GW-2500iM Series Quick Start

V1.0, May 2026

Packing List

In addition to this guide, the package includes the following items:



GW-2500iM Module x 1

Technical Support

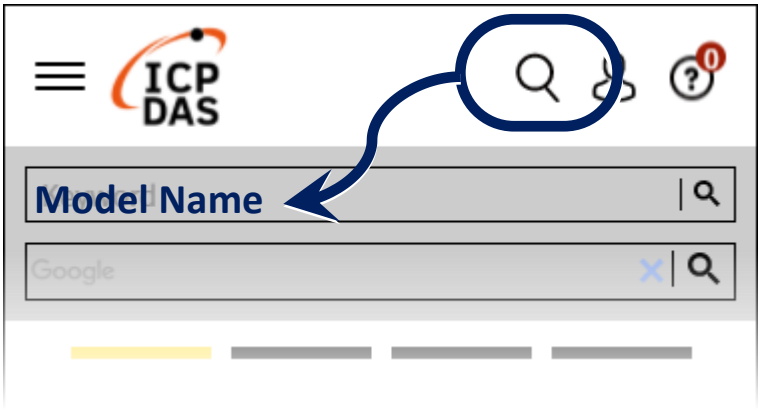
service@icpdas.com

www.icpdas.com

Resources

How to search for drivers, manuals and spec information on ICP DAS website.

- **For Mobile Web**



- **For Desktop Web**



1 Connecting the Power and Host PC

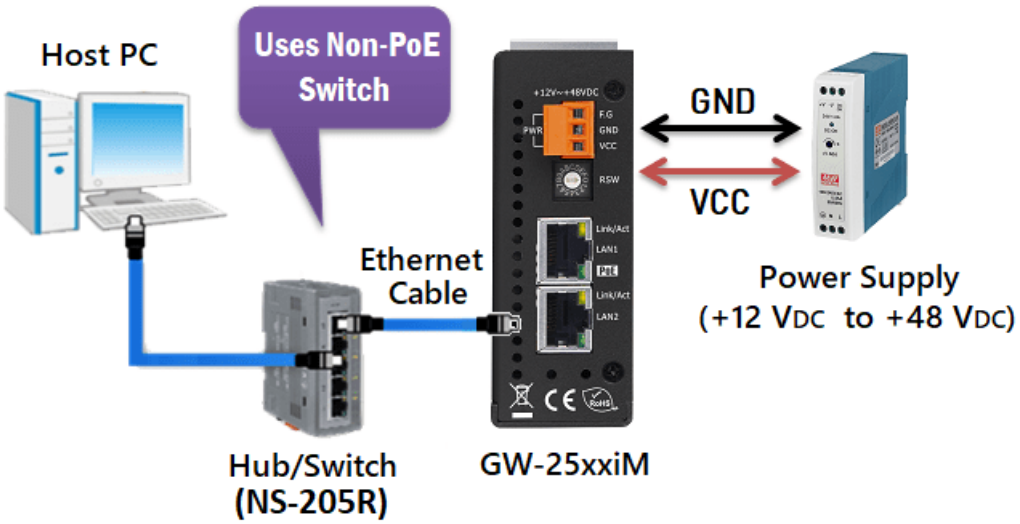
1) Make sure your PC has workable network settings.

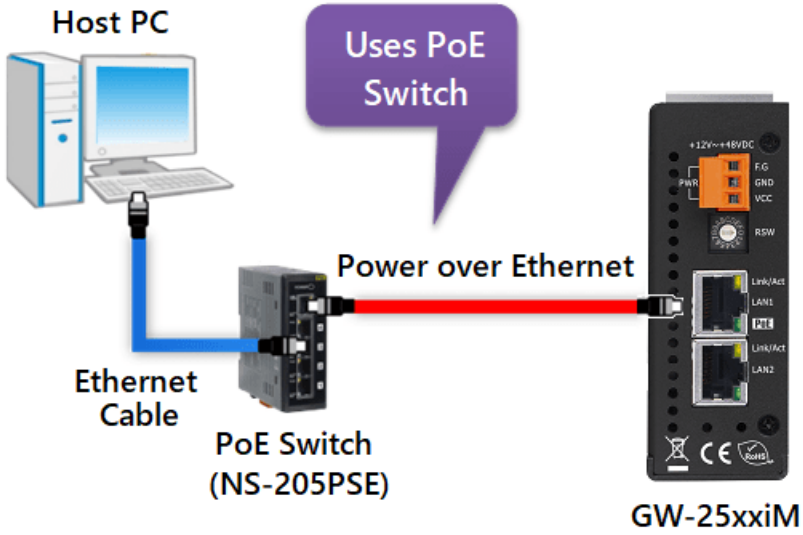
Disable or well configure your Windows firewall and Anti-Virus firewall first, else the “Search Servers” on Chapter 5 may not work. (Please contact with your system Administrator)

