



# GW-2200 Series Quick Start

IPv6 version 1.0, Dec. 2020

## What's in the box?

The following items are included in the package:



GW-2200 Module x 1



Quick Start x1

## Related Information

- GW Series Product webpage:

[https://www.icpdas.com/en/product/guide+Industrial\\_Communication+Gateway+tGW\\_Modbus\\_Gateway#1183](https://www.icpdas.com/en/product/guide+Industrial_Communication+Gateway+tGW_Modbus_Gateway#1183)

- Document & Firmware:

<https://www.icpdas.com/en/download/index.php?nation=US&kind1=&model=&kw=GW-2200>

- NS-205/NS-205PSE/M-7000 Product webpage (optional):

[https://www.icpdas.com/en/product/guide+Industrial\\_Communication+Ethernet\\_Communication+Ethernet\\_Switch](https://www.icpdas.com/en/product/guide+Industrial_Communication+Ethernet_Communication+Ethernet_Switch)

[https://www.icpdas.com/en/product/guide+Remote\\_I\\_O\\_Module\\_and\\_Unit+RS-485\\_I\\_O\\_Modules+I-7000#467](https://www.icpdas.com/en/product/guide+Remote_I_O_Module_and_Unit+RS-485_I_O_Modules+I-7000#467)

# 1 Connecting the Power and Host PC

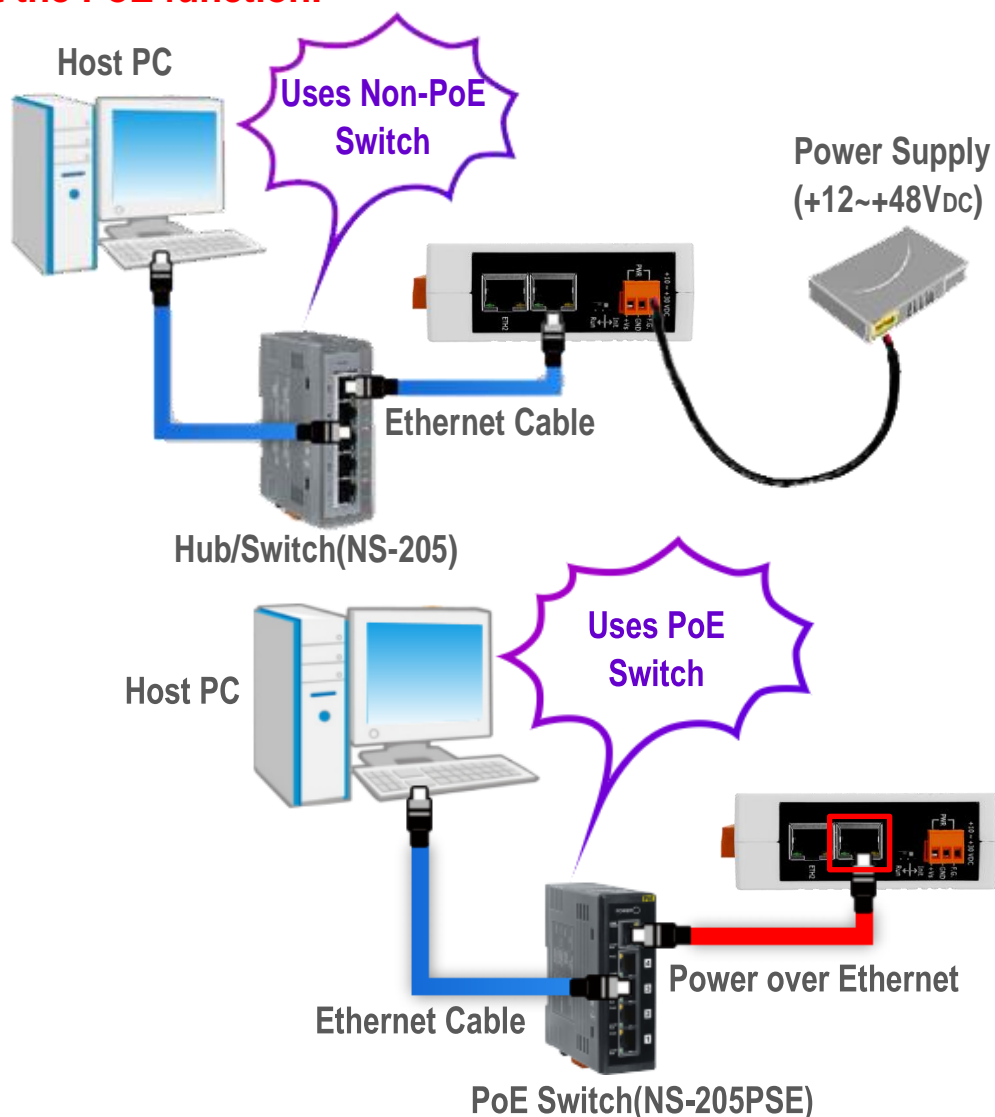
## 1) Make sure the network of your PC is functioning appropriately.

