

Modbus/DeviceNet Gateway GT200-DN-RS

User Manual

REV 1.4



SST Automation

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Catalog

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1 About This Document

1.1 General

This document describes every parameter of the gateway GT200-DN-RS and provides using methods and some announcements that help users use the gateway. Please read this document carefully before using the gateway.

For further information, documentation etc., please visit the SSTCOMM website: <http://www.sstcomm.com>.

1.2 Important User Information

The data and examples in this manual cannot be copied without authorization. SSTCOMM maybe upgrades the product without notifying users.

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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 field, and the safety includes laws, rules, codes and standards.

1.3 Terms

DeviceNet: DeviceNet protocol

RS-485/RS-232: Hardware specifications of serial interface

Modbus: MODICOM Modbus Protocol PI-MBUS-300 Rev.J

2 Product Overview

2.1 Product Function

The gateway can connect multiple devices with Modbus (RS-485/RS-232) interface to DeviceNet network. It acts as a master at the side of Modbus network, and a slave at the side of DeviceNet network. It supports RS-485 and RS-232 at the serial interface. Comparing with other products, GT200-DN-RS adds the debugging function, which makes the application so convenient in industrial field. RS-485 interface is used for communication while RS-232 interface is used to debug, and RS-232 interface is used for communication while RS-485 interface is used to debug. RS-232 interface is the special interface of configuration mode.

GT200-DN-RS works through the data mapping between networks, mapping Modbus parameters to DeviceNet I/O data.

2.2 Product Features

- Acts as a DeviceNet slave: Group 2 Only Slave.
- Support all the baudrate which accords with the DeviceNet protocol, and support sensing baud rate automatically function.
- Acts as a Modbus master, and support the 1, 2, 3, 4, 5, 6, 15, 16 function codes.
- The range of input-voltage is 8~30V, and the standard working voltage is 24VDC.
- Free configuration software SST-MD-CFG.
- Support the debugging without PLC.

2.3 Technical Specification

[1] Communication rate:

- DeviceNet interface supports: 125kbit/s, 250kbit/s, and 500kbit/s;
- The default parameters of Modbus interface are 19200bps, 8 bits, no parity, 1 stop bit;
The Modbus baud rate: 300, 600, 1200, 2400, 9600, 19200, 38400, 57600, 115200bps;

[2] DeviceNet topology:

➤ Trunk lines

Thick cable and thin cable both can be used to build the trunk lines. When the thick cable and thin cable are mixed to build the trunk lines, the longest cable length can be calculated through the following formulas:

$$L_{\text{thick}}+5*L_{\text{thin}}=500\text{m} \quad 125\text{kbit/s}$$

$$L_{\text{thick}}+2.5*L_{\text{thin}}=250\text{m} \quad 250\text{kbit/s}$$

$$L_{\text{thick}}+L_{\text{thin}}=100\text{m} \quad 500\text{kbit/s}$$

Here L_{thick} is the length of thick cable, and L_{thin} is the length of thin cable.

➤ Drop lines

The length of drop lines is the distance from tap of the trunk lines to the transceiver of every device, and it should be less than 6m. The length of drop lines is related to baud rate, and the longest length with different baud rate shows in Table1.

Table1-The length of drop lines

| Baud Rate | Length of Cable |
|-----------|-----------------|
| 125kbit/s | 156m |
| 250kbit/s | 78m |
| 500kbit/s | 39m |

[3] Working mode: DeviceNet interface only support: Group 2 Only Slave;

[4] Working environment:

- Relative Humidity: 5% to 95%(No condensing)
- Temperature: -4°F ~140°F (-20°C ~ 60°C)
- Pollution level: 3

[5] EMC testing standard compliant;

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

Within the module, it uses DC to DC conversion, and the conversion efficiency is not less than 70%;

[7] External dimension (W*H*D): 1.57 in*4.92 in*4.33 in (40mm*125mm*110mm).

2.4 Attention

- ◆ To prevent stress, prevent module panel damage;
- ◆ To prevent bump, module may damage internal components;
- ◆ Power supply voltage control in the prospectus, within the scope of the requirements to burn module;
- ◆ To prevent water, water module will affect the normal work;
- ◆ Please check the wiring, before any wrong or short circuit.

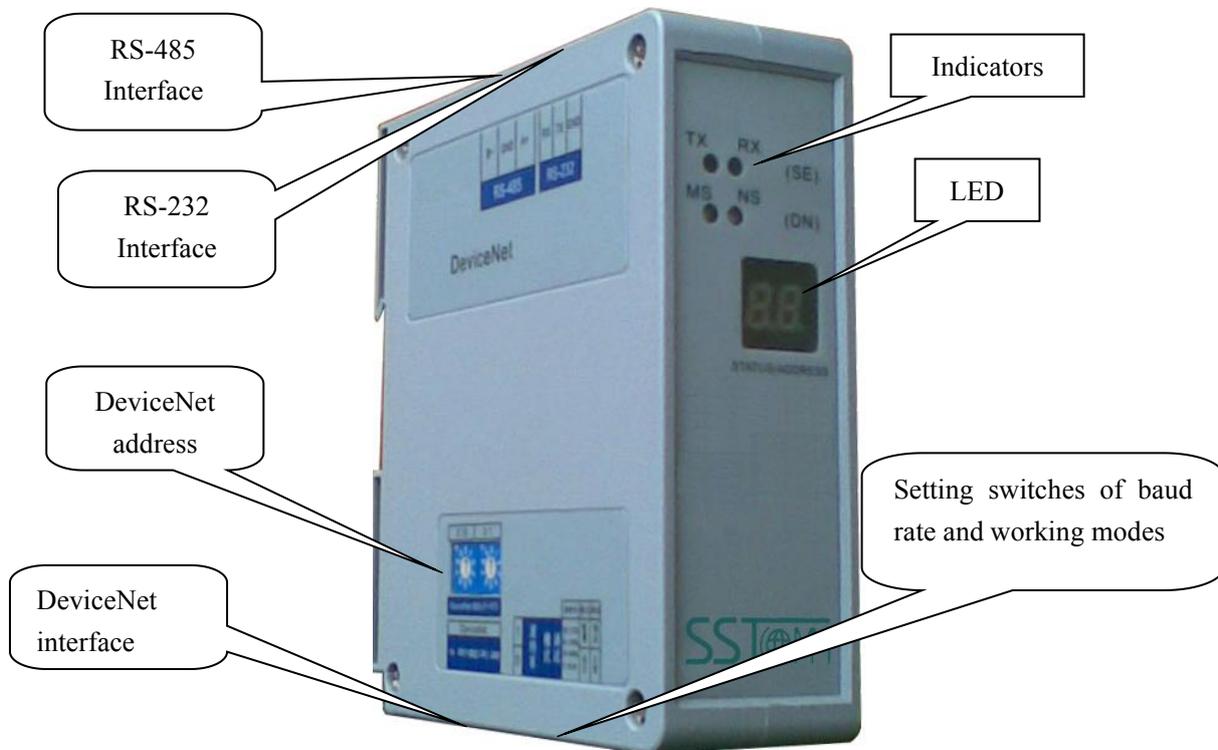
2.5 Related Products

There are other products: GT200-DP-RS, GT200-DP-DN and so on.

If you want to get more information about these products, please visit the SSTCOMM website:

<http://www.sstcomm.com>.

3 Product Appearance



Note: This picture is only for reference, the product appearance should take the material object as a standard.

3.1 Indicators

The explanation of indicators show as Table 2, Table3 and Table4:

Table 2-Indicators of Module Status (MS)

| Indicators | Description |
|----------------|--|
| Off | No power supply or broken indicators |
| Always Green | Work normally |
| Green blinking | Not correctly configured |
| Red blinking | Recoverable faults, Modbus communication faults (such as not find the slave station) |
| Always Red | Unrecoverable faults |

| | |
|--------------------|-------------------------|
| Red-Green blinking | Self-testing is ongoing |
|--------------------|-------------------------|

Table 3-Indicators of DeviceNet network Status (NS)

| Indicators | Description |
|----------------|---|
| Off | The repetitive MAC ID detection is not successful or no power supply |
| Green blinking | The devices are online but there are not connections established |
| Always Green | The devices are online and there are connections established |
| Red blinking | One or more I/O connections have been timeout |
| Always Red | The device detects unrecoverable faults and cannot communicate, such as there is repetitive DeviceNet address on net. |

Table 4-Indicators of Serial interface Status (TX, RX)

| Indicators | Status | Description |
|------------|----------|-----------------------------------|
| RX (Green) | Blinking | Serial port is receiving data |
| | Off | Serial port is not receiving data |
| TX (Red) | Blinking | Serial port is sending data |
| | Off | Serial port is not sending data |

3.2 Status Setting Switches and LED

3.2.1 Status Setting Switches

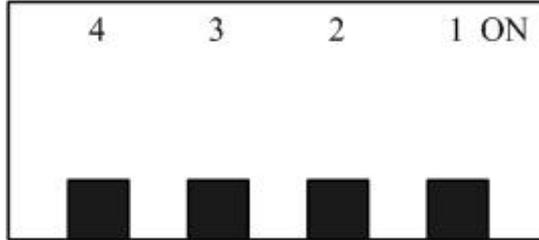
Status setting switches have three functions:

- 1) Modify DeviceNet baud rate
- 2) Set working mode: Configuration and run mode are optional. At the status of configuration, the LED shows “CF”.
- 3) Set debugging: Debug and normal mode are optional. GT200-DN-RS has the function of debugging, and it provides users with easy way for debugging Modbus network data communications. At the status of debugging, the LED shows “db”.

Note: The priority of configuration mode is higher than debugging. When configuring the gateway, the debug

switch should be dialed to normal. When debugging the gateway, mode switch should be dialed to run.

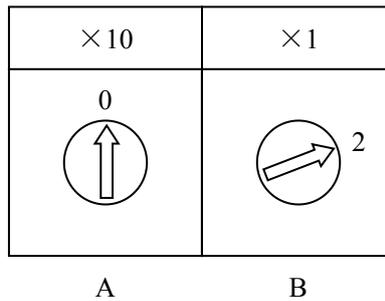
Status setting switches are below the product:



| | 4 | 3 | 2 | 1 |
|---|--------------------------|---|---------------|--------|
| | Baud rate | | Mode | Debug |
| 1 | 00:125K 01:250K | | Configuration | Debug |
| 0 | 10:500K 11: Automatic | | Run | Normal |

Note: If you reset the status switches, you should restart GT200-DN-RS (power off and power on) to make the settings take effect.

