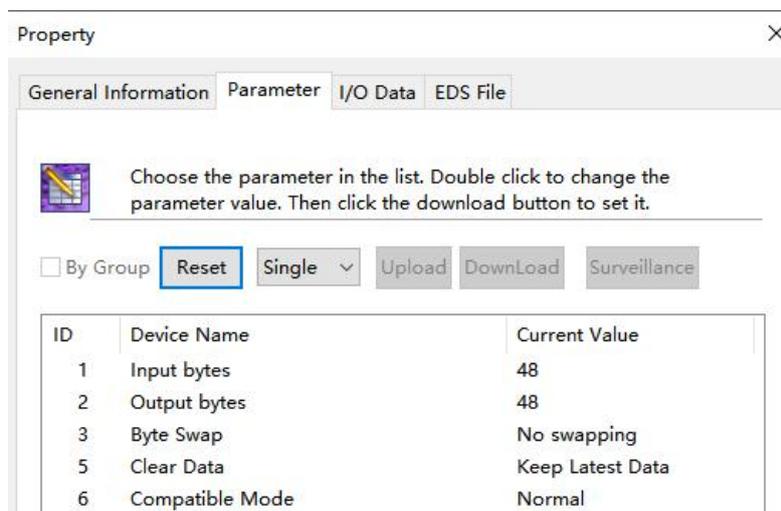
The scanned device is displayed in the main window, as shown in the figure below:



Double-click the scanned DeviceNet adapter device, in the "General Information" interface, the DeviceNet address can be modified. The "Device ID" displays information such as the device manufacturer, type, device, Sort and EDS version.



Click “parameter”, the parameter interface allows users to perform operations such as upload and download values.



Note: The "Reset" button restores parameters to their default values, but it only applies to individual parameters.

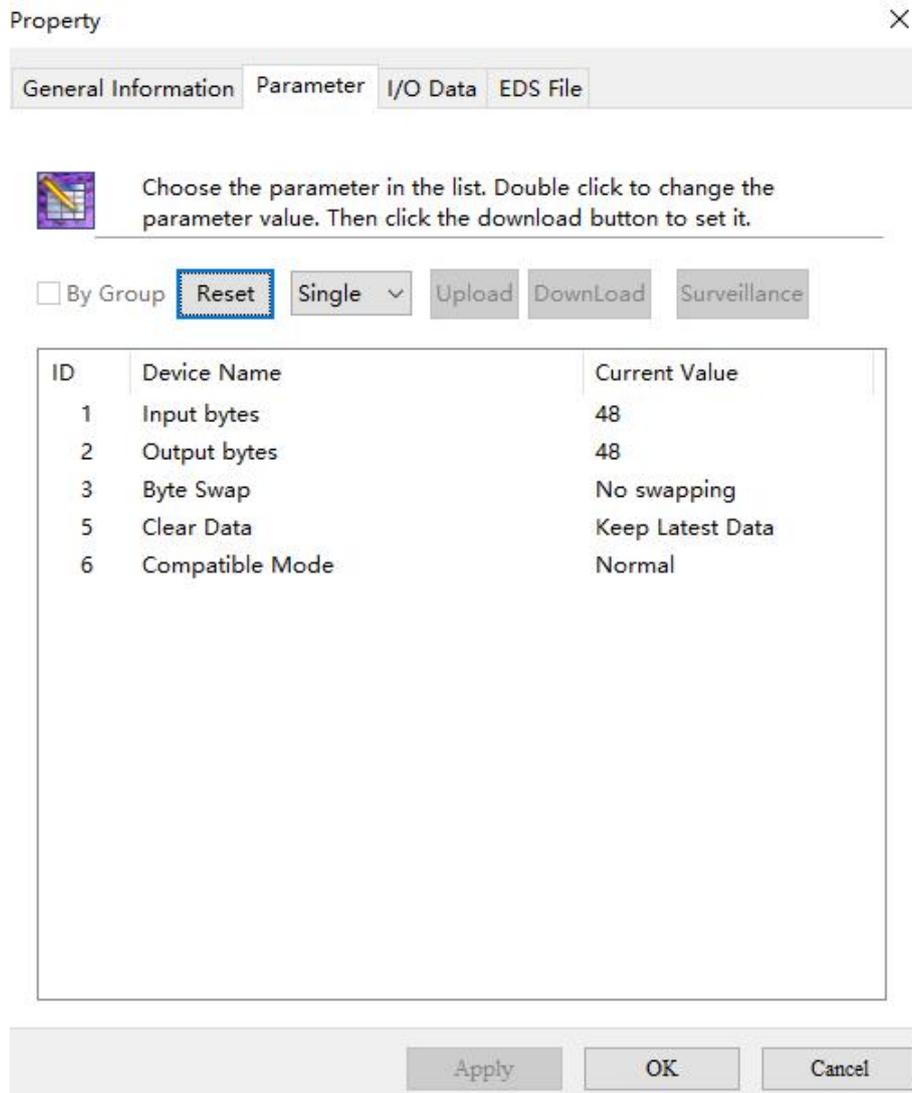
The "Upload" button supports operations for individual or all parameters. After clicking "Upload," the interface displays the actual parameter values of the online DeviceNet adapter device.

The "Download" button only supports individual parameter operations, allowing modification of parameters on online devices. Whether a parameter supports the "Download" operation can be identified by the "ID" number on the interface—parameters with an icon in front of the ID cannot be modified online through the configuration software. Whether a parameter supports online modification is determined by the registered EDS file.

The properties interface also displays the parameter ID, Device name, and current value. SST-DNET-COM software supports relevant linear operations on parameters defined in the EDS file, with the current value showing the calculated result. Users can adjust related operation factors as needed.

Click "I/O Data", once a connection is established for a DeviceNet device, the byte lengths of the output and input are fixed. How can users determine the input and output length? This information can be found in the EDS file.