Make sure your Windows firewall and Anti-Virus firewall is set accurately (or you can temporarily disable the Windows firewall or Anti-Virus firewall). The “Search Servers” on Chapter 5 may not work if the settings are incorrect. (Please contact your system Administrator if you have problem)

## 2) Connect the GW-2200 and your PC to the same sub network or the same Ethernet switch.

## 3) Connect power supply (PoE or +12 to +48 V<sub>DC</sub>) to the GW-2200.

**⚠ Note : Please use the first RJ-45 jack (ETH1) to connect the PoE Switch when using the PoE to power. The second RJ-45 jack (ETH2) doesn't support the PoE function.**



# 2

## Installing Software on Your PC

Install eSearch Utility (it can be obtained from the web site as below):



**! Note: The version of the eSearch Utility must be v1.2.5 or later.**








































 [https://www.icpdas.com/en/product/guide+Software+Utility\\_Driver+eSearch\\_Utility](https://www.icpdas.com/en/product/guide+Software+Utility_Driver+eSearch_Utility)

# 3

## Wiring Notes

**Wiring Notes for RS-232/485/422 Interfaces:**

☒: The following RS-232 and RS-485 wiring deployment as an example.

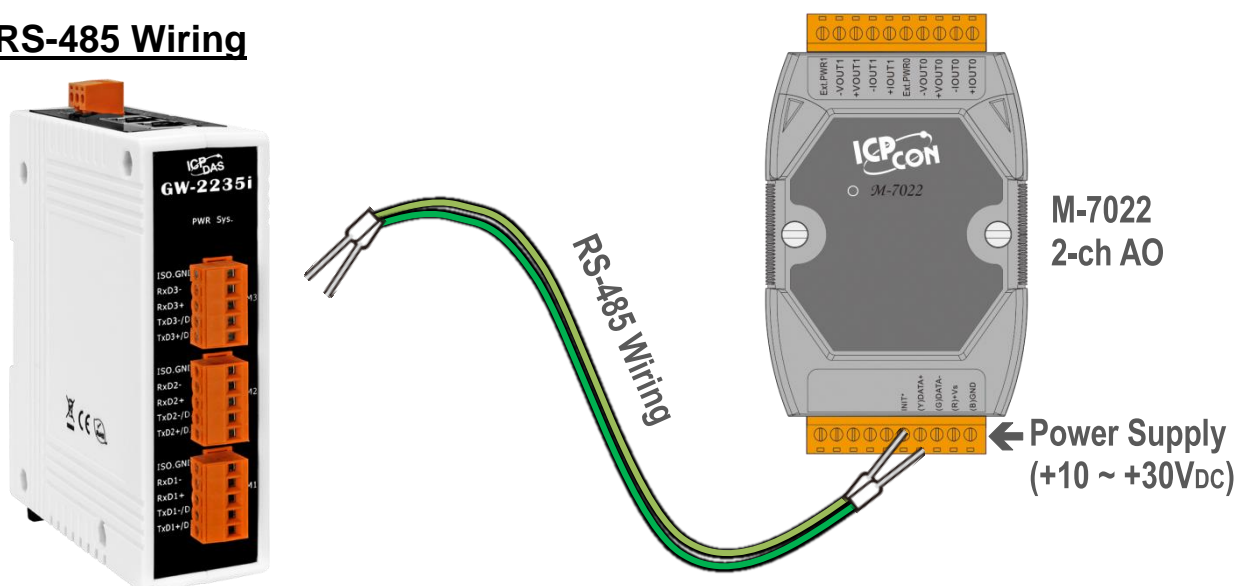
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# 4 Connecting the Modbus Devices