3.2.2 Setting Switches of DeviceNet Address



According to the above, the DeviceNet address is calculated as follow:

$$\text{DeviceNet address} = (A \times 10) + (B \times 1)$$

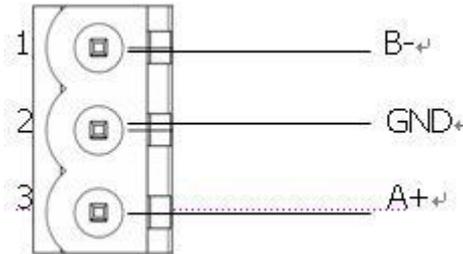
3.2.3 LED

The main contents of LED include: current baud rate (only show at startup), current DeviceNet address (show at running)

3.3 Communication Interface

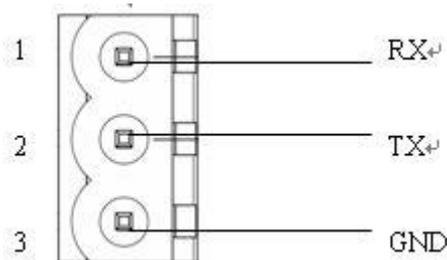
3.3.1 Modbus Interface

Modbus interface use open 3 pin pluggable terminal, users could accord to the panel instruction to wire:



| Pin | Function |
|-----|------------|
| 1 | B-, RS-485 |
| 2 | GND |
| 3 | A+, RS-485 |

RS-485 interface

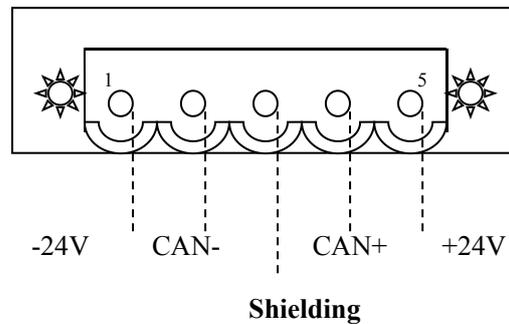


| Pin | Function |
|-----|---|
| 1 | RX, connect to RX of user's device RS-232 |
| 2 | TX, connect to TX of user's device RS-232 |
| 3 | GND, connect to GND of user's device RS-232 |

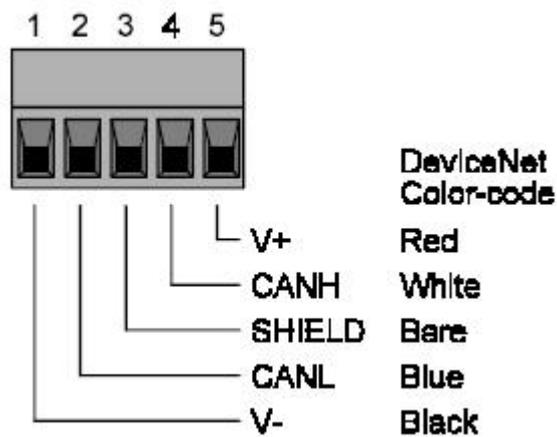
RS-232 interface

3.3.2 DeviceNet Interface

5-pin connector:



Open 5-pin connector at the side of DeviceNet:



| Pin | Wiring |
|-----|-----------|
| 1 | GND(24V) |
| 2 | CAN- |
| 3 | shielding |
| 4 | CAN+ |
| 5 | +24V |

4 Use Method

4.1 Quick Start Guide

1. Setting DeviceNet address manually

Before connecting DeviceNet master, sets DeviceNet address by moving code switch at the gateway's side. The range of DeviceNet effective address is 0 to 63. The calculation method of DeviceNet address is shown at chapter 3.2.2 of the document. To supply power to this module, the LED displays blinking "bT", and then shows "12" or "25" or "50", respectively indicates "125K", "250K", "500K". Finally, it shows the DeviceNet address you have set. When baud rate is set to automatically baudrate sensing state, if there is no other CAN node on the network to send data, it shows "bT".

Note: When using DIP switch to modify the DeviceNet address, restart the gateway to take the new address effect.

2. In the configuration mode, set DeviceNet address, Modbus parameters and commands through gateway configuration software SST-MD-CFG.

The method of entering configuration mode is: Dial the mode setting switch to "1", and power on the module, the module can enter the configuration mode. Then connect with SST-MD-CFG for configuration. After configuration, restart the gateway to run normally.

Note: RS-232 interface is specialized configuration interface, in configuration mode, please pay attention to the wiring exactly.

3. Setting DeviceNet baud rate manually

Set DeviceNet baud rate manually though the baud rate setting switches below the gateway, baud rate setting switches have four combinations, respectively indicate 125K, 250K, 500K, automatically sensing baud rate. See chapter 3.2.1 of the document.

4. Connect Modbus interface and DeviceNet interface accurately and checkup the wiring.

5. Power on, the module enter the run mode. Before powering on, you should dial the mode setting switch to running status, debugging setting switch to normal.



4.2 Hardware Wiring

1. In accordance with the third chapter about DeviceNet interface instructions, wire every pin of 5-pin terminal exactly, no power on at this time.
2. In accordance with the third chapter about Modbus interface, properly wiring.
3. Checkup all wiring.
4. Power on the module, the module enter run mode. Pay attention to settings of mode switch and debug switch.

4.3 Software Configuration

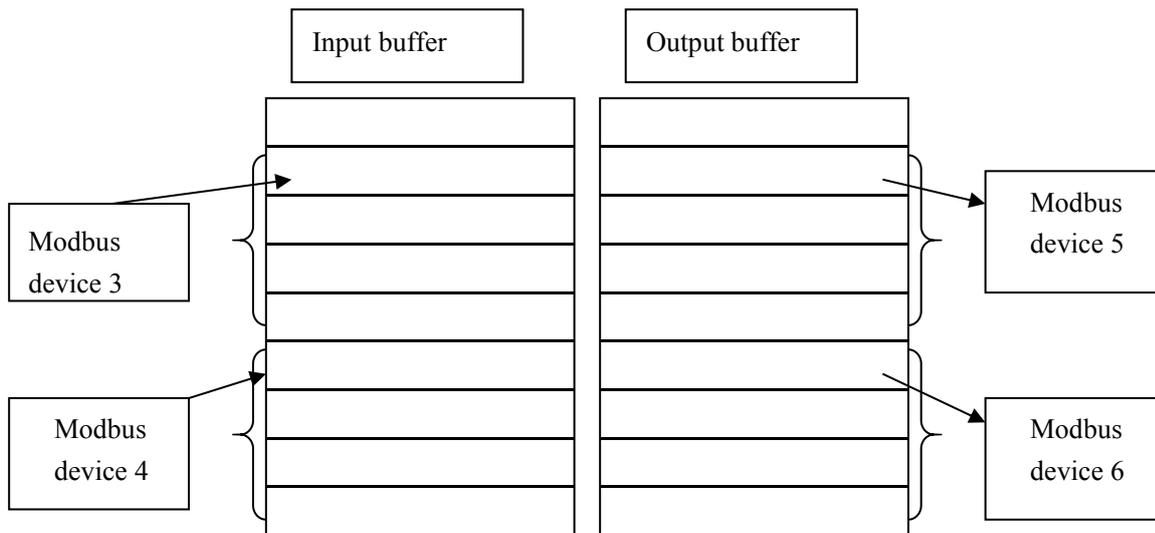
Users connect GT200-DN-RS gateway to PC. Set gateway's Modbus parameters, commands, and DeviceNet parameters through gateway configuration software-SST-MD-CFG. Before powering on the gateway, you should dial the mode setting switch to "1", make the gateway be at the status of configuration.

See SST-MD-CFG Software configuration instruction.

4.4 Run

4.4.1 Data Exchange Mode

The data exchange between GT200-DN-RS Modbus and DeviceNet is established by "mapping". GT200-DN-RS has two data buffers, one is DeviceNet network input buffer, and the other is DeviceNet network output buffer. Modbus read commands read the data and then write the data into input buffer for DeviceNet network reading. Modbus write commands get data from network output buffer, and then output the data to Modbus devices by writing commands.



Users can configure 48 commands at most, and can use a Modbus command to read a serial Modbus registers.

- ✧ **Note 1:** If there is something wrong with Modbus communication, DeviceNet I/O data cannot be effectively collected, and the data got through I/O scanning is zero.
- ✧ **Note 2:** When DeviceNet interface of GT200-DN-RS receives network output-data, Modbus interface will send writing-commands. That is to say that after DeviceNet master station sending data, Modbus interface of GT200-DN-RS will send writing-commands, and transmit data to Modbus slave devices. If AB's PLC is in programming mode, there will be no the network output-data.
- ✧ **Note 3:** During the configuration of GT200-DN-RS, when polling mode of output commands is set to "Change of State", the function of the local data exchange cannot be used.

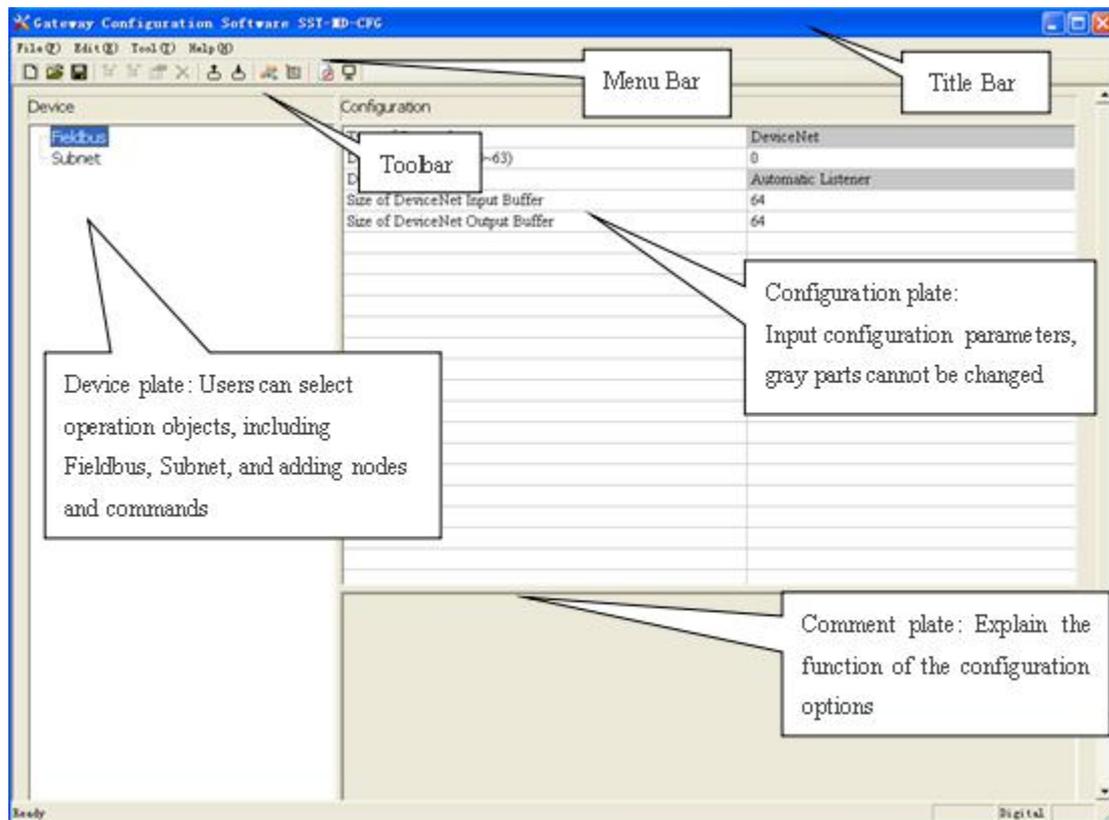
Local data exchange: Configure writing-commands to input-area (0000~3FF0)

4.4.2 Terminal Resistor

DeviceNet network requires a 120ohm terminal resistor respectively at the two farthest terminals of the network. Modbus requires terminal resistors too. GT200-DN-RS has a terminal resistor at the side of Modbus interface; users only need add a 120ohm terminal resistor at the other side of the Modbus network.