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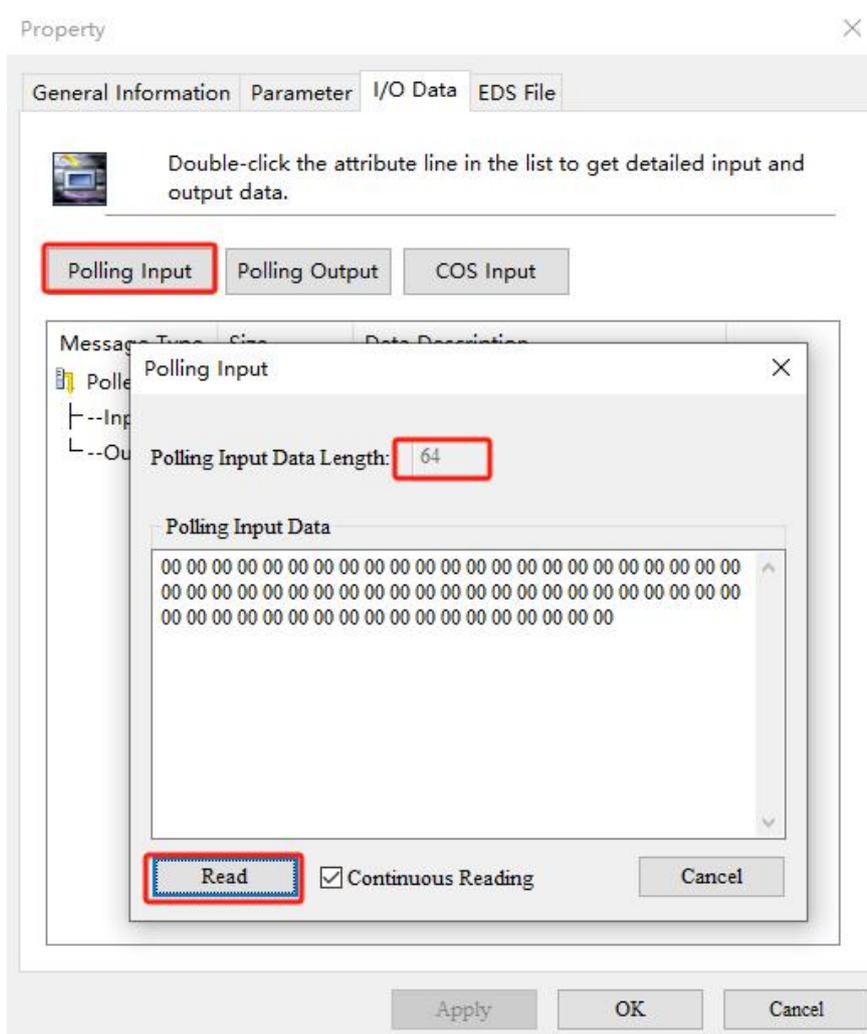


The input/output bytes in SST-DNET-COM software can also provide this information. In the figure above, under the "Polled" section, the provided Input and Output 48-Bytes represent the default input and output data byte length (note that the default and actual lengths may differ).

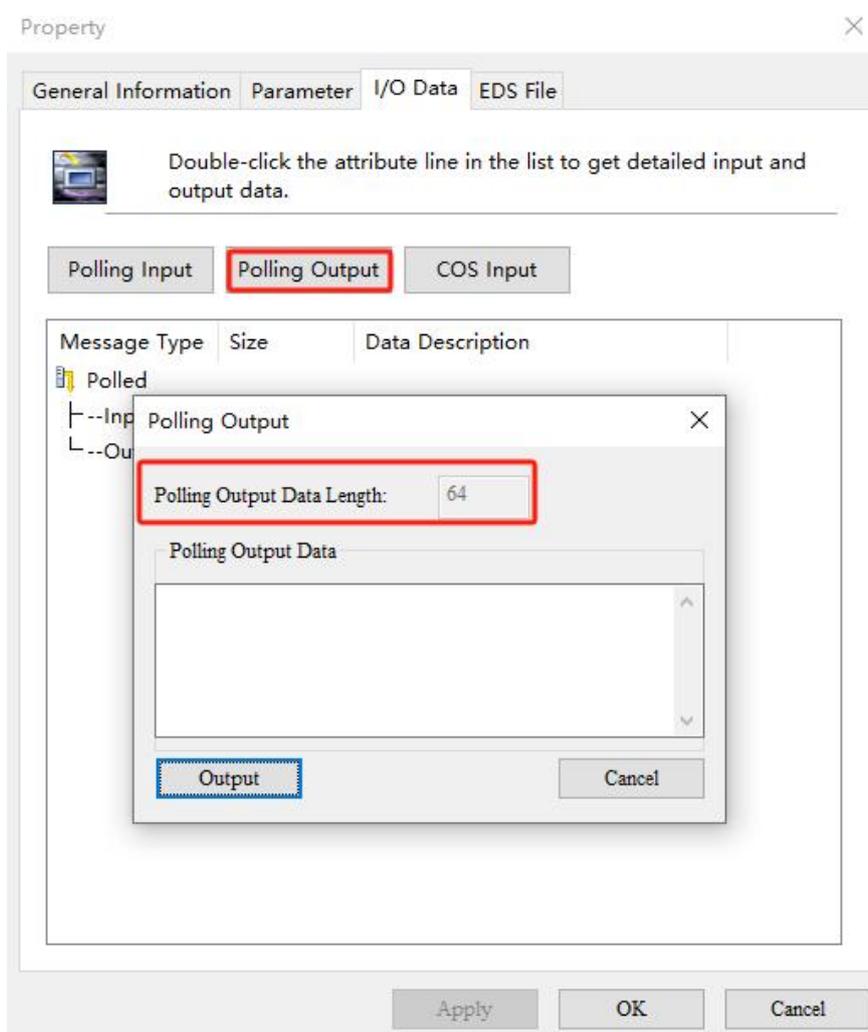
SST-DNET-COM software supports a maximum of 255 input bytes and 255 output bytes.

For example, with "Polling Input" and "Polling Output":

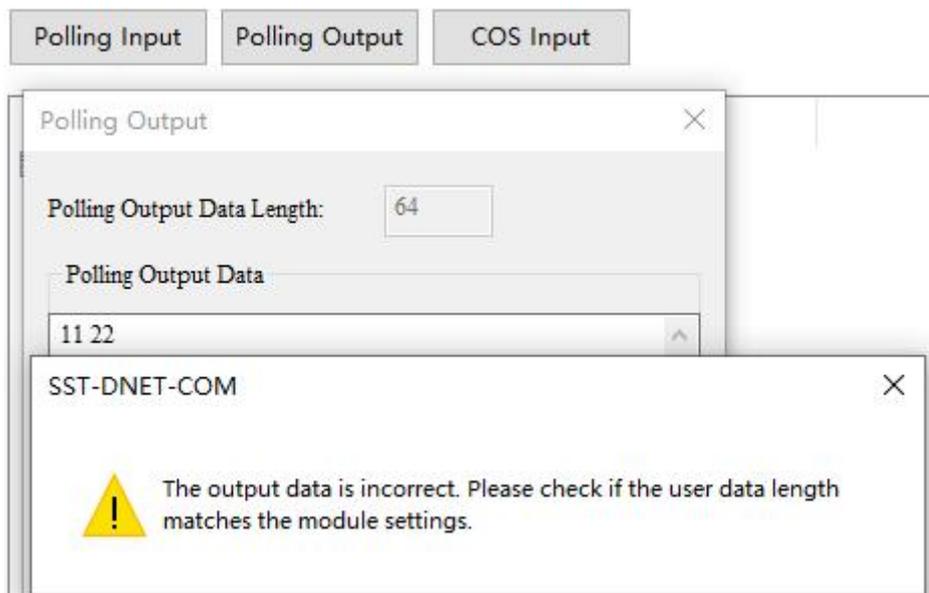
Click the "Polling Input" button, then click the "Read" button, and the DeviceNet software will read the network input data. If the "Continuous Read" checkbox is selected, SST-DNET-COM software will continuously read the network input data from the field DeviceNet device. As shown in the figure below:



Similarly, by clicking the "Polled Output" button, users can access the network output data dialog. Users must enter the complete output data. otherwise, if the byte count is incorrect, the output will be incomplete and the operation will not be successful.