2) Connect both the GW-2500iM and your PC to the same sub network or the same Ethernet switch.

3) Supply power (PoE or +12~+48 VDC) to the GW-2500iM.

⚠ **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.**



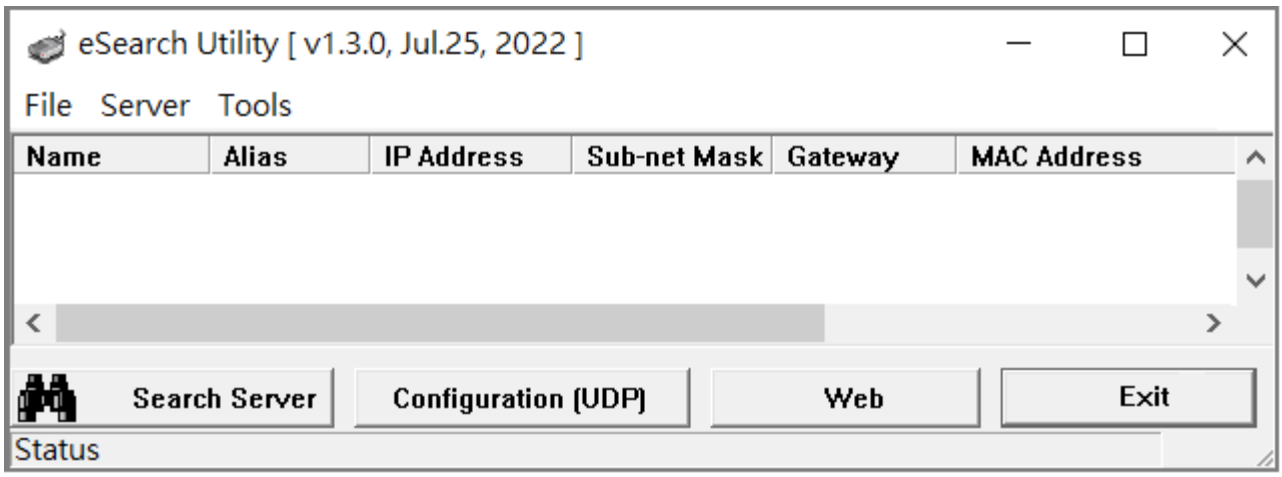


2 Installing Software on Your PC



Install eSearch Utility, which can be obtained from the web site:

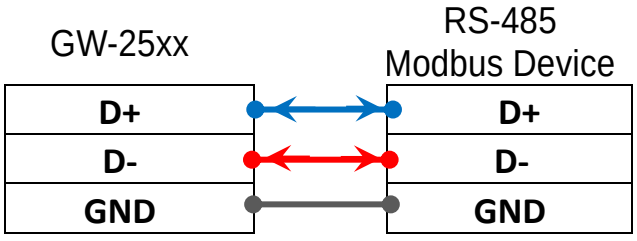
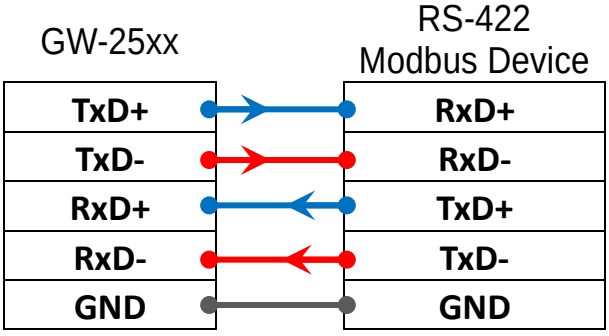
https://www.icpdas.com/en/download/index.php?nation=US&kind1=&model=&kw=esearch



3 Wiring Notes

Wiring Notes for RS-485/422 Interfaces:

☑ Here, the RS-485 and RS-422 wiring is used as an example.