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Toolbar:

Toolbar is shown as below:



The function of Toolbar: New, Open, Save, Add Node, Delete Node, Add Command, Delete Command, Upload, Download, Conflict Detection, Auto Mapping, Export EXCEL and Monitor I/O Data..

 New: Create a new configuration project

 Open: Open a configuration project

 Save: Save current configuration

 Add node: Add a node for Modbus master

 Delete node: Delete a node for Modbus master

 Add command: Add a Modbus command

 Delete command: Delete a Modbus command

 Upload: Read the configuration information from the module and shown in the software

 Download: Download the configuration file to the gateway

 Conflict Detection: To check whether there are some conflicts with configured commands in the gateway memory data buffer

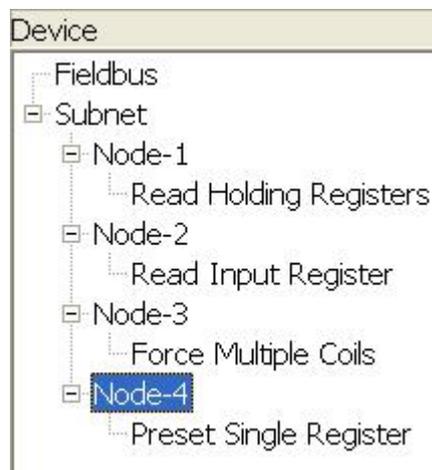
 Auto Mapping: Used to automatically calculate the mapped memory address without conflict by each command

 Export EXCEL: Export current configuration to the local hard disk, saved as .xls file

 Monitor I/O Data: Monitor the gateway memory buffer data

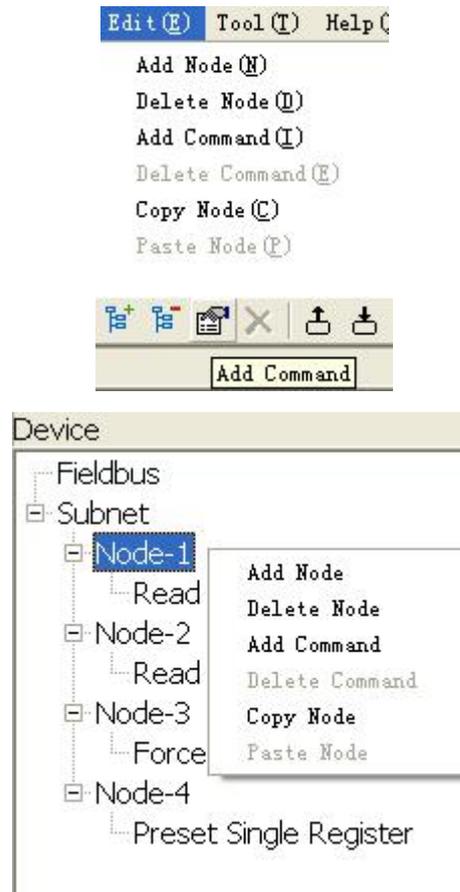
5.3 Device View Operation

5.3.1 Device View Interface



5.3.2 Operation Mode

The device view supports three types of operation: Edit Menu, Edit Toolbar and Right-click edit Menu.



5.3.3 Operation Types

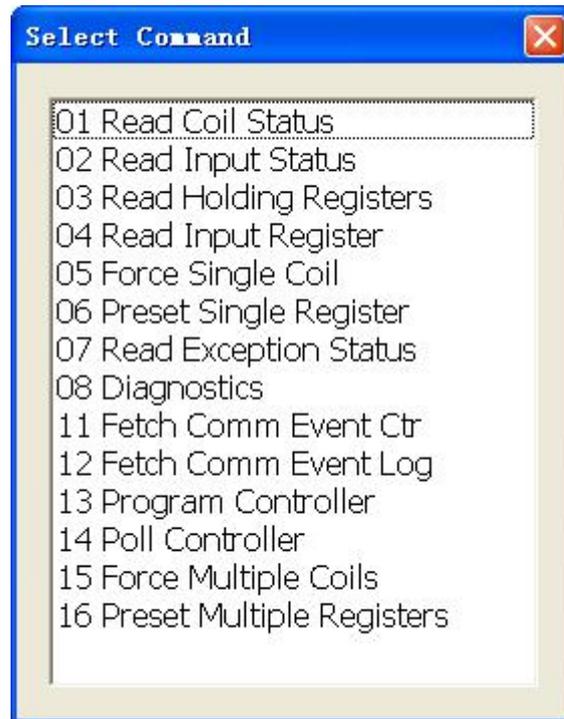
1) Add node operation: Right-click on subnet or existed nodes, and then you can add a new node named "new node" under subnet.

2) Delete node operation: Right-click on the node to be deleted, and then you can delete the node. The node and its all commands will be deleted.

3) Add command operation: Right-click on the node, and then you can add a command for the node. The commands dialog box is shown as follow:

Currently, GT200-DN-RS supports the commands: 01, 02, 03, 04, 05, 06, 15 and 16 commands

Select the command: Double click on the command



4) Delete command operation: Right-click on the command and then you can delete command.

5) Rename nodes: Left-click on the node to be renamed, and then the edit status will be shown and you can rename it.

5.4 Configuration View Operation

5.4.1 Interface of Fieldbus Configuration

In the device view, click on “fieldbus”, the configuration view is shown as follows:

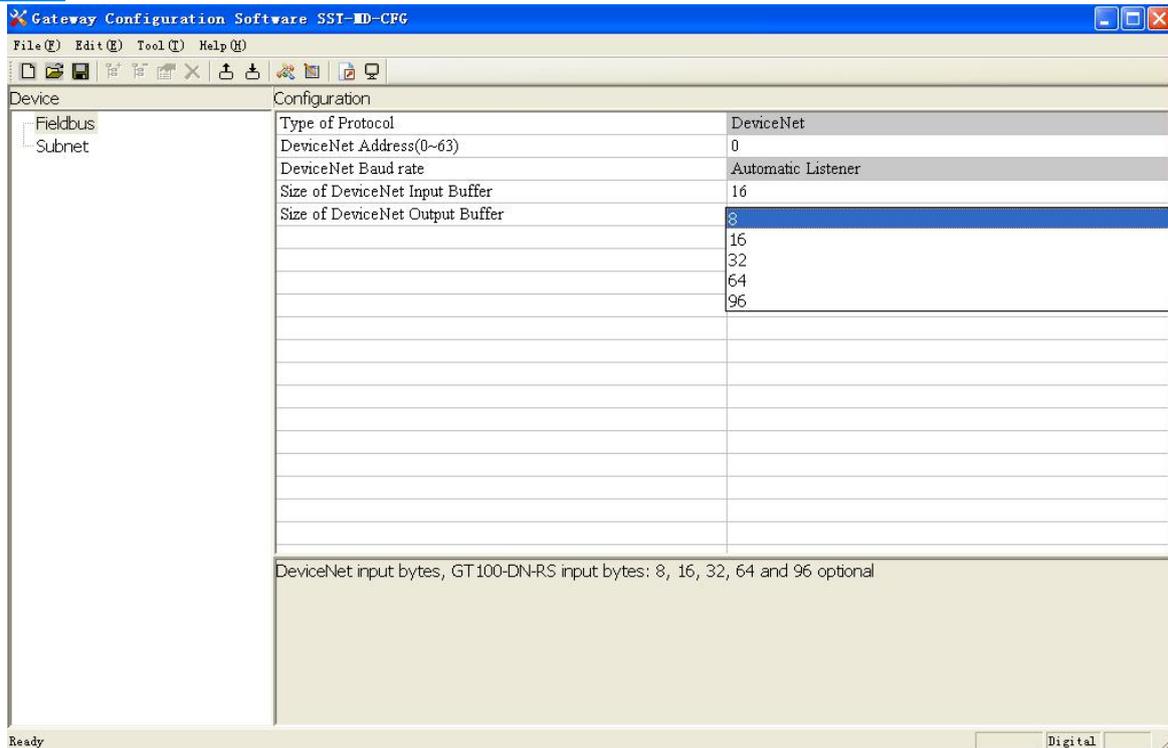
Configurable items include: size of DeviceNet input buffer, size of DeviceNet output buffer and DeviceNet address.

Size of DeviceNet input buffer: There are 8, 16, 32, 64, 96, 128 and 160 to be selected.

Size of DeviceNet output buffer: There are 8, 16, 32, 64, 96 and 112 to be selected.

Note: The sum of input buffer and output buffer must be less than 240. (Expect 240). If the size of input buffer is 160, the size of output buffer is at most 64. If the size of output buffer is 112, the size of input buffer is at most 96, or the configuration didn't work.

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5.4.2 Interface of Subnet Configuration

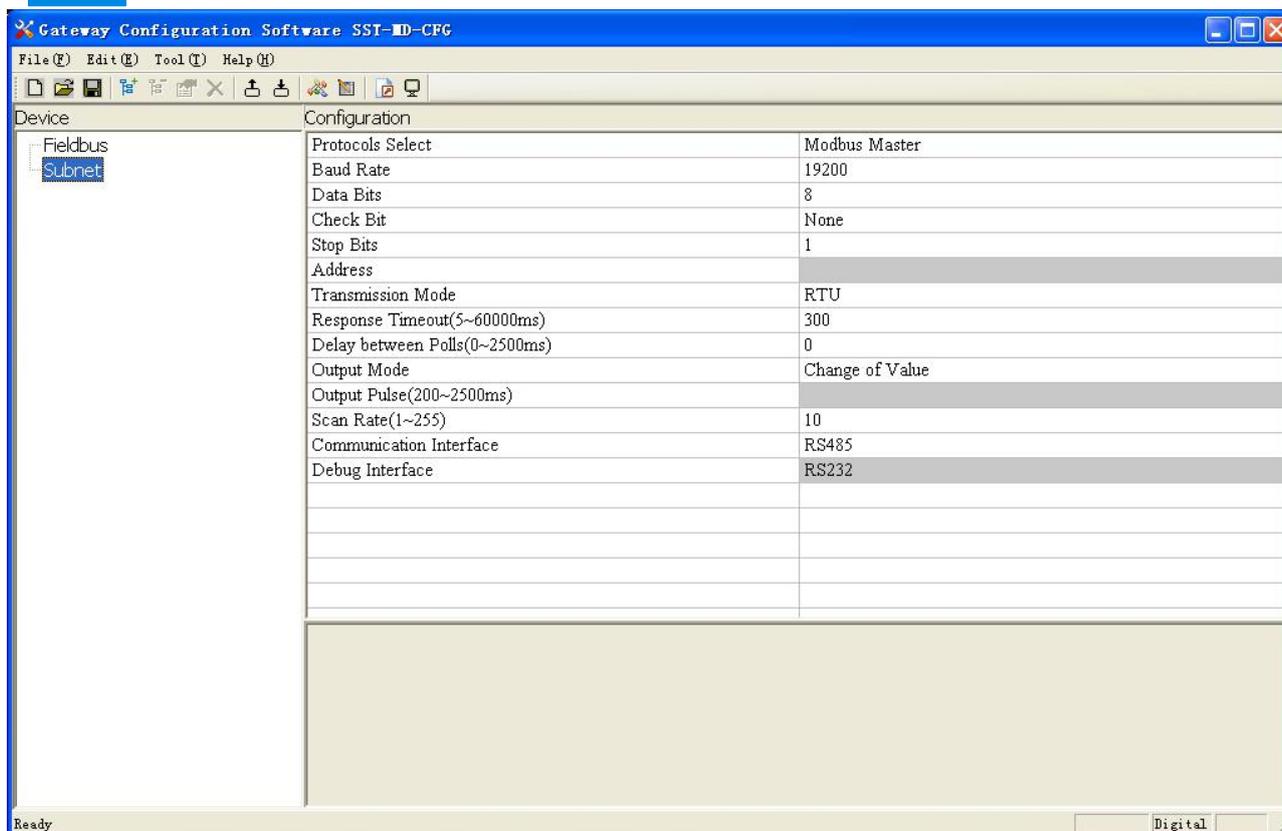
The protocol type is Modbus Master, and configurable parameters are shown as follows:

Modbus communication baud rate, data bits, check bit, Stop bits, transmission mode, response timeout, delay between polls, output mode, scan rate and communication interface.