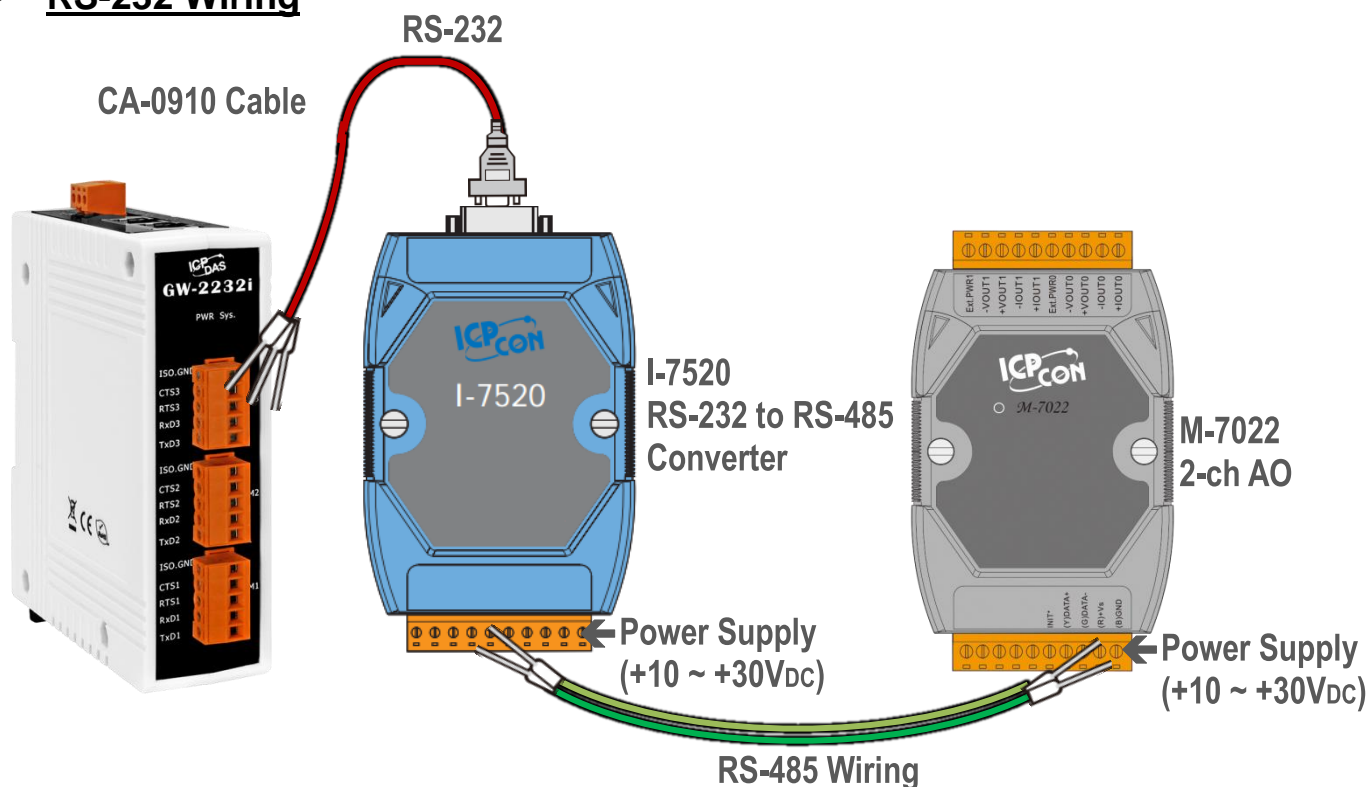
- 1) Connect the Modbus device (e.g., M-7022, optional) to the COM1 on GW-2200.
- 2) Supply power to the Modbus device (e.g., M-7022, Device ID:1).