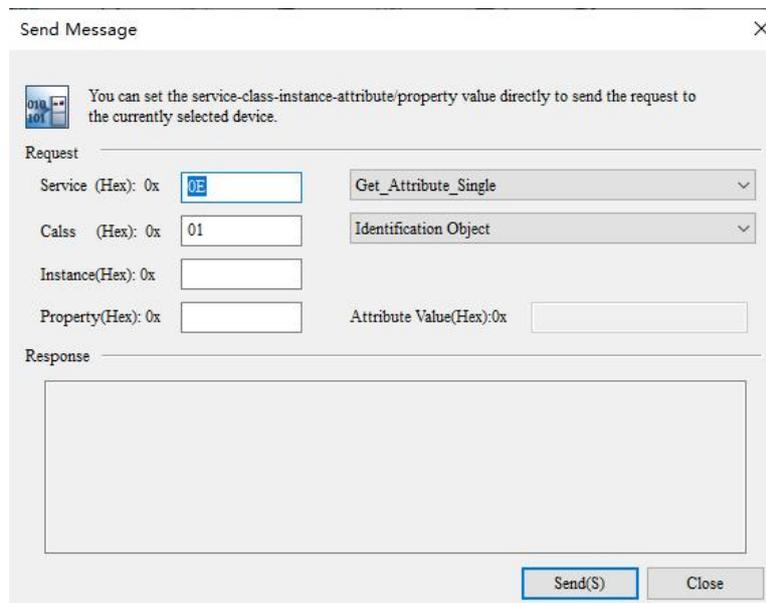


If the output data length is incorrect, the following message will be displayed:



Note that after modifying the address in the General interface, the device with the modified address will restart, causing the DeviceNet network connection to be lost. At this point, performing I/O data input/output operations will not display data. You need to disconnect the "Network " in SST-DNET-COM and re-establish the network connection.

## 5.6.1 Sending Explicit Messages



After the device is online, right-click to perform the "Send Explicit Message" operation. The interface that appears is shown in the figure above, where users can perform attribute setting and retrieval operations, facilitating online device debugging.

Using this function, users can directly read or set the corresponding parameters of the device without using the device's EDS file. The Service ID, Class ID, Instance ID, Property ID, and Attribute Value data formats are all in hexadecimal. The Class ID and Instance ID can be one or two bytes, and the bytes are separated by spaces. All IDs are in little-endian order (low byte first, high byte second).

Supported Service IDs:

0x0E Get\_Attribute\_Single: Read parameter attribute value.

0x10 Set\_Attribute\_Single: Write parameter attribute value.

Supported Class IDs: Standard Class IDs from 0x01 to 0x27 and custom classes.

You can select the service content or object name on the right to determine the corresponding Service ID or Class ID on the left. When using a custom class, you can directly input the Class ID, and in this case, the Class ID will not correspond to the object on the right. The manually entered Class ID takes precedence.

## 5.6.2 Configuration DeviceNet adapter devices to GT200-MT-DN

Double-click the scanned GT200-MT-DN, 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 5.5](#) of this manual, "Device ID" displays the information of the device manufacturer, type, device, sort and version.

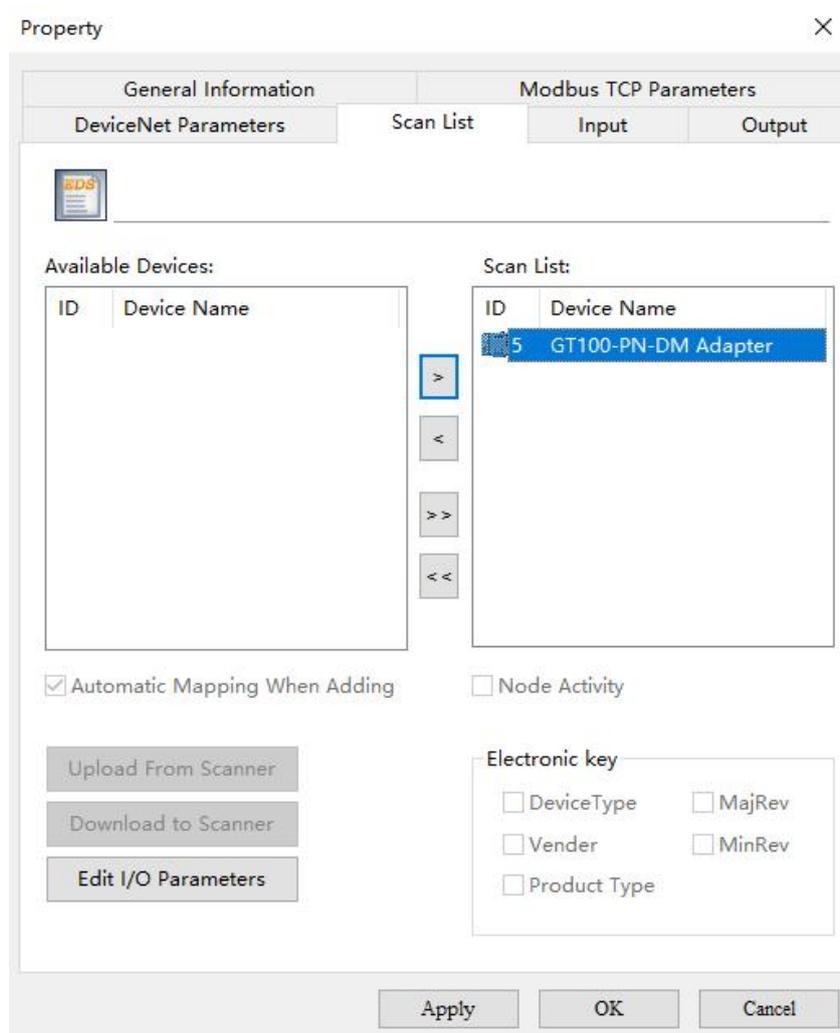
The screenshot shows a 'Property' dialog box with the following fields and values:

- Name:** GT200-MT-DN Scanner
- Description:** (Empty text box)
- Address:** 0
- Device Info:**
  - VendName:** SST Automation Co.Ltd [1376]
  - ProdType:** Communication Scanners
  - ProdName:** GT200-MT-DN Scanner
  - Catalog:** GT200-MT-DN
  - Version:** 2.0

Buttons at the bottom: Apply, OK, Cancel.