Interface of configuration view is shown as follow:

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Baud Rate: There are 300, 600, 1200, 2400, 9600, 19200, 38400, 57600 and 115200bps to be selected.

Data Bits: 8 bits

Check Bit: There are none, odd, even, mark and space to be selected.

Stop Bits: There are 1 and 2 to be selected.

Transmission Mode: There are RTU and ASCII to be selected.

Response Timeout: After the Modbus master sending commands, the time waiting for response from the slaves, the range is 300~60000ms.

Delay between Polls: After a command of Modbus having been sent and having received correct response, the time before next command being sent, the range is: 0 ~ 2500ms.

Output Mode: There are three types of output command: Cycle, Forbidden and Change of Value.

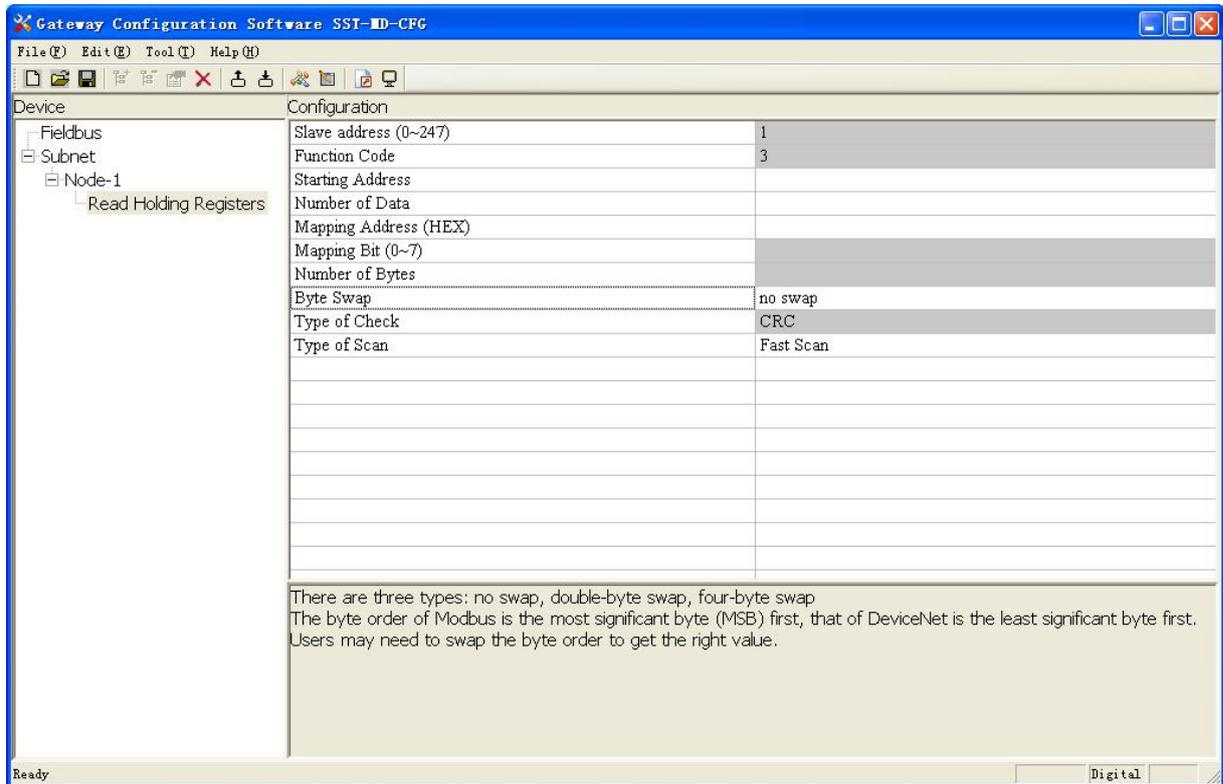
Cycle: same as Modbus read command output way, start scan output according to scan rate

Forbidden: disable output of Modbus write command

Change of Value: when the output data change, the write command will be sent and stop to output when receiving the right response

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Starting Address: the starting address of the register/switching value/coil in Modbus slave device, the range of the parameter value is 0 to 65535.

Number of Data: The number of register/switching value/coil of Modbus slave.

Mapping address (HEX): The starting address of data in memory buffer of the module

The address range of data mapping in the module memory:

Read command: 0x0002 ~ 0x009F

Write command: 0x4000 ~ 0x406F

When write commands are used as local data exchange, they also can use: 0x0000 ~ 0x006F

Mapping Bit (0 ~ 7): For the bit operation commands, the position of start-bit in a byte, and the range is: 0 ~ 7.

Byte Swap: There are three kinds of types: "no swap", "double-byte swap" and "four-byte swap". Modbus byte sequence is that the Most Significant Byte (MSB) has the highest priority. DeviceNet byte sequence is that the Least Significant Byte (LSB) has the highest priority. For example, if a Modbus register value is 0x1234, the DeviceNet value is 0x3412 when not using "double-byte swap". Users should exchange the sequence of bytes so as to get right value. Usually, selecting "double-byte swap" is OK. If users use two continuous Modbus registers to

express a four-byte value, they can use "four-byte swap", maybe it will achieve.

Type of Scan: There are two ways, fast scan and slow scan. Every Modbus command can be set to fast scan or slow scan. The gateway will send Modbus command according to the "Scan Rate". Slow scan is fast scan multiples scan rate. (Configure it in the interface of subnet configuration interface)

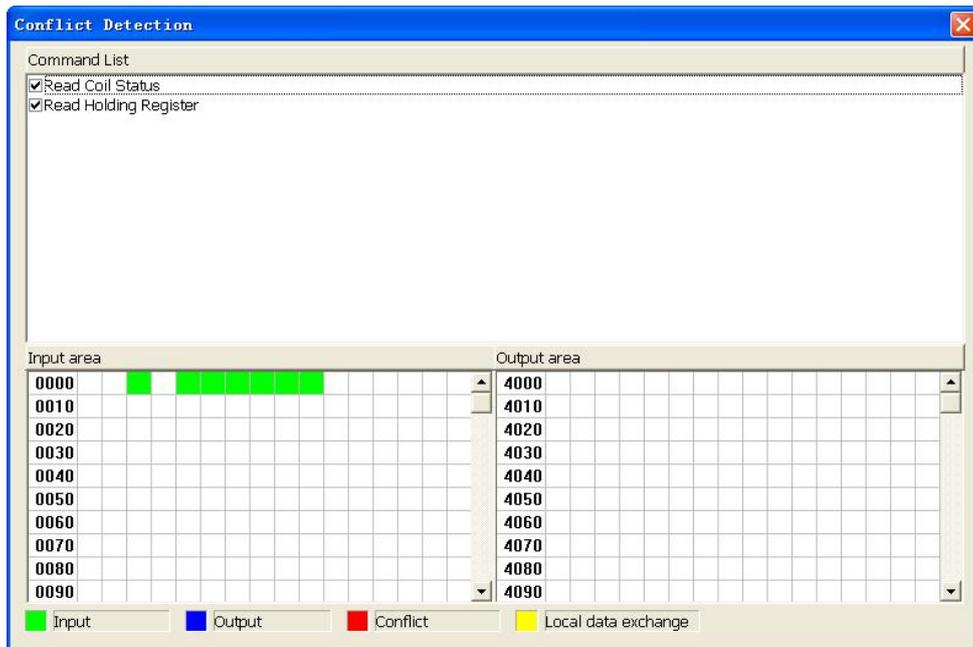
5.4.5 Comment Interface

Notes view displays the explanation of configuration items. For example the notes that show how to configure the starting address of memory mapping is shown as follow:

Data mapping in the module memory address range
 Read command: 0x0002~0x009F
 Write command: 0x4000~0x406F
 Input 0 for Modbus address mapping command status, if N number of the command does not respond, the byte is N
 Input 1 for Modbus address mapping node status, if M number of the command does not respond, the byte is M
 Write command as a local data exchange can also use the area : 0x0000~0x006F
 Users can also click on the "Calculate Mapping Address "to let the software calculate

5.5 Conflict Detection

For the detection of whether there is collision of "the starting address of memory mapping" or not. If there is collision then you can modify it quickly. The interface is shown as follow:



5.5.1 Operation of Command List

All the configuration commands can be shown at the command list. Each select box before command is used for checking the memory-mapping location of the command. Click on the command can select the check box, and in the memory-mapping area it can show the corresponding share of spatial location. Click on the command again will remove the selected box and it doesn't show the mapping location. The function can be used to conflict detect ion of memory-mapping area.



5.5.2 Operation of Memory Mapping Area

Memory mapping area is divided into two parts: input area and output area.

Input-mapping address: 0x0002 ~ 0x009F;

Output-mapping address: 0x4000 ~ 0x406F.

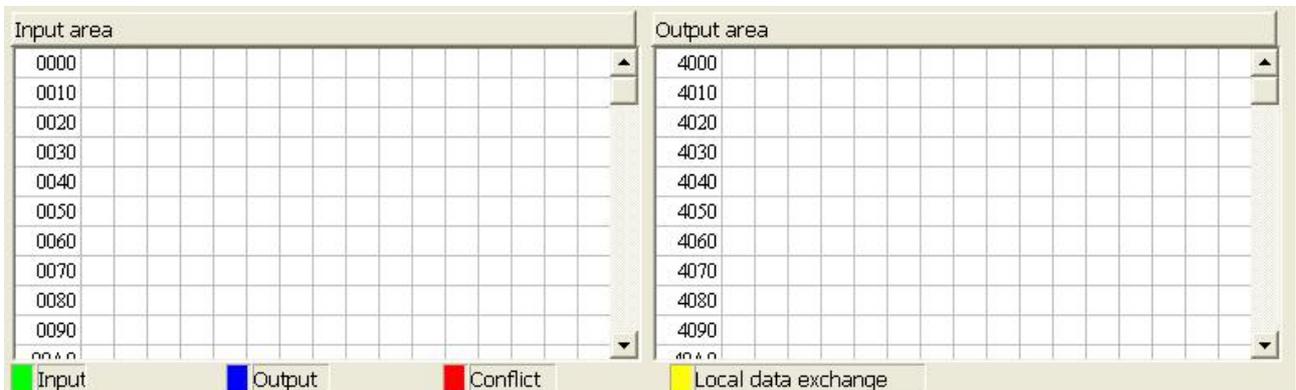
Each box represents a byte address.