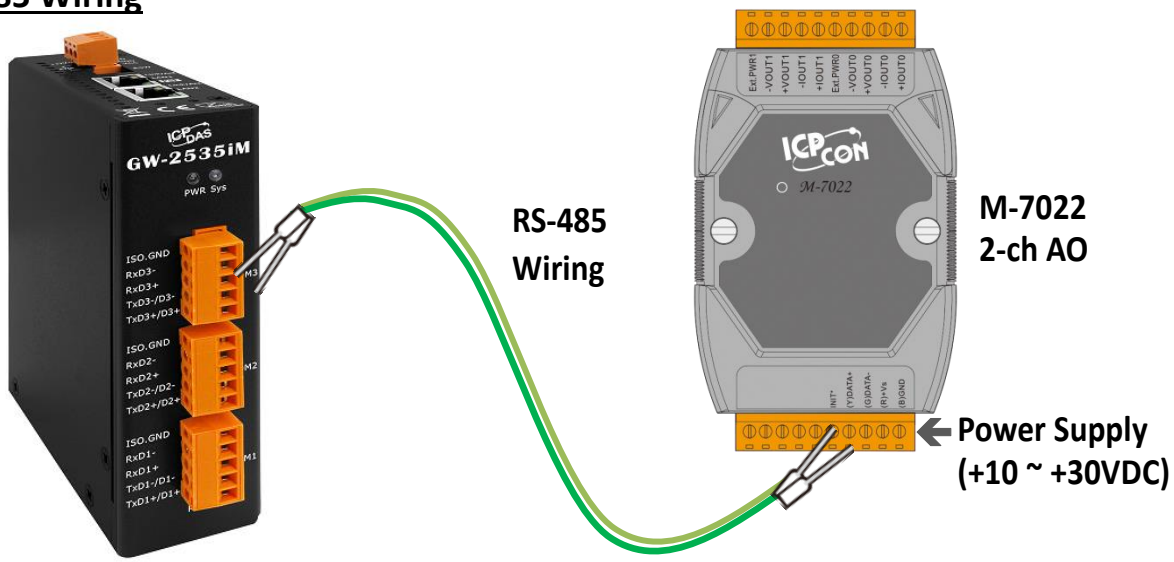
RS-485 Wiring	RS-422 Wiring
	

4 Connecting the Modbus Devices

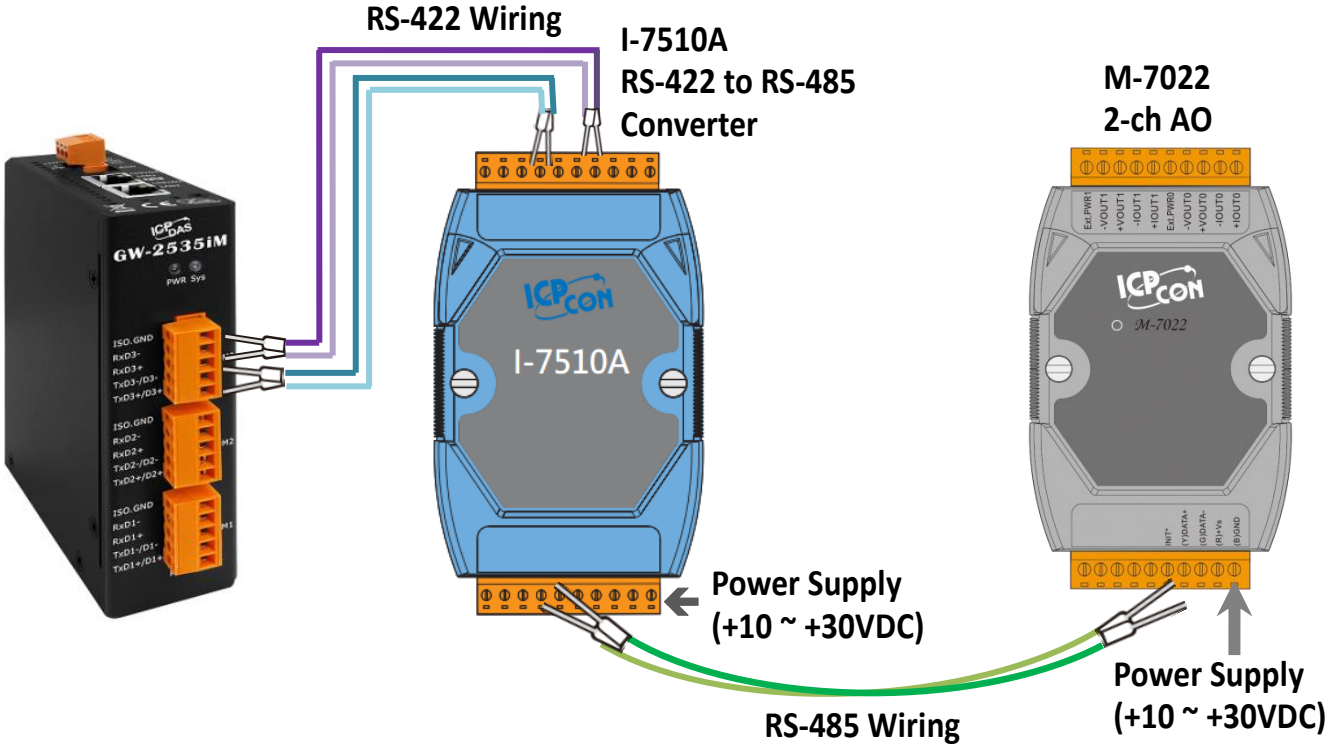
1) Connect the Modbus device (e.g., M-7022, optional) to the COM1 on GW-2500iM module.
2) Supply power to the Modbus device (e.g., M-7022, Device ID:1).