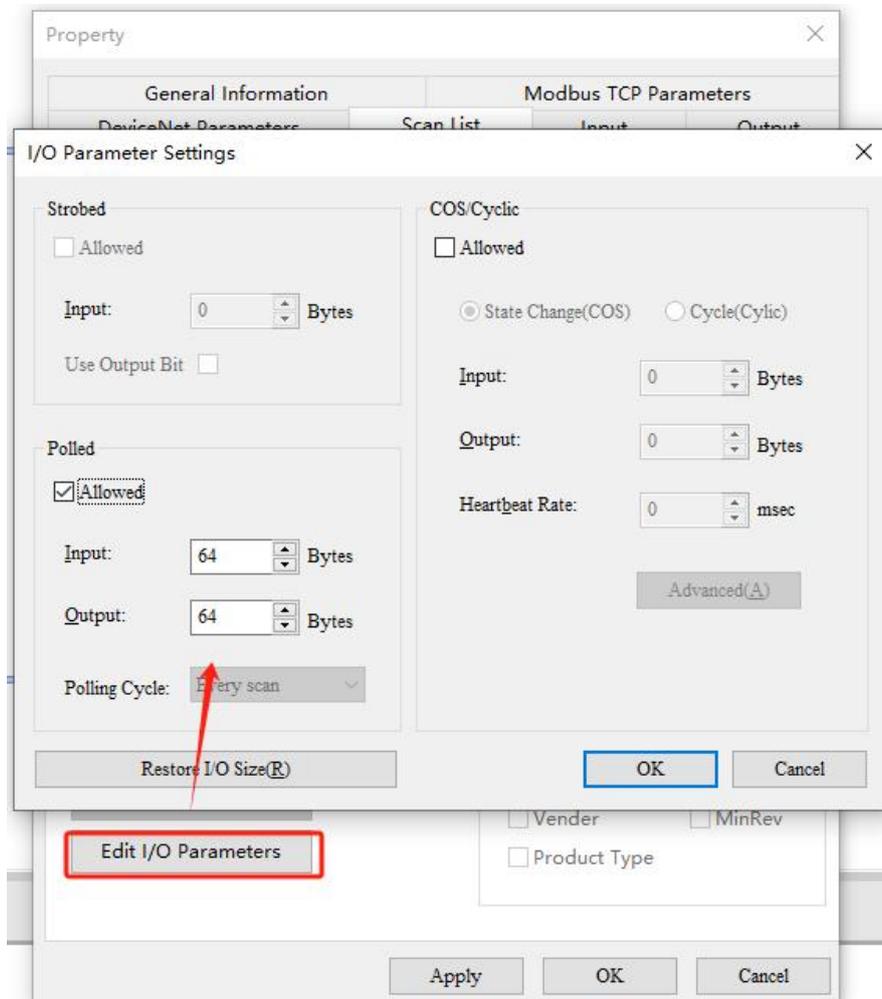
# GT200-MT-DN Modbus TCP/DeviceNet Gateway User Manual

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:



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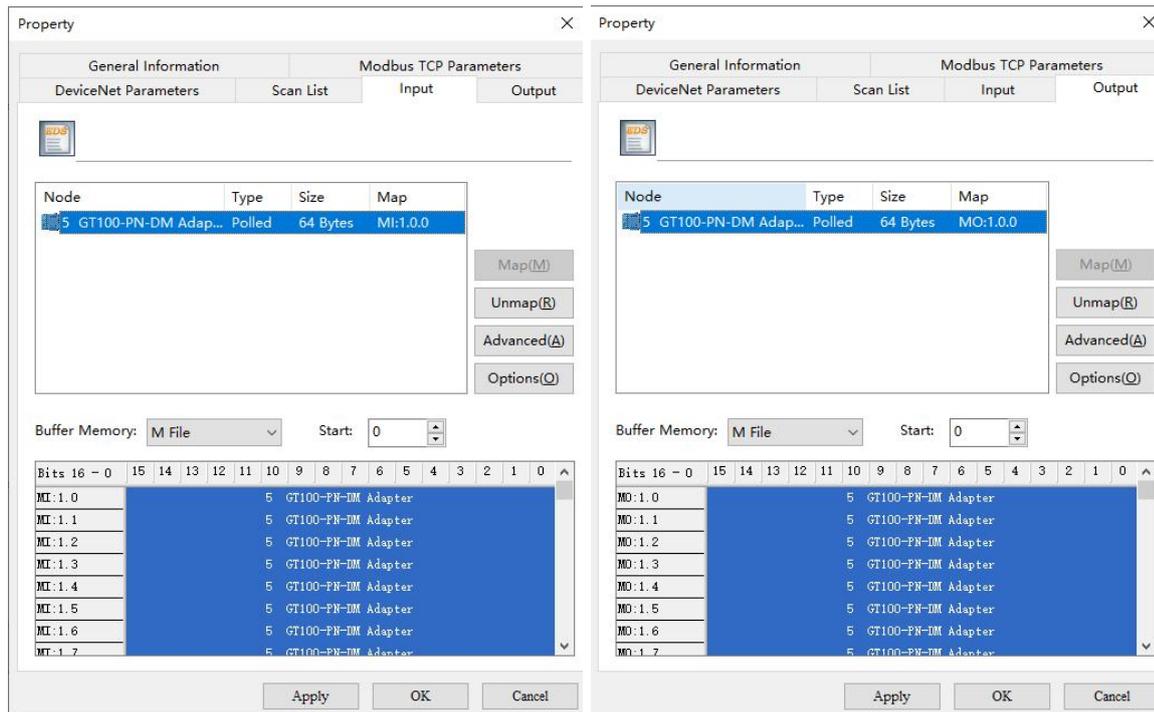
Add adapter station 5 to the scanner station mapping list, and then select adapter station 5 in the "Scan List". After selecting it, click "Edit I / O parameters". This interface sets the number of input and output bytes of the adapter:



**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 shown in the default value, and users can configure it according to the desired I/O parameters.

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In the "Input" and "Output" options interface, the users 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. Then click "Apply" button to apply this configuration to the gateway GT200-MT-DN and restart the gateway.



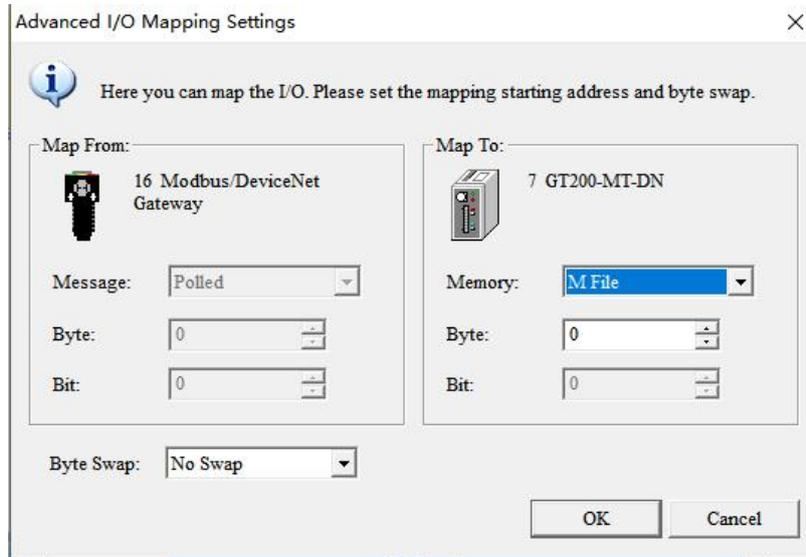
If users need to map manually, they can also click the "Advanced" button to set the starting address in the dialog box shown below.