**⚠ Note: The wiring deployment of the device and power supply may vary depends on your Modbus device.**

## ➤ RS-485 Wiring



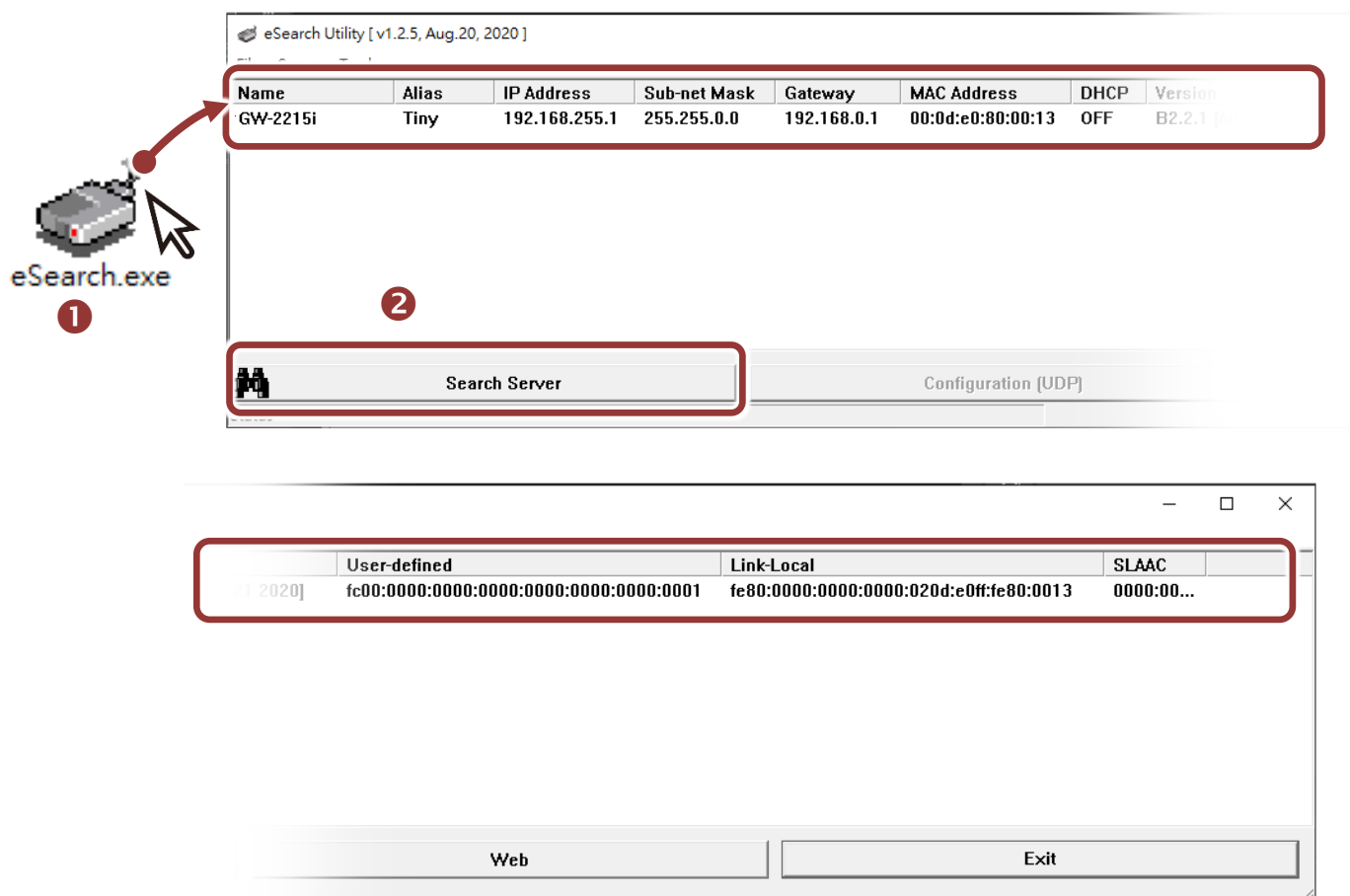
## ➤ RS-232 Wiring



# 5

## Configuring Network Settings

- 1) Double-click the eSearch Utility shortcut on the desktop.
- 2) Click the “**Search Servers**” to search your GW-2200.