Note: The wiring and supply power method depends on your Modbus device.

➢ **RS-485 Wiring**



➢ **RS-422 Wiring**

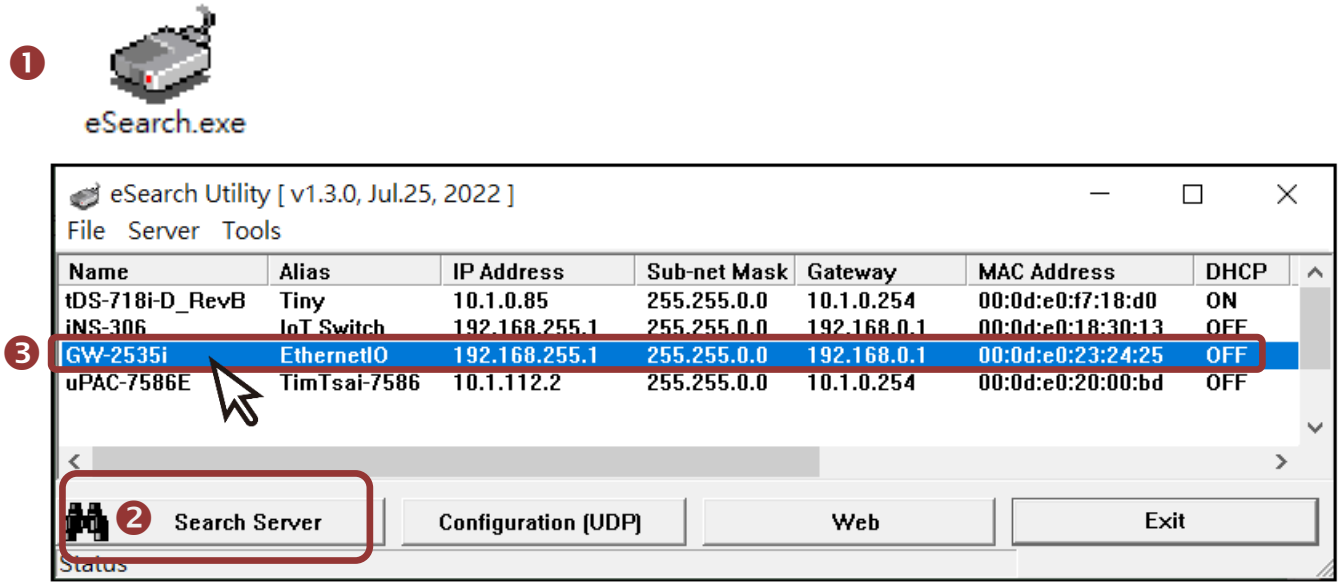


5 Configuring Network Settings

1) Double-click the eSearch Utility shortcut on the desktop.