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:

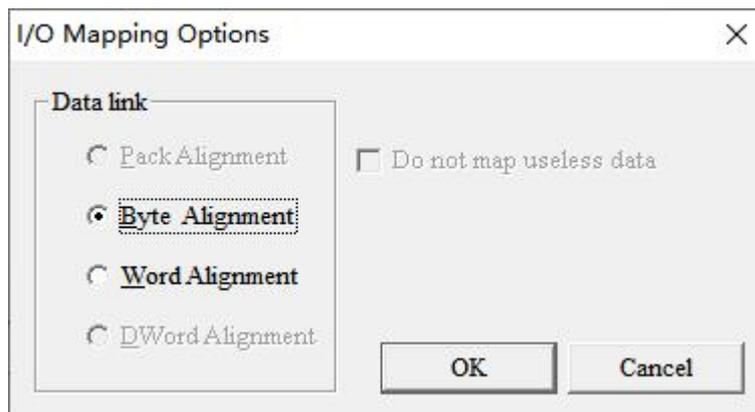
**No Swap:** Data transfers normally.

**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 12345678, the result is 78563412.



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.

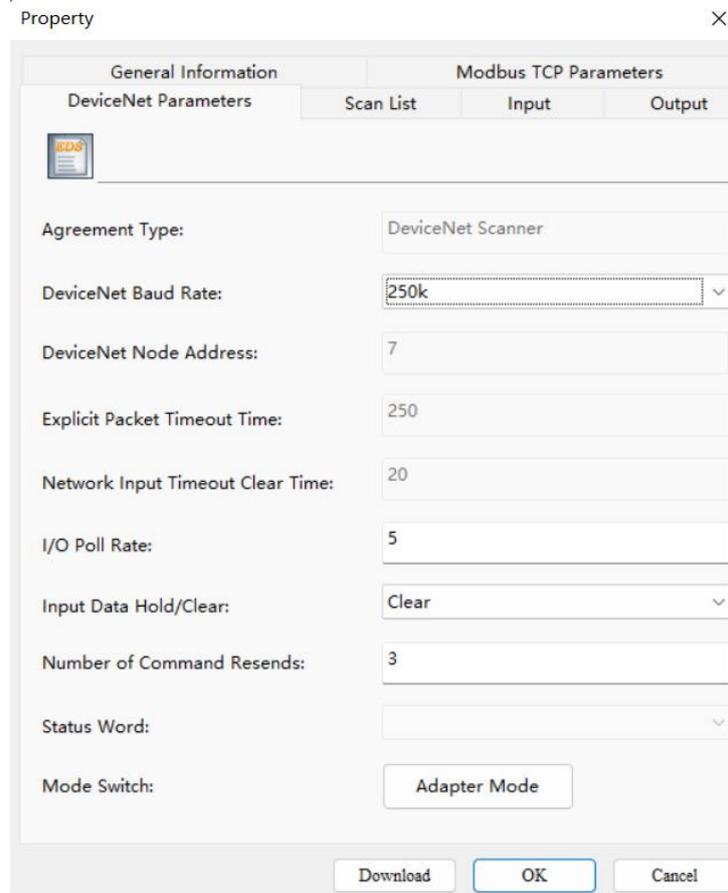
In the "DeviceNet Parameter" interface, users can set the following DeviceNet parameters:

**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.

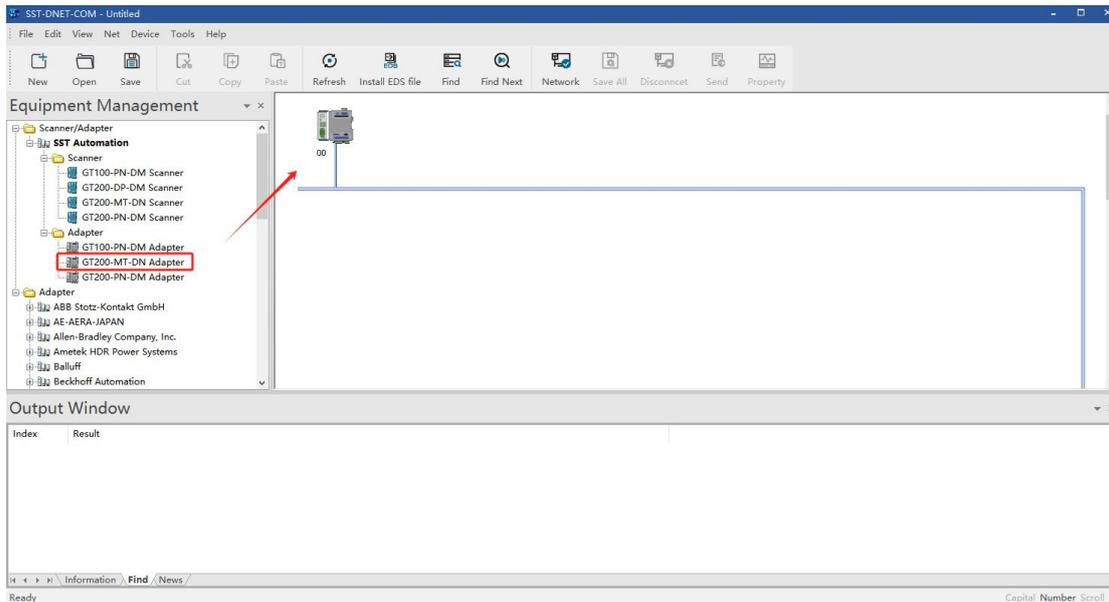


Under pre-operation mode, users can view the DeviceNet adapter information.