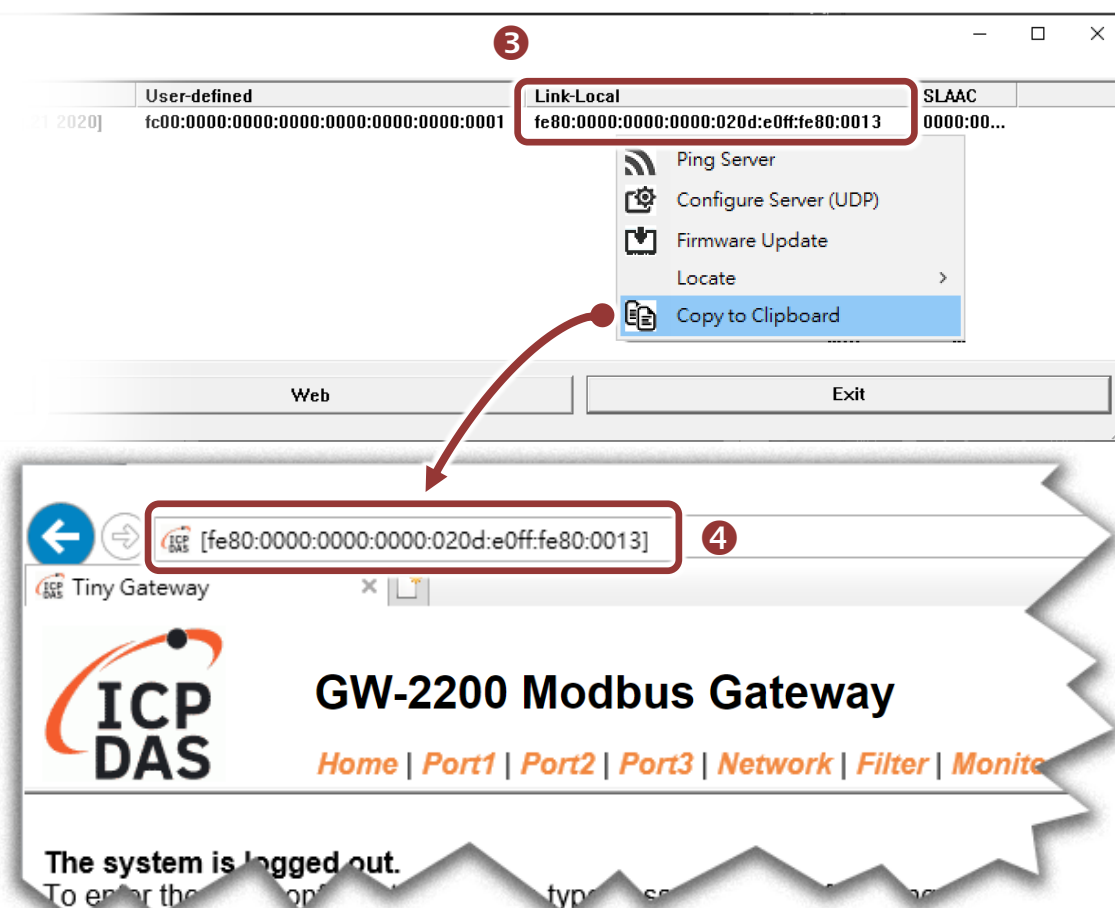


### Factory Default Settings of GW-2200:

IPv4 settings		Writable
IP Address	192.168.255.1	✓
Subnet Mask	255.255.0.0	✓
Gateway	192.168.0.1	✓
IPv6 settings		Writable
User-defined	fc00::1	✓
Link-Local	EUI-64 format	✗
SLAAC	Auto-Configure	✗