2) Click the “Search Servers” to search your GW-2500iM.

3) Double-click the name of GW-2500iM to open the “Configure Server (UDP)” dialog box.

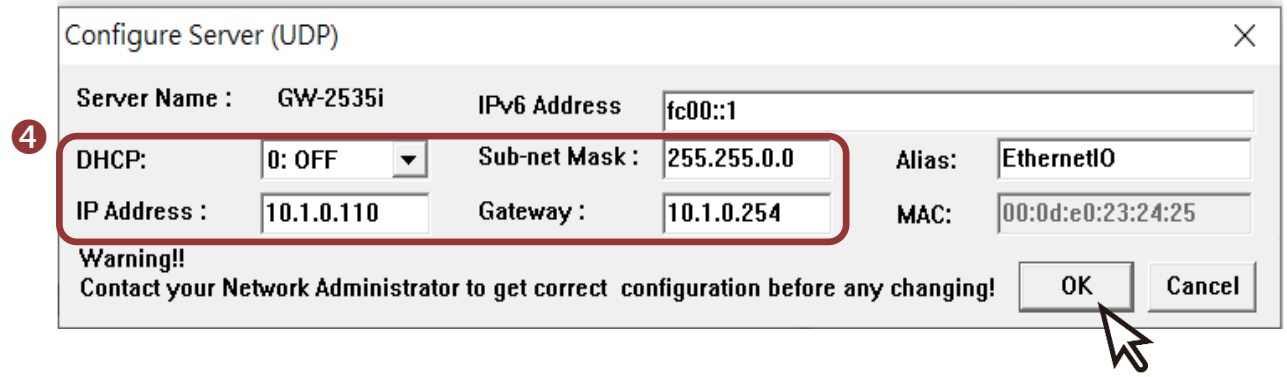


Default Settings of GW-2500iM:

IP Address	Subnet Mask	Gateway	User Name	Password
192.168.255.1	255.255.0.0	192.168.0.1	Admin	Admin

4) Contact your Network Administrator to obtain a correct network configuration (such as **IP/Mask/Gateway**). **Enter the network settings** and click **“OK”**.