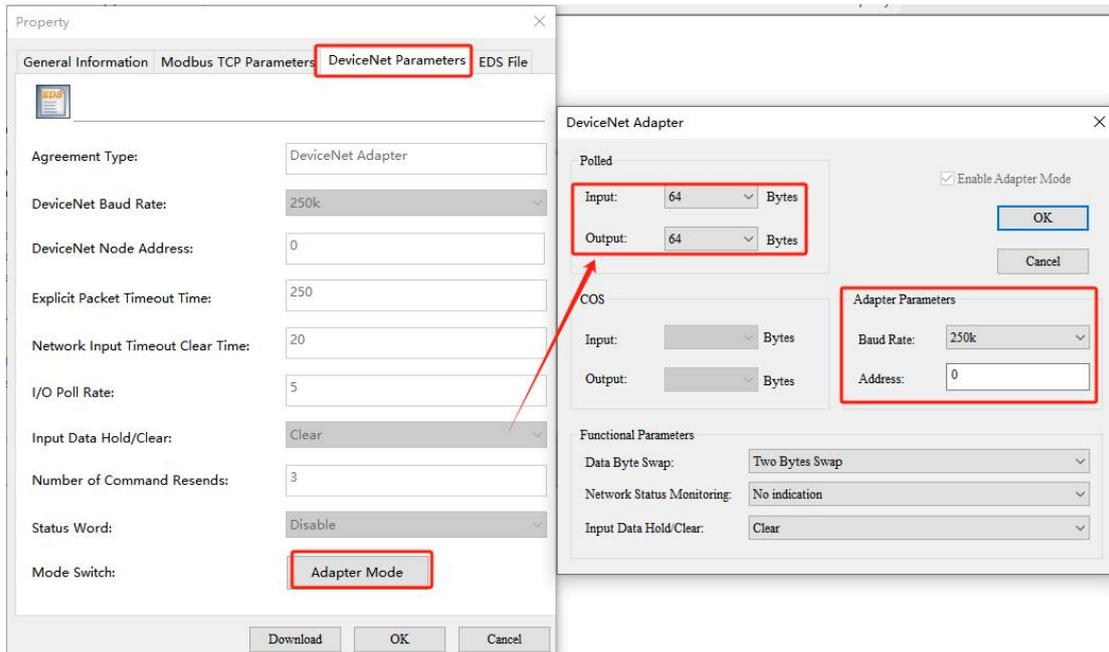
## 5.7 SST-DNET-COM Offline Configuration (DeviceNet adapter Mode)

Drag the GT200-MT-DN adapter device from the library on the left to the bus.

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Double click the device icon, in the property interface, select the DeviceNet Parameters and then click the Adapter Mode button. Change Input/Output Bytes, Baud Rate, etc. parameters according to the actual requirements. Click OK to close.



1

Select the gateway and click Download button to download the configuration into the gateway.

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Search ×

NO.	Serial Number	Device	IP Address	MAC Address	Scanner/Adapter	Version
1	105302512	GT200-MT-DN	192.168.0.10	64-ea-c5-16-09-d0	DeviceNet Scanner	3.1

Search

Upload the Configuration of the gateway. Now the gateway has been switched to DeviceNet adapter mode.

Search ×

NO.	Serial Number	Device	IP Address	MAC Address	Scanner/Adapter	Version
1	105302512	GT200-MT-DN	192.168.0.10	64-ea-c5-16-09-d0	DeviceNet Adapter	3.1