Green: read command is shown in input mapping area, it will be in green without conflict.

Yellow: Write command: When address mapping area is located in input area, it will be in yellow without conflict;

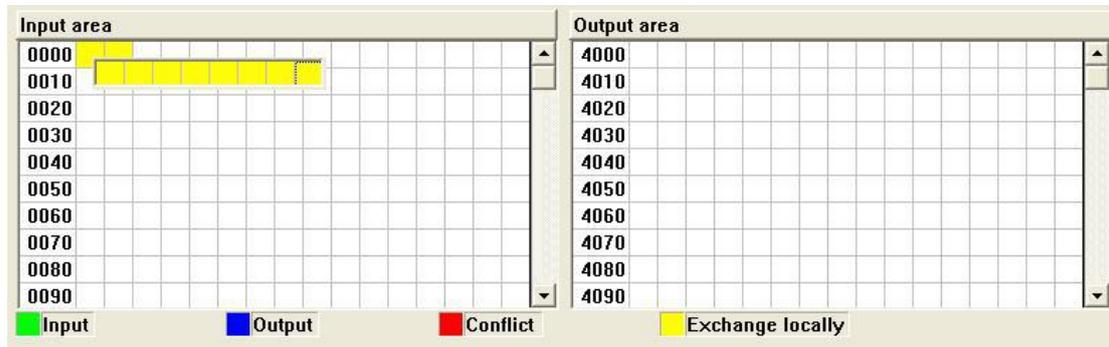
Blue: When address mapping area is located in output area, it will be in blue without conflict.

Red: In input area or output area, different command occupied on the same byte, this byte area will be in red.



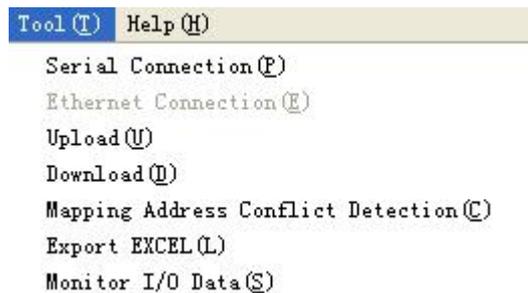
For bit operation commands, the meanings of all colors are also applicable.

Click on the input or output grid, whether the grid is occupied or not is shown as follows:



5.6 Hardware Communication

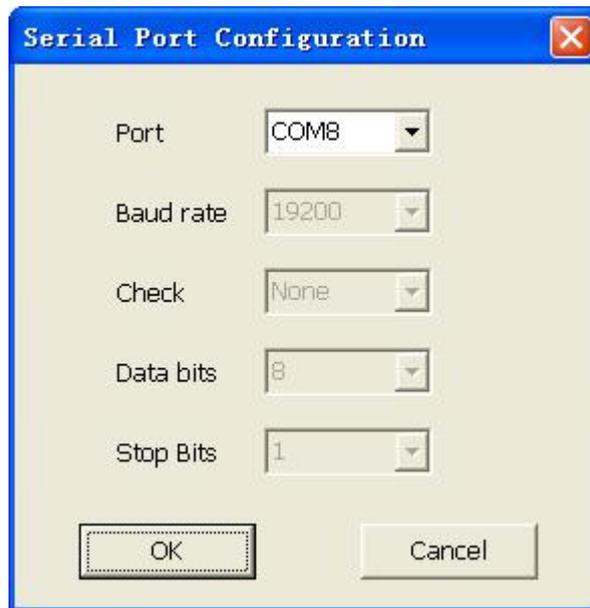
Hardware communications' menu items are shown as follow:



5.6.1 Serial Configuration

The software automatically scan the available serial port of system, and the available serial can be shown in serial list. After modifying the item, pressing "OK" to save your settings.

Note: Apart from the serial port, the other parameters are fixed values: 19200, None, 8, 1.



5.6.2 Upload Configuration

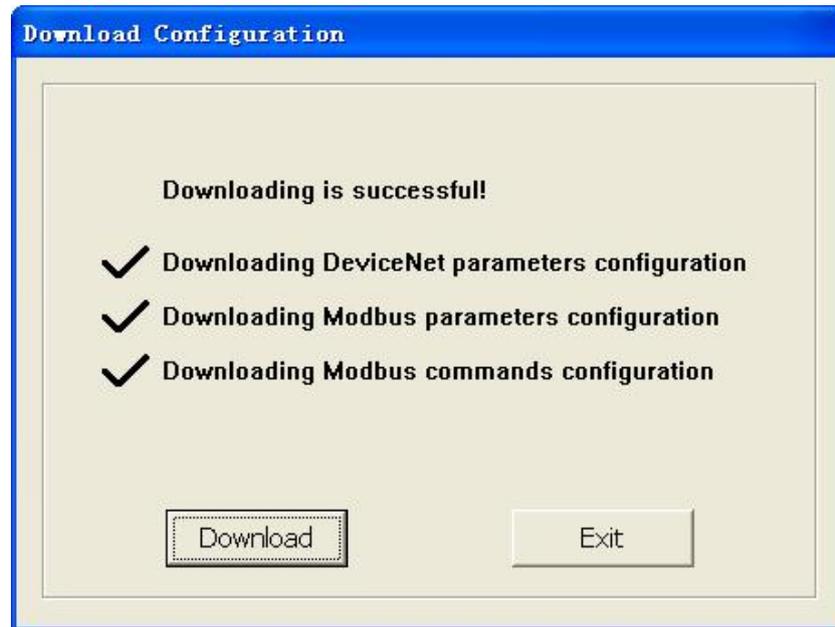
Choose upload configuration, upload the configuration from gateway to the software, the interface is shown as follows:



Note: Before uploading the configuration, please check whether the port is the available port.

5.6.3 Download Configuration

Choose download configuration, download the configuration from software to the gateway, the interface is shown as follows:



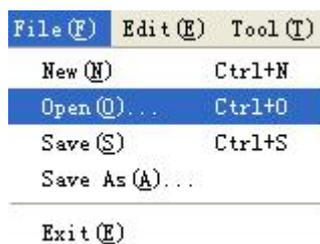
Note1: Before downloading the configuration, please check whether the port is the available port.

Note 2: Before downloading the configuration, make sure that all configurations has been completed.

5.7 Load and Save Configuration

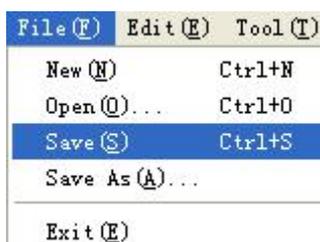
5.7.1 Load Configuration Project

Select "Open", you can open the configuration project that you have saved.



5.7.2 Save Configuration Project

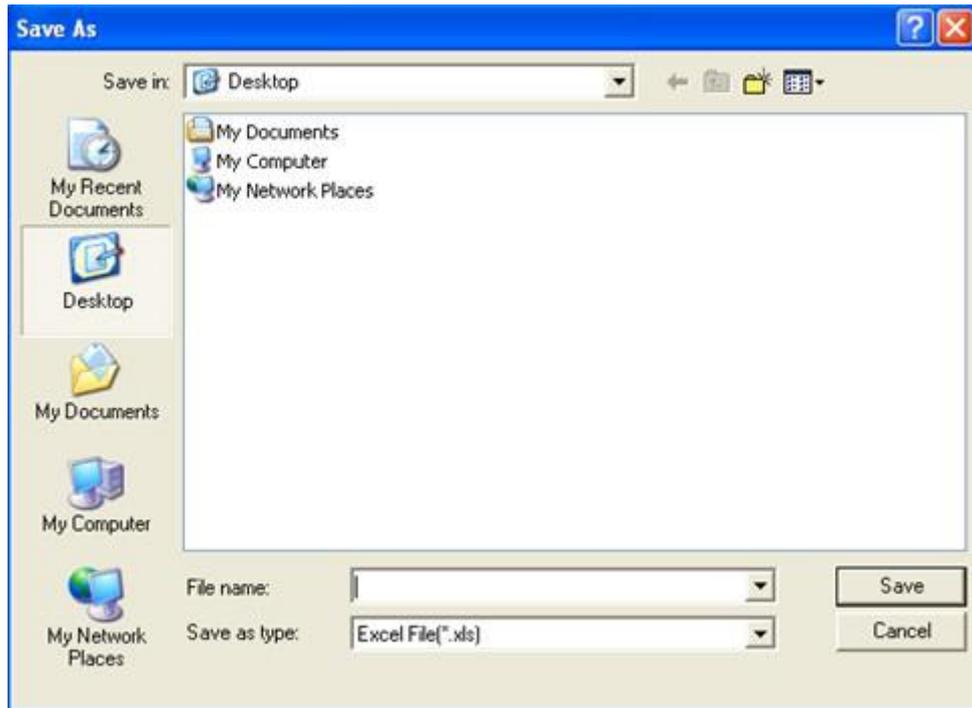
Select "Save" or "Save as", you can save the configuration project with chg as its extension.



5.8 Export Excel File

Excel document helps users to examine the configuration related.

Choose the icon , save the configuration as excel document and choose the right path.



Double-click to open the document, and it divided to three parts: "Command List", "Fieldbus", and "Subnet".