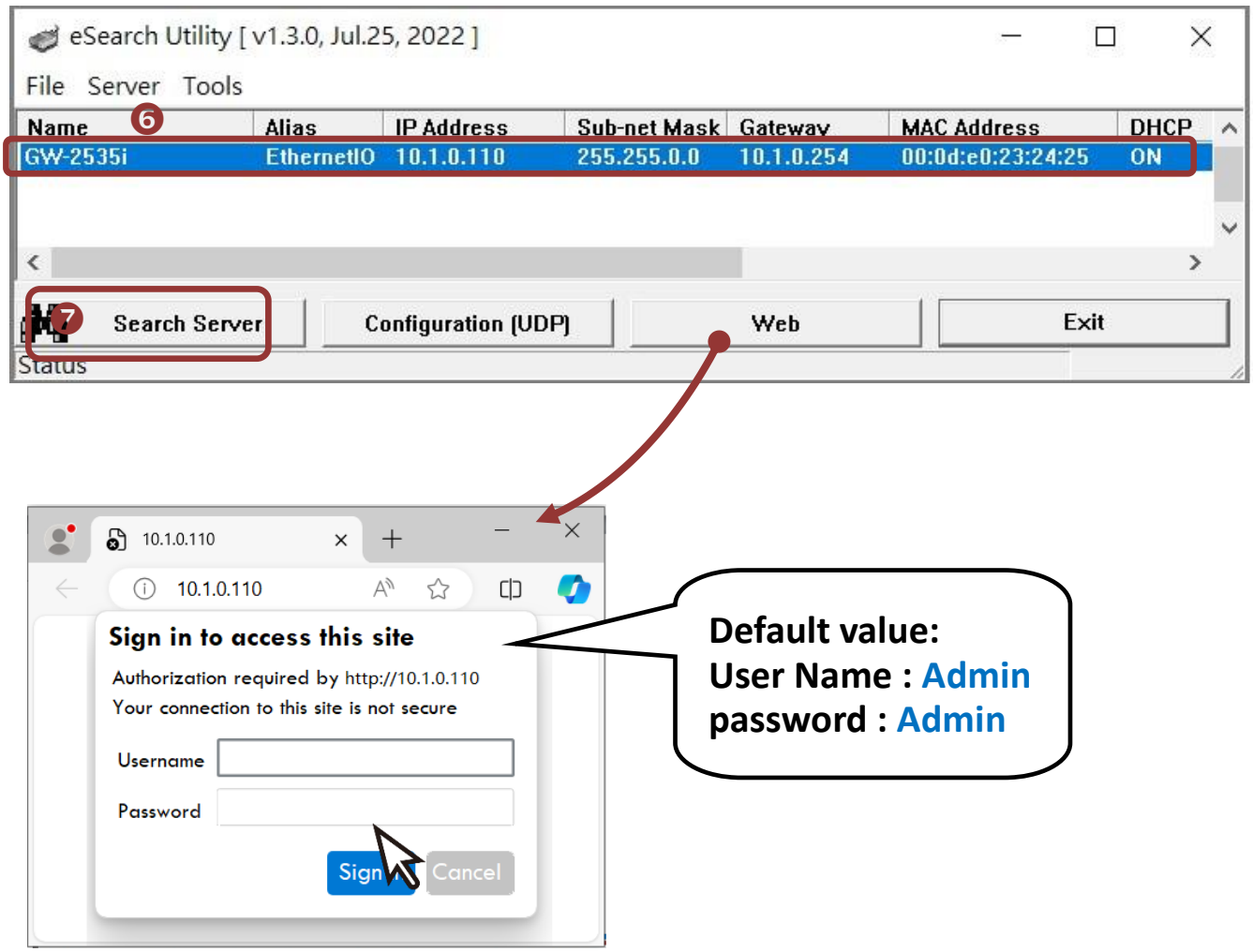
⚠ **Note: The GW-2500 will use the new settings 2 seconds later.**



5) Wait 2 seconds and click **"Search Servers"** button again to ensure the GW-2500iM is working well with new configuration.

6) Click the name of GW-2500iM to select it.

7) Click the **"Web"** button to log in to the web configuration pages.
(Or enter the URL address of the GW-2500iM in the address bar of the browser.)



8) Once you have enter the Username and password in the pop-up box, the user will be able to log in to the GW-2500iM homepage.