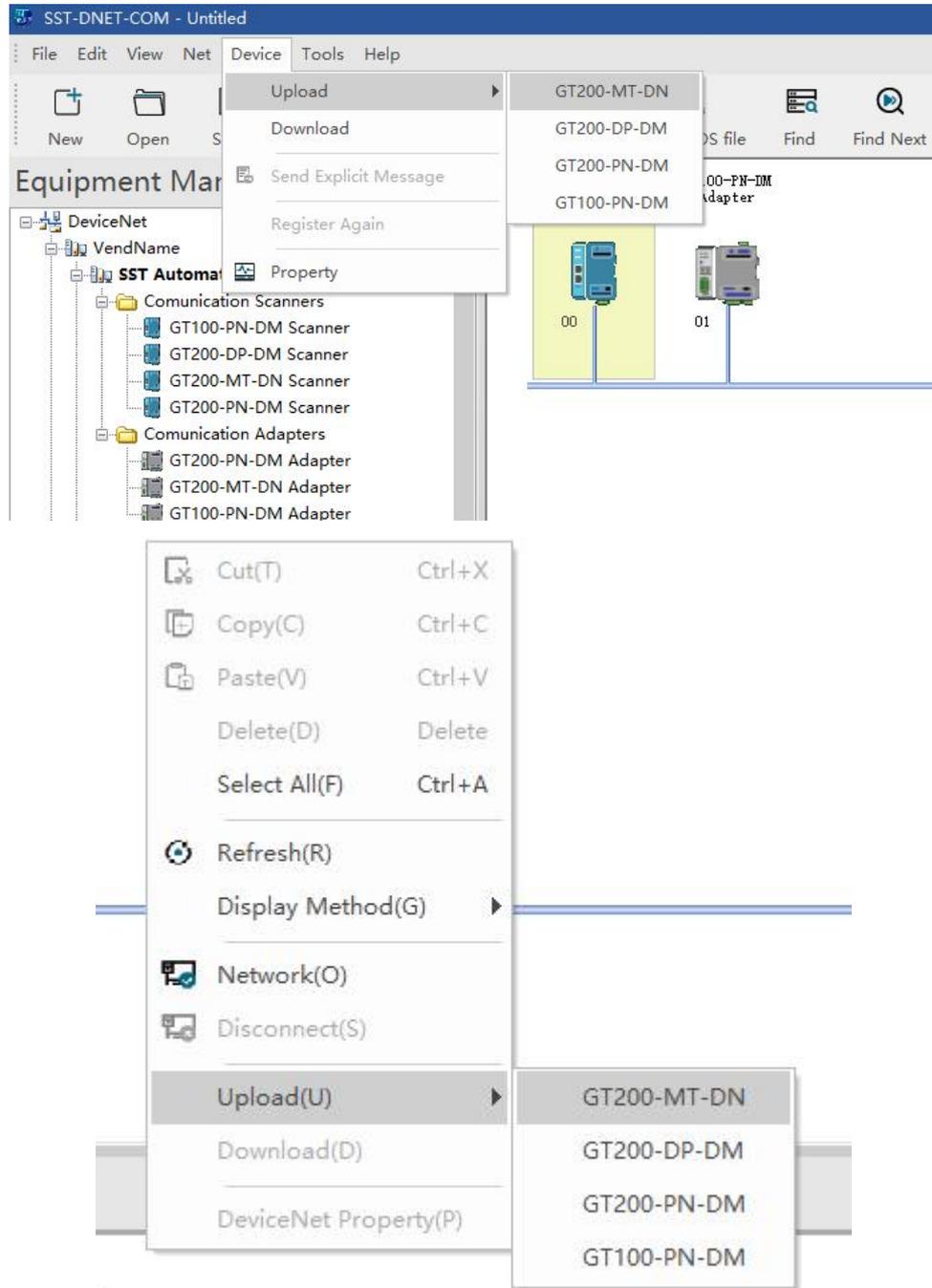
Search

## 5.8 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.

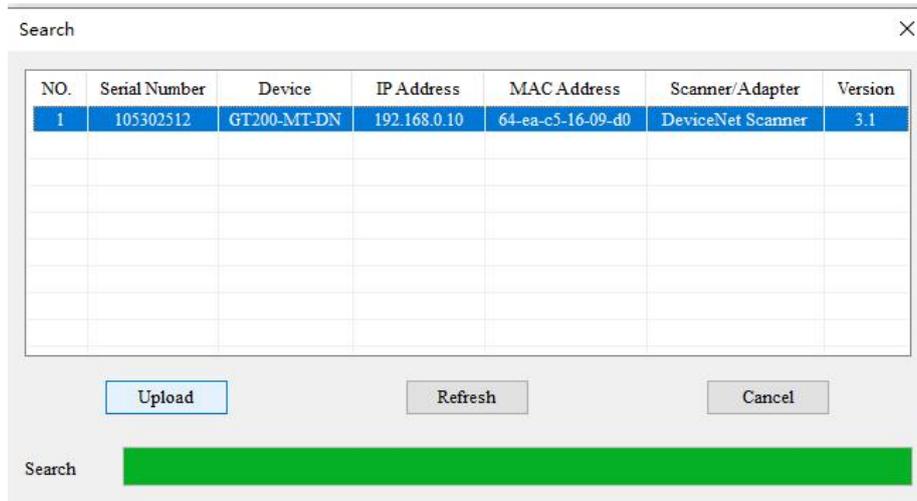
# GT200-MT-DN Modbus TCP/DeviceNet Gateway

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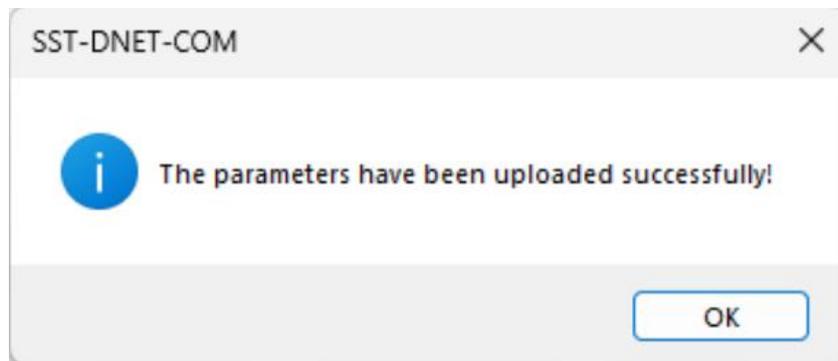


Select a device to upload:

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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:



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

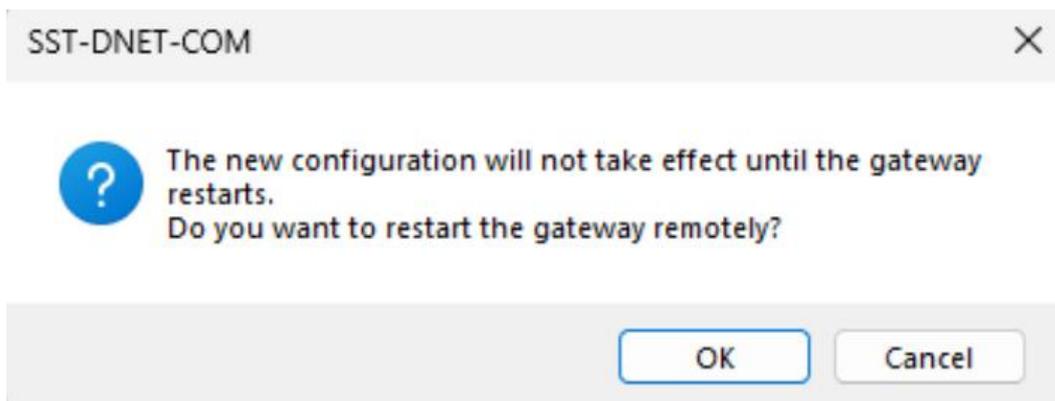
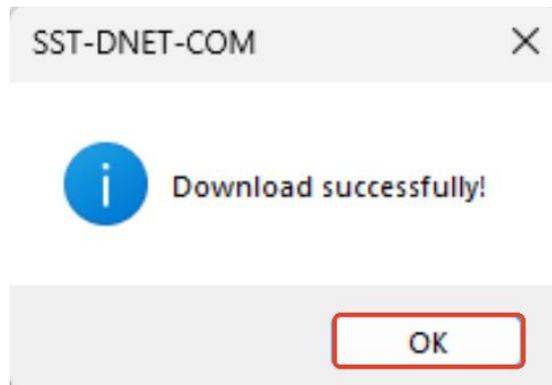
# GT200-MT-DN Modbus TCP/DeviceNet Gateway User Manual

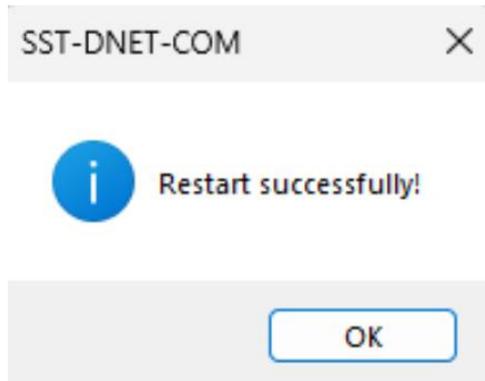
Search

NO.	Serial Number	Device	IP Address	MAC Address	Scanner/Adapter	Version
1	105302512	GT200-MT-DN	192.168.0.10	64-ea-c5-16-09-d0	DeviceNet Scanner	3.1