Subnet: Modbus subnet parameters. It is shown as follow:

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---------------|---------------|-----------|-----------|--------------|----------|---------------|-------------------|------------------|---------------------|------------|----------------|
| 1 | Serial number | Protocol type | Baud rate | Date bits | Parity check | Stop bit | Slave address | Transmission mode | Response timeout | Delay between polls | Pulseratio | Scanning ratio |
| 2 | 1 | Modbus master | 19200 | 8 | None | 1 | | RTU | 300 | 0 | | 10 |
| 3 | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |

Commands list: Modbus command list. It is shown as follow:

| | A | B | C | D | E | F | G | H | I |
|----|---------------|---------------|-----------------|------------------|-------------|-------------|-----------------|------------|----------------|
| 1 | Serial number | Slave address | Functional code | Starting address | Data number | Byte number | Mapping address | Bit offset | Scanning cycle |
| 2 | 1 | 3 | 3 | 1 | 2 | 10H | | | Fast scanning |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

Fieldbus: Fieldbus type and relevant parameters. It is shown as follow:

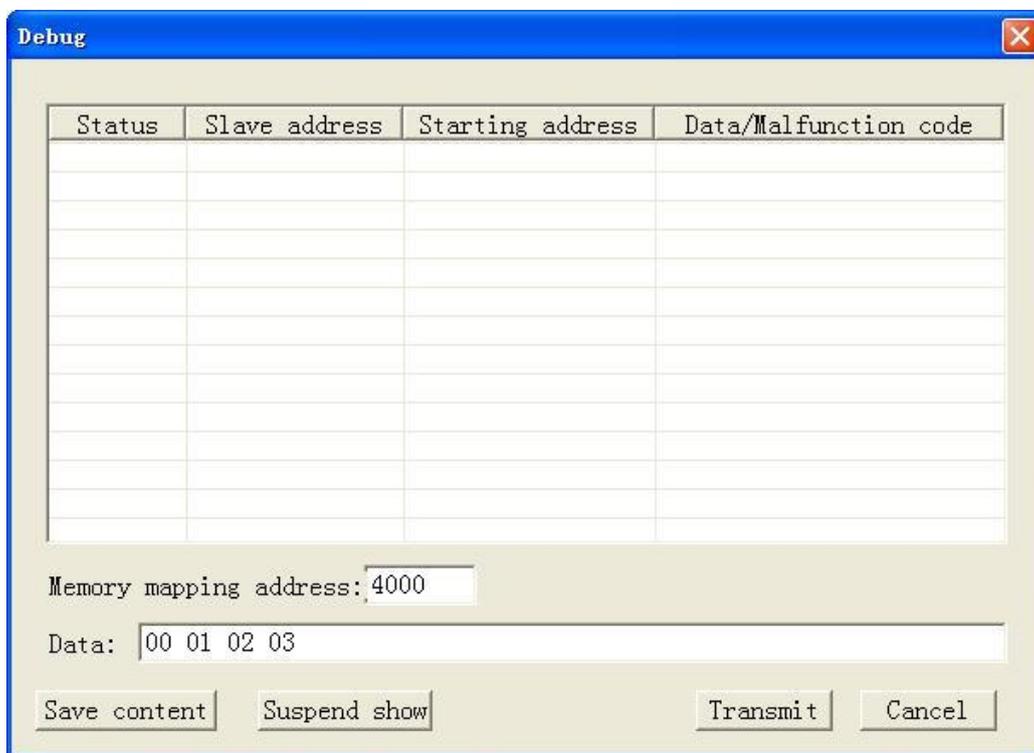
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| | A | B | C | D | E |
|---|---------------|---------|--------------------|------------|-------------|
| 1 | Protocol type | Address | Communication baud | Input byte | Output byte |
| 2 | DeviceNet | 5 | 125K | 64 | 112 |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |

5.9 Monitor I/O Data

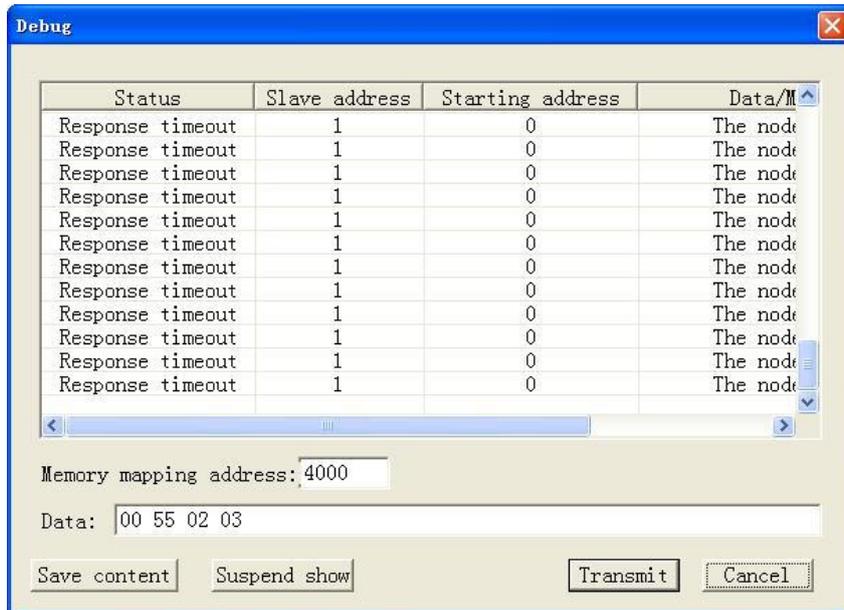
The function is for debugging Modbus network communications, the interface is shown as follows:



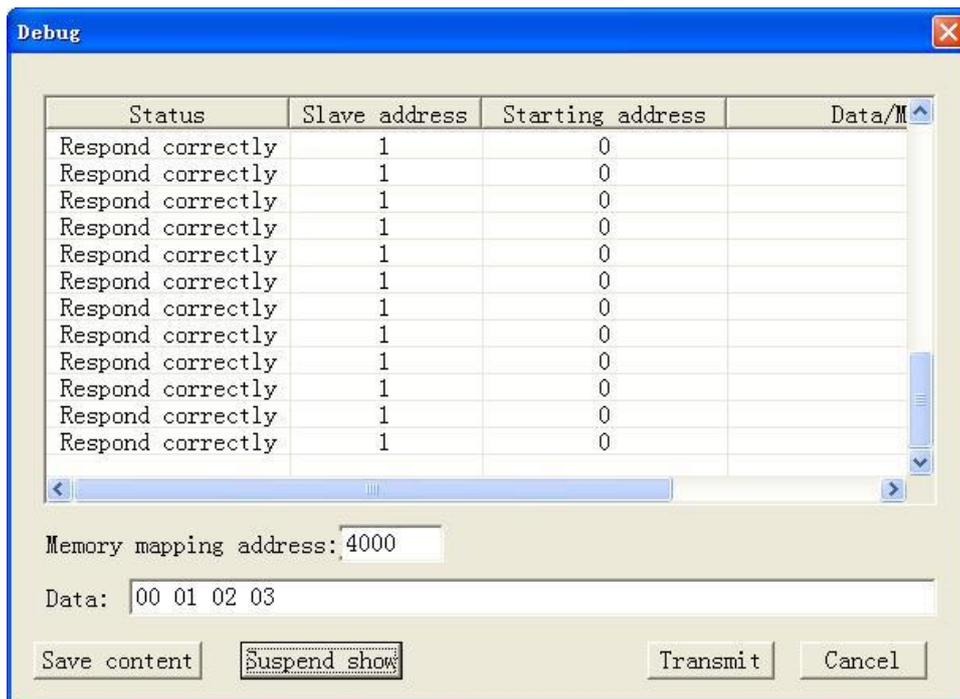
Memory mapping address: Starting address of data writing into the gateway memory

Data: Data writing into the gateway

When Modbus slave has no response or response timeout:



When Modbus responses are right:

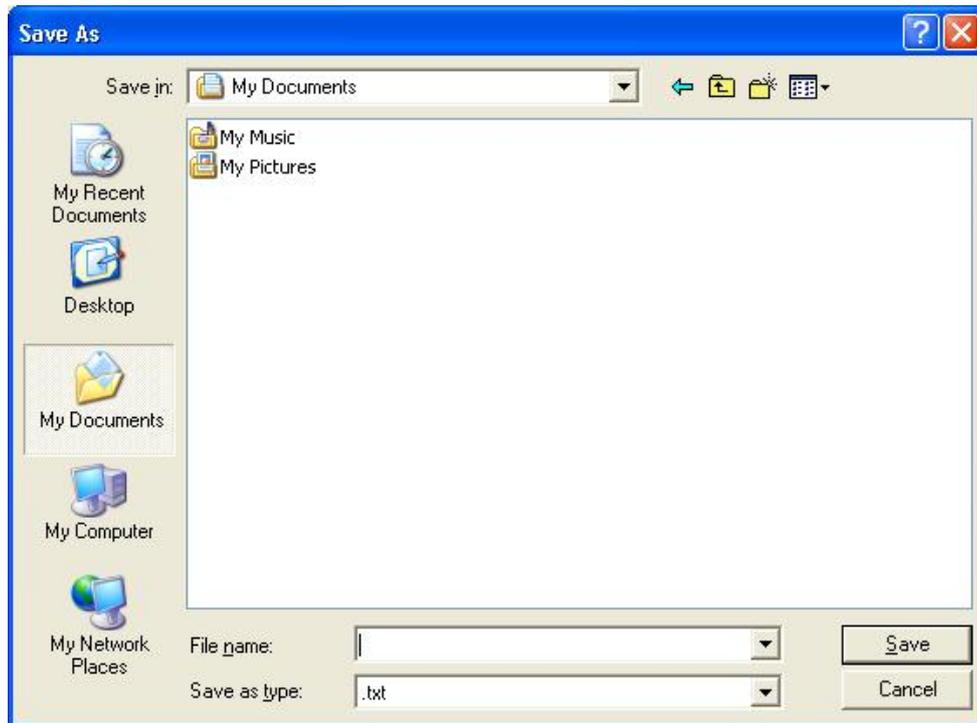


After filling the "Memory mapping address" and "Data" rightly, users can click on "Transmit" button to transmit the packet.

User clicks on the "Save content" button can save the received data to a computer's hard disk.

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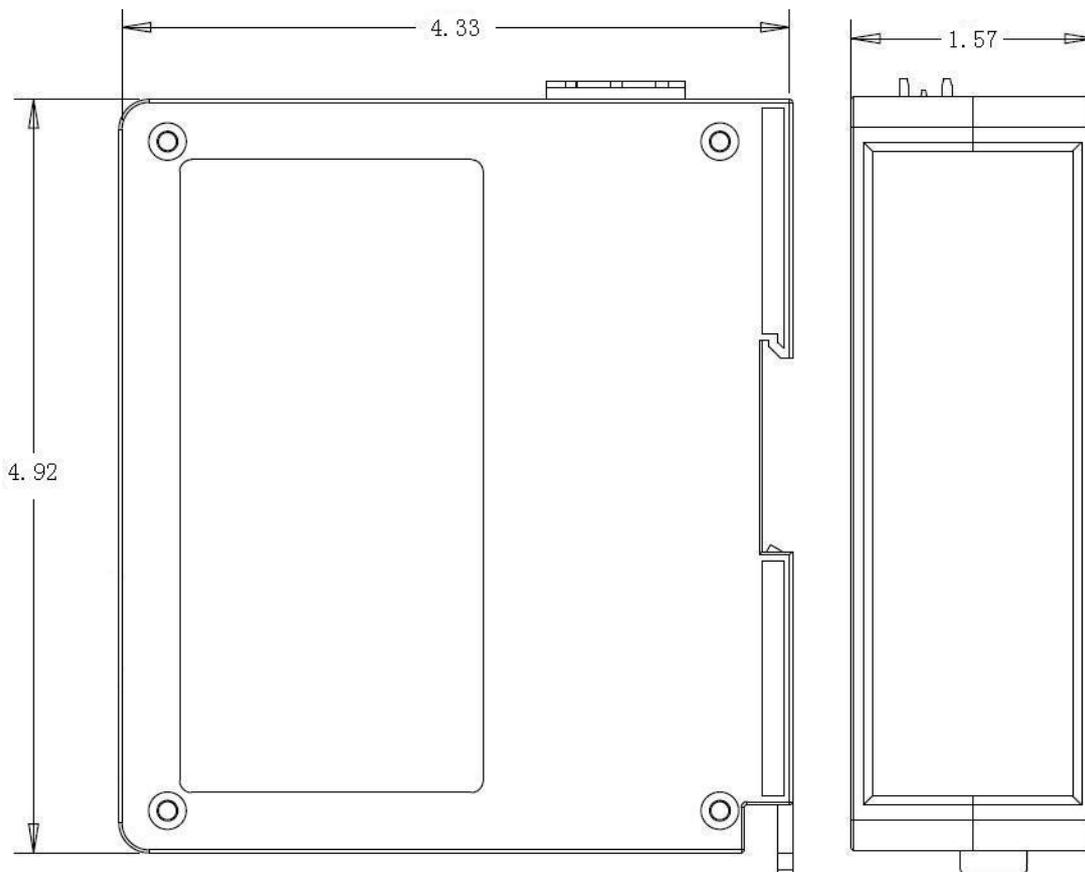
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6 Installation