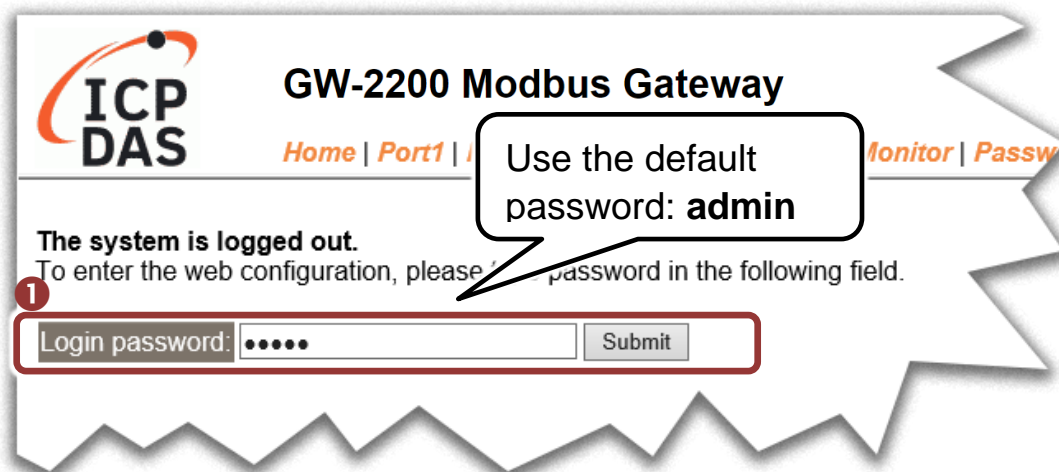
- 3) Right Click on the Link-Local field and click the **“Copy to Clipboard”** to copy the **“Link-Local address”** of the GW-2200 module.
- 4) Paste the **“Link-Local address”** of the GW-2200 module in the address bar of the browser and add the brackets, i.e., [Link-Local address].

**⚠ Note: The Web button only use the IPv4 address to access the Web Server.**



## 6 Configuring the Serial Port

- 1) Enter the password in the login password field and click **“Submit”**.



- 2) Click the “**Port1**” tab to display the “**Port1 Settings**” page.
  - 3) Select the appropriate **Baud Rate, Data Format and Modbus Protocol** (e.g., 19200, 8N2 and Modbus RTU) from the relevant drop down options.
- ⚠ Note: The settings of Baud Rate, Data Format or Modbus protocol will depend on your Modbus device.**
- 4) Click “**Submit**” to save your settings.

**ICP DAS** GW-2200 Modbus Gateway

Port 1 Settings

Port Settings	Current	Updated	Comment
Baud Rate	115200	19200 ( select )	bps (bits/second)
Data Size	8	8	bits/char
Parity	None	None	
Stop Bits	1	2	
Flow Control	None	None	
Remove Errors	FE BE	<input type="checkbox"/> Parity Error <input checked="" type="checkbox"/> Framing Error <input checked="" type="checkbox"/> Break Error	Clear RX FIFO data when serial errors.

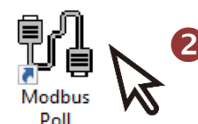
Modbus Settings	Current	Updated	Comment
Slave Timeout	300	300	10 - 65000 ms (step 10), Default: 300
Char Timeout	4	4	4 - 15 bytes, Default: 4
Silent Time	0	0	0 - 65000 ms (step 10), Default: 0
Protocol	Modbus RTU	Modbus RTU	
Virtual ID Range	1 - 247	1 to 247	Range: 1 to 247. Note: Gateway skips the Modbus messages if its ID is NOT in the specified range.
ID Offset	0		Offset: -246 to 246, No change=0. For example: Slave ID 1 to 247, offset 10, offset the Slave ID to 11 to 257.

Pair-Connection Settings (Master/Slave Mode)	Current	Updated	Comment
Application Mode	Server	Server	Server=Slave, Client=Master