Download Refresh Cancel

Search

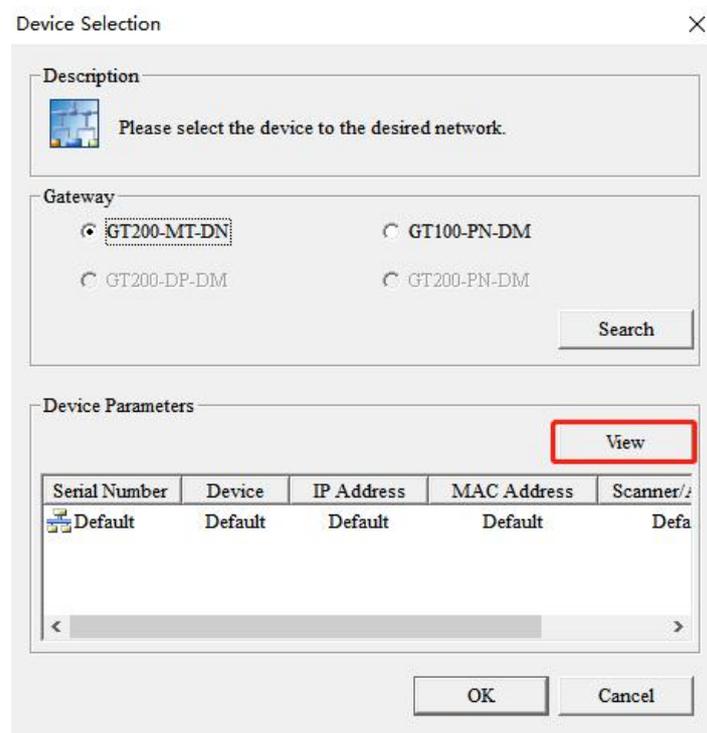




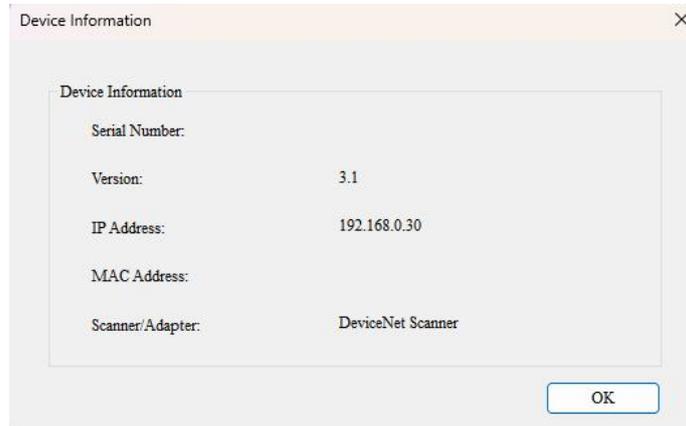
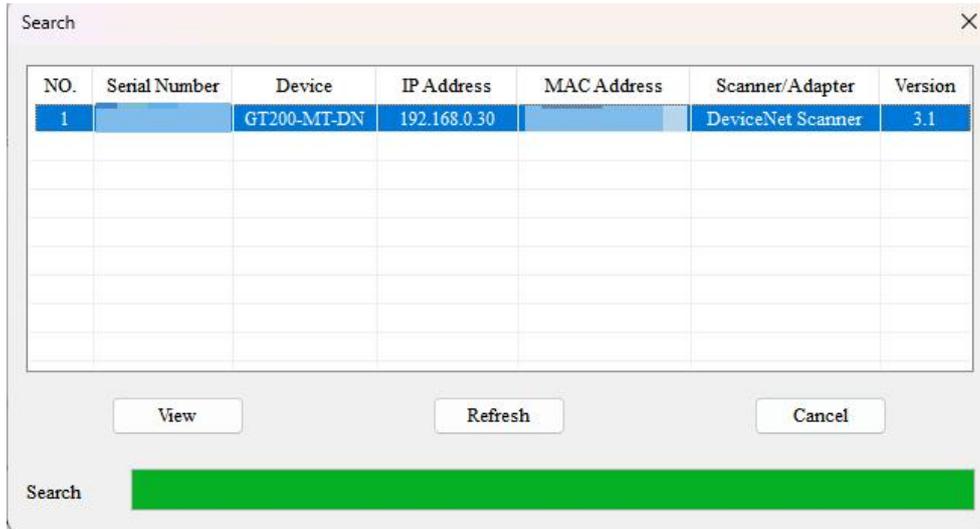
Note: If users open the SST-DNET-COM software, drag GT200-MT-DN from the device management window on the left to the main window, double-click the dragged device, and open the general, scan list, input, output, Modbus TCP parameters, DeviceNet parameters, etc., modify the required parameters and download.

## 5.9 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".



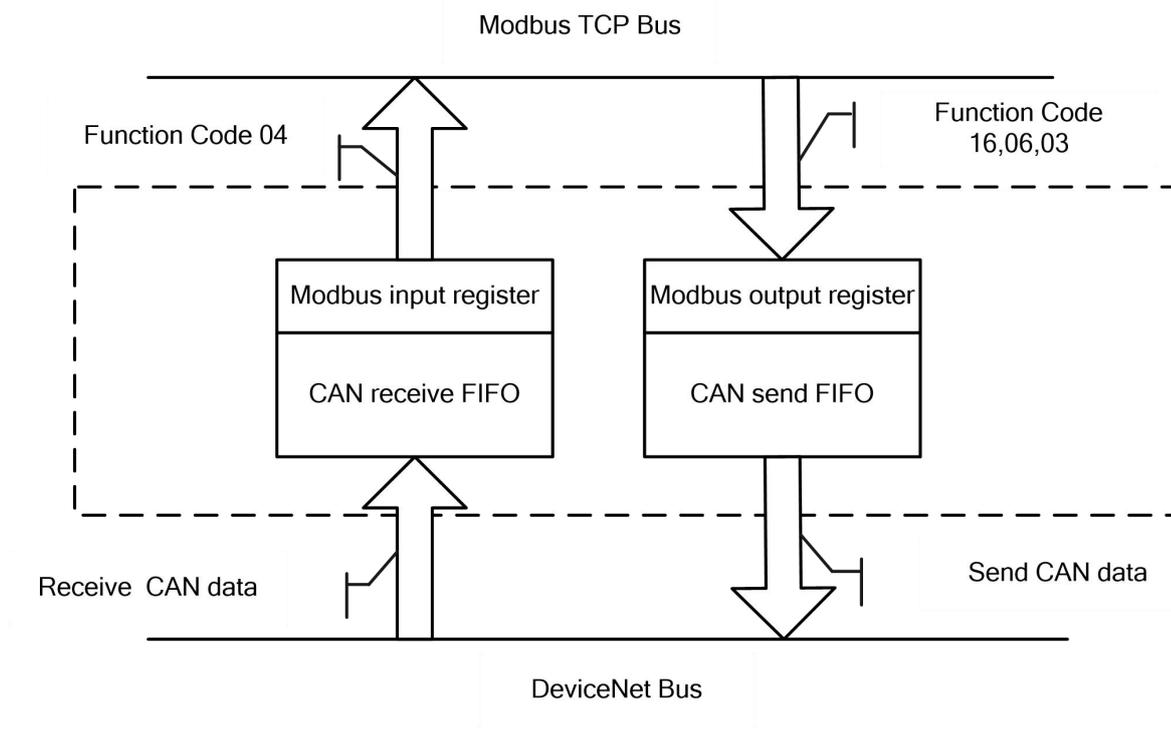
# GT200-MT-DN Modbus TCP/DeviceNet Gateway User Manual



## 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.

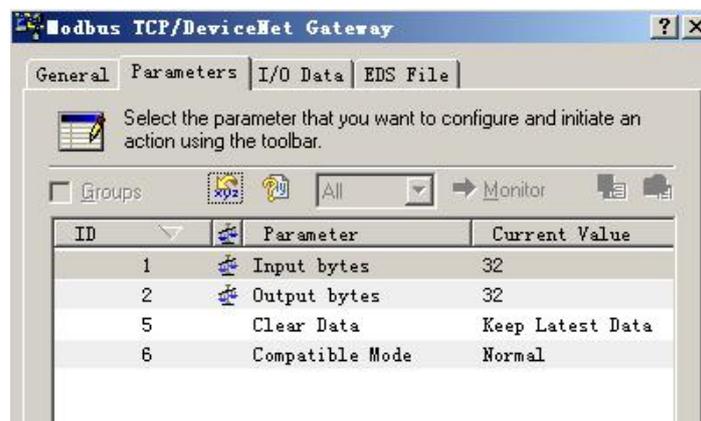
I/O input:

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.