6.1 Machine Dimension

Size: 1.57 in (width)*4.92 in (height)*4.33 in (depth)

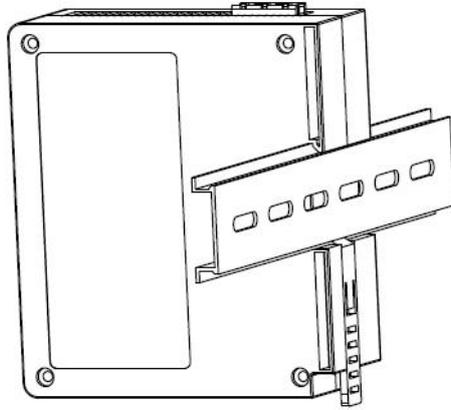


6.2 Installation

35mm DIN rail installation

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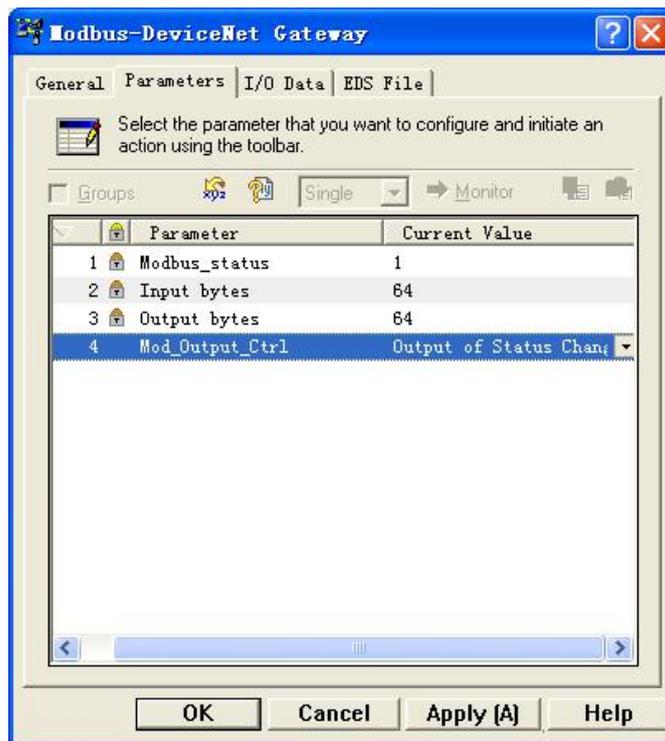
7 Instructions of DeviceNet I/O and parameters

7.1 I/O Configuration

DeviceNet input-bytes could be configured as 8 bytes, 16 bytes, 32 bytes, 64 bytes, 96 bytes, 128 bytes or 160 bytes.

DeviceNet output-bytes could be configured as 8 bytes, 16 bytes, 32 bytes, 64 bytes, 96 bytes and 112 bytes.

7.2 DeviceNet Parameters



Modbus_Status: The value shows the status of Modbus communications. If it keeps zero, the Modbus communication is OK. If it is a non-zero value, the communication of the command is failed.

Input bytes: Number of DeviceNet I/O input bytes

Output bytes: Number of DeviceNet I/O output bytes

The parameters of input bytes and output bytes must be the same with the numbers of input/output bytes in

DeviceNet master scanning list of RSNetWorx and so on, or the connection can't be established.

Mod_Output_Ctrl: Modbus output control

Continuous Output

Disable Output

Output of Status Change: When the network output data has changed, Modbus commands can be sent.

Note: If the output mode is “Disable Output”, though it has configured Modbus output commands, the gateway won't send Modbus output commands.

To ensure securities of output-data, if PLC hasn't effective output-data (For example, PLC in programming mode or DeviceNet device has not been connected), Modbus output commands will not be sent.

This parameter also could be modified through Modbus setting in SST-MD-CFG.

7.3 DeviceNet Network Configuration Instructions

Users need to install the *.EDS file in the disc to DeviceNet configuration software, then you can configure GT200-DN-RS through network configuration software.

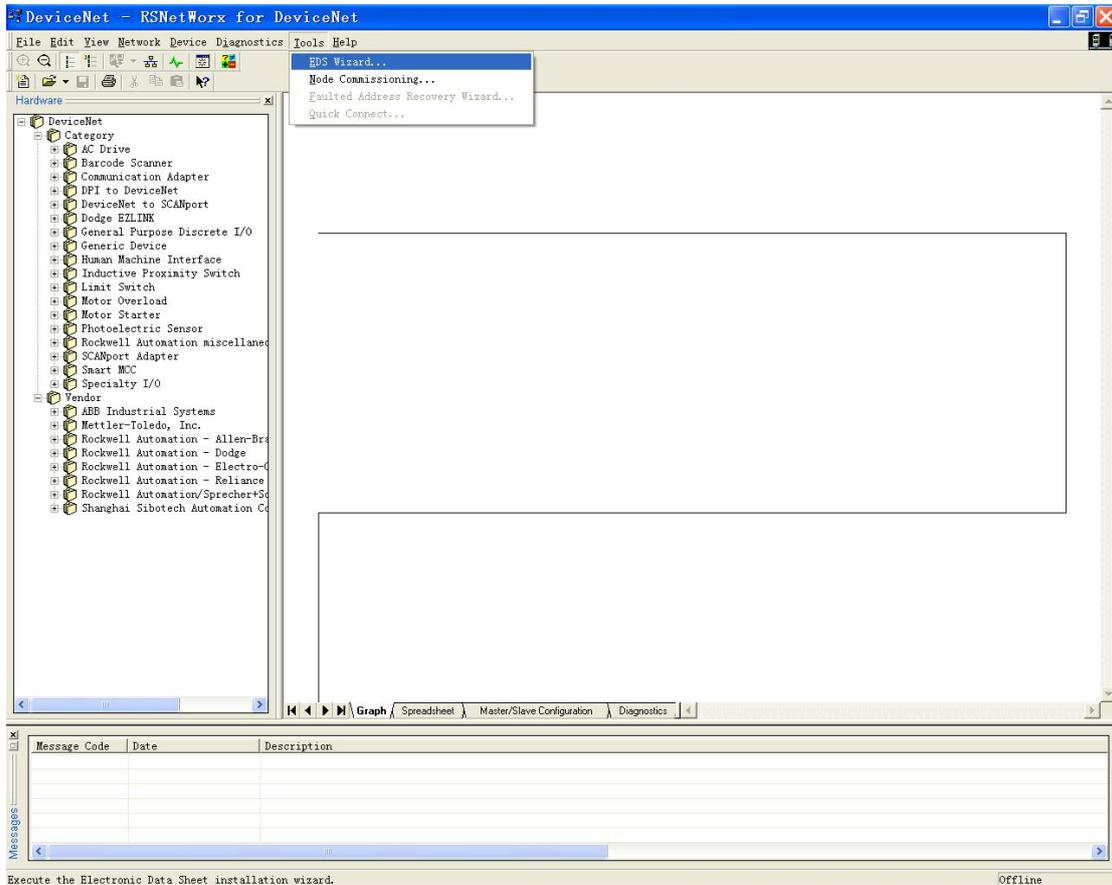
EDS (Electronic Data Sheet) is comprehensive description which supports DeviceNet network function. It equals to equipment's driver of Windows. Users need to install EDS files to DeviceNet network configuration software, such as RsNetWorx and so on, and then the configuration can be going on through network configuration software.

Here we take Rockwell's RsNetWorx for example (edition 4.12.0), and explain how to install. For further details, please refer to the network configuration software instructions.

Step1: Create a new network configuration profile

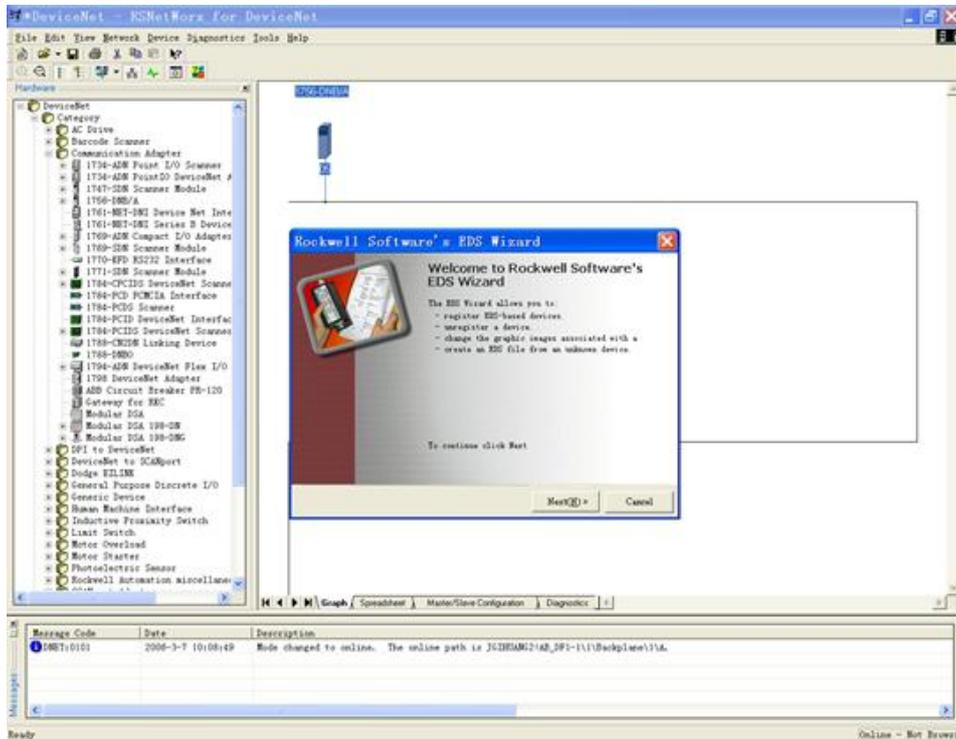
Step2: Select EDS operation guide, select “Tools” and then “EDS-Wizard”, you will see that:

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Execute the Electronic Data Sheet installation wizard.