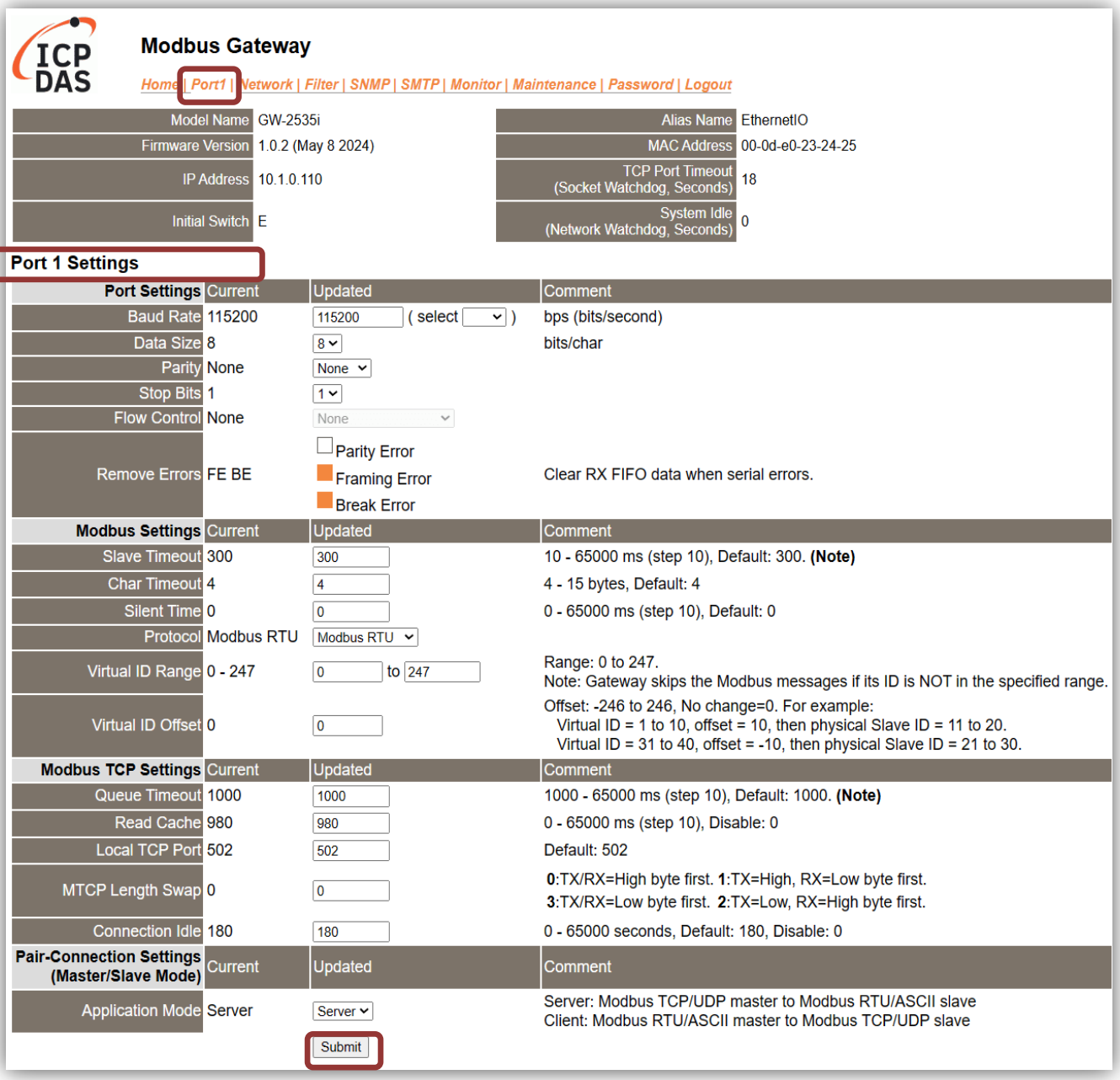
6 Configuring the Serial Port

1) Click the **“Port1”** tab to display the **“Port1 Settings”** page.

2) 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 Baud Rate, Data Format and Modbus protocol settings depends on your Modbus device.

3) Click **“Submit”** to save your settings.



Modbus Gateway

Home | Port1 | Network | Filter | SNMP | SMTP | Monitor | Maintenance | Password | Logout

Model Name	GW-2535i	Alias Name	EthernetIO
Firmware Version	1.0.2 (May 8 2024)	MAC Address	00-0d-e0-23-24-25
IP Address	10.1.0.110	TCP Port Timeout (Socket Watchdog, Seconds)	18
Initial Switch	E	System Idle (Network Watchdog, Seconds)	0

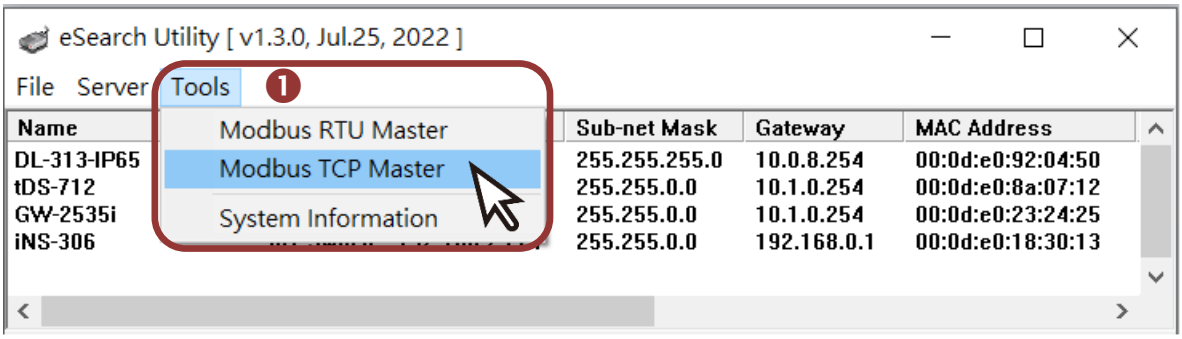
Port 1 Settings