**Submit**

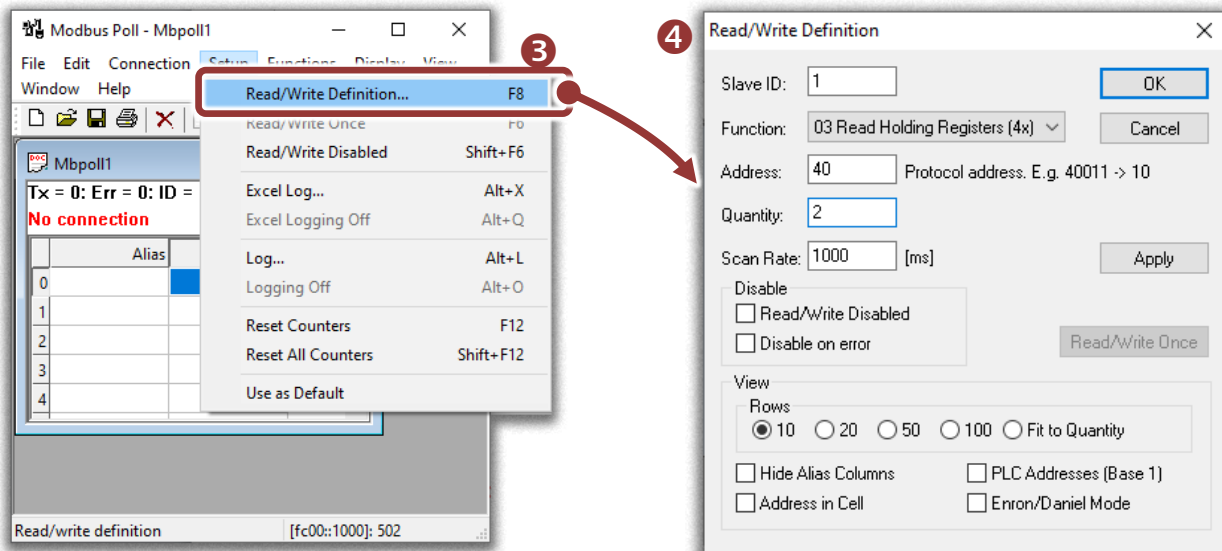
# 7 Self-Test

- 1) Download and install the “Modbus Poll” test program from the link as below: <https://www.modbustools.com/download.html>
- 2) Double-click the Modbus Poll shortcut to open.
- 3) Select the “Read/Write Definition...” from the “Setup” menu to open the “Read/Write Definition” dialog box.
- 4) Configure the settings for the Slave.



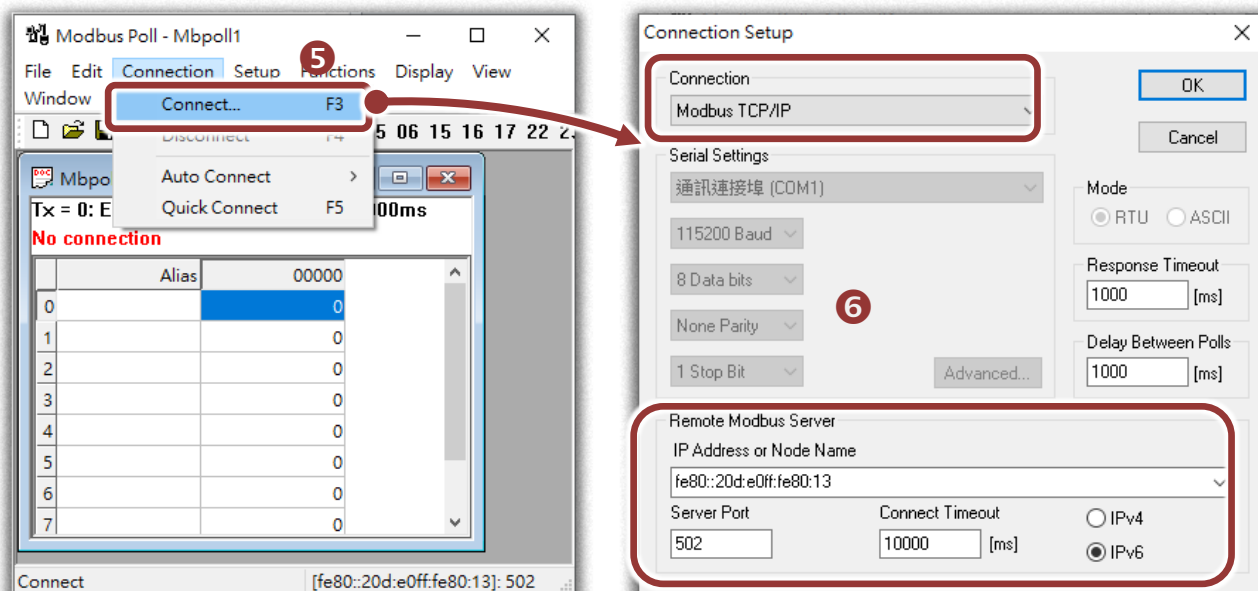
**⚠ Note: The settings of the Modbus Slave will depend on your Modbus device.**





5) Select the “Connect...” from the “Connection” menu to open the “Connection Setup” dialog box.

6) Configure the IPv6 address and TCP port (default : 502) of GW-2200 and click “OK” to connect the GW-2200 for testing.



7) If the response data is correct, it means the test is successful.