Offline



Ready

Online - Not Brownout

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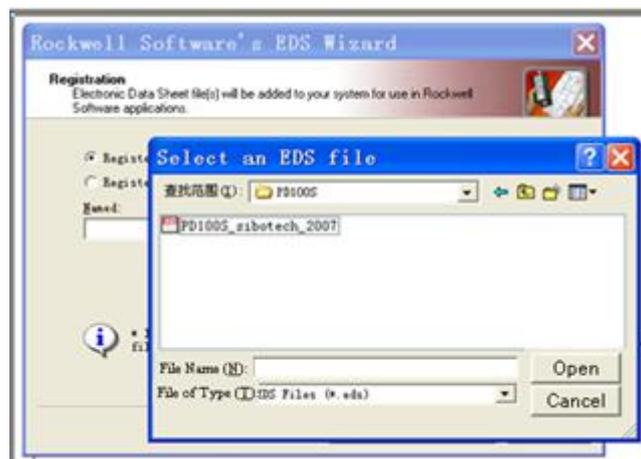
Step3: Select “Next”, as follow:



Step4: Register gateway GT200-DN-RS

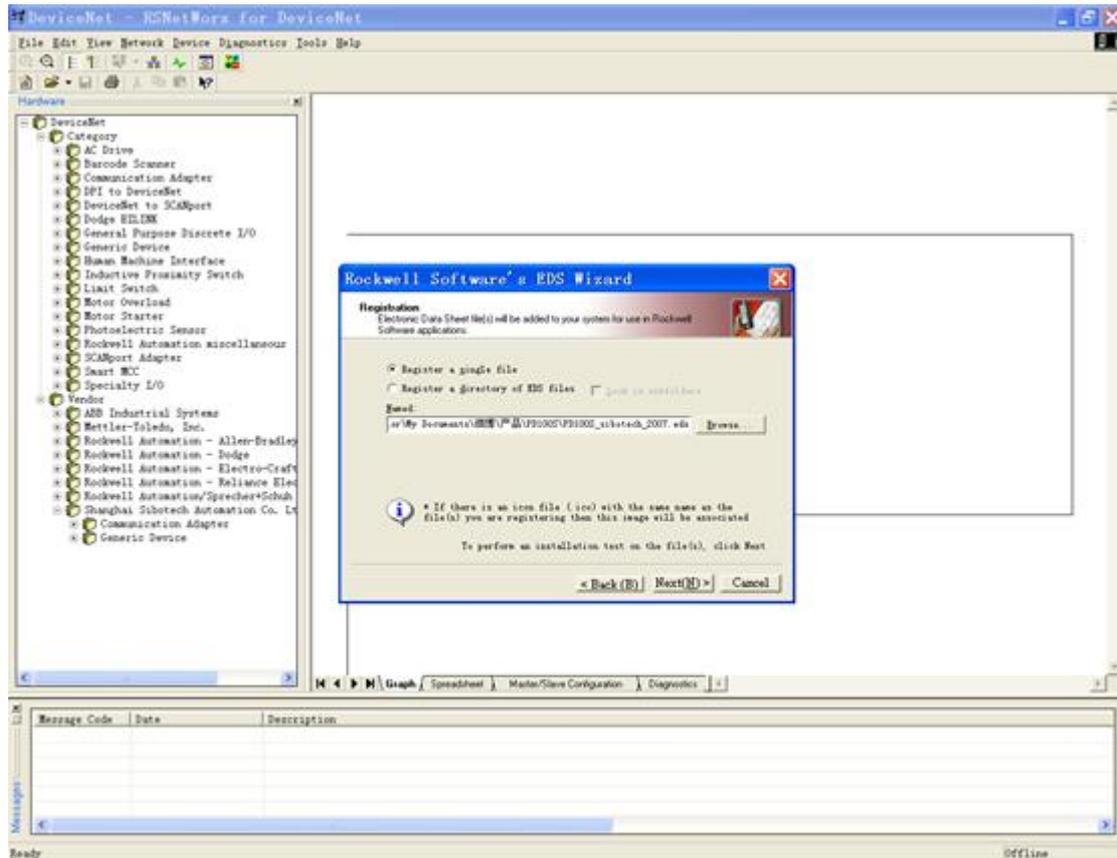
Shown as above, select “Register an EDS file”, as follow:

Please register GT200-DN-RS.EDS file we provided, according to the place where you save EDS file, and select the file.



Step 5: Confirm register file you choose

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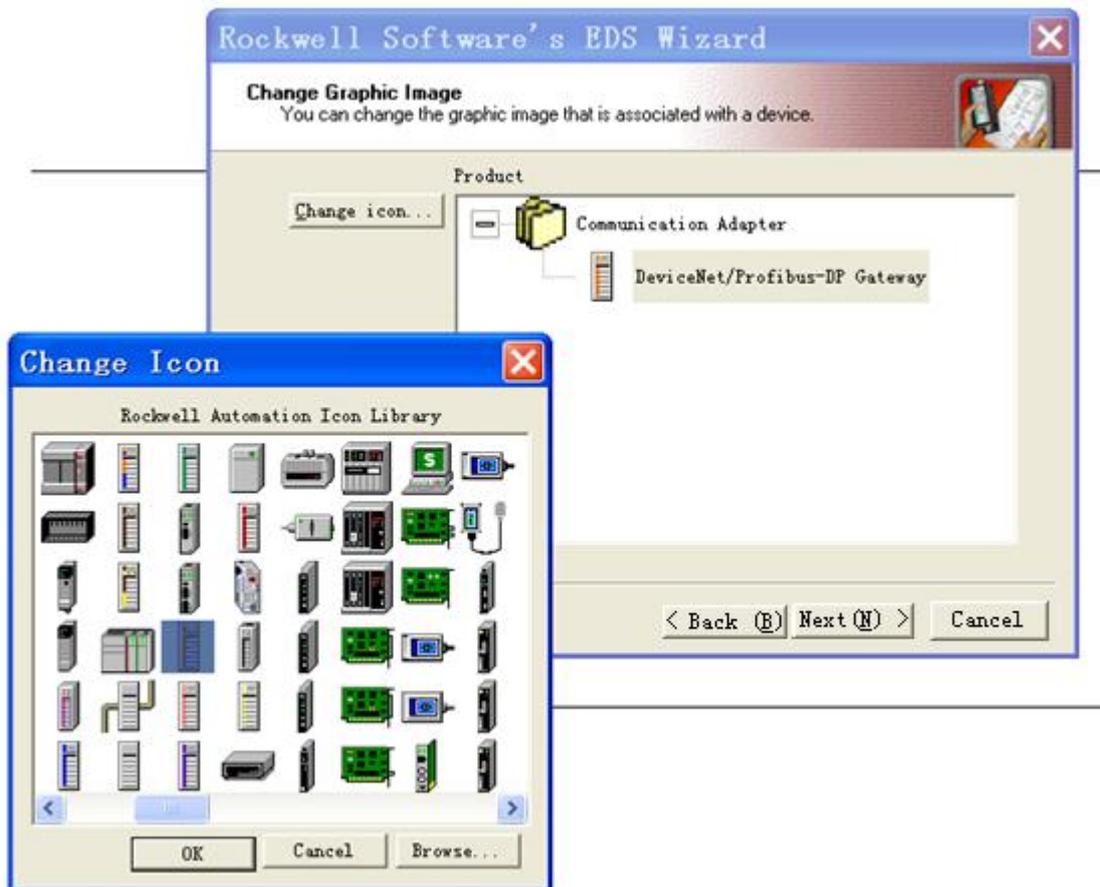
Click “Next” :



Step 6: Select the icon.

Following network configuration software will prompt you the equipment category in equipment storehouse, you may choose icon in this process.

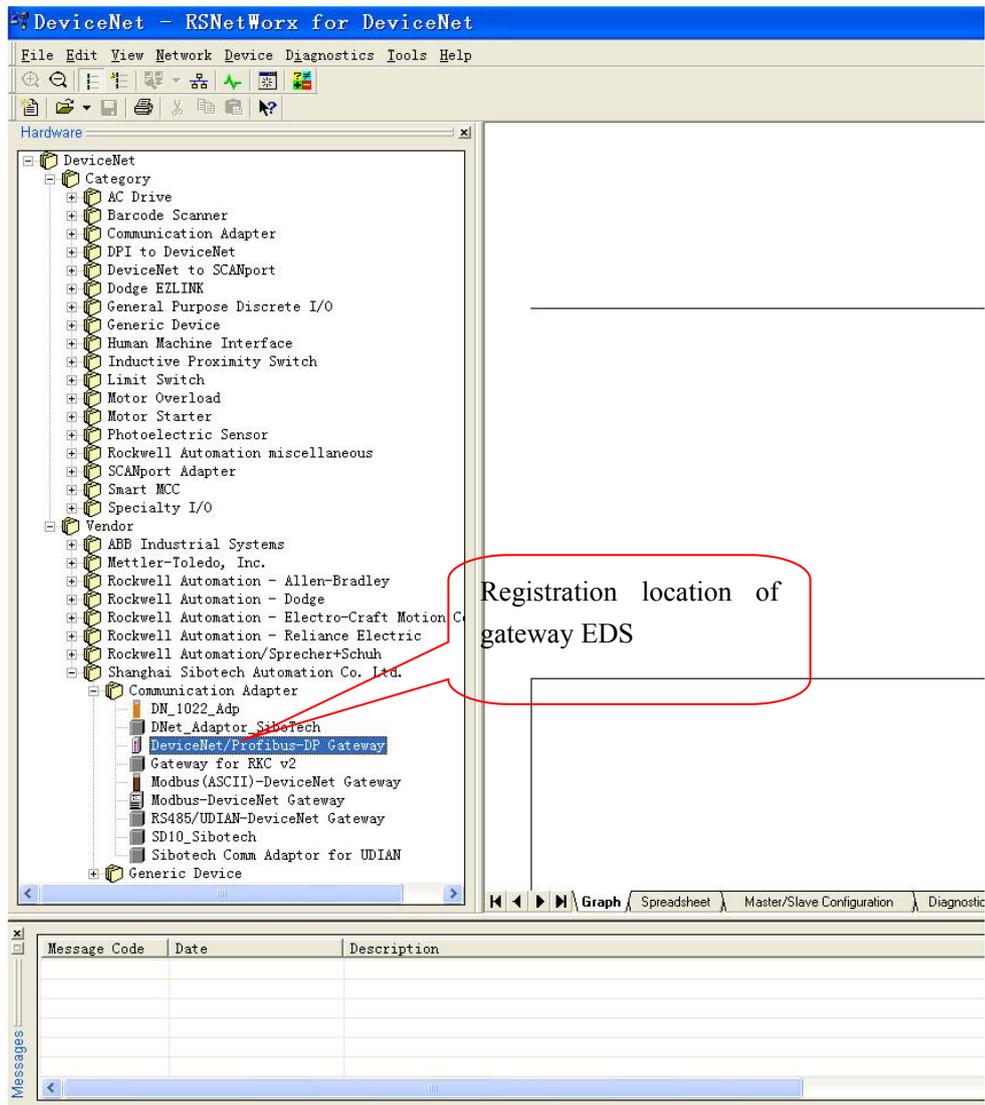
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Here, the device has successfully registered to the icon library location of configuration software's equipment storehouse.

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Then, you should connect gateway GT200-DN-RS to DeviceNet network, click on “SCAN” button of RsNetWorx, or select “Network-Online” in menu bar, your gateway will be scanned by system and identified exactly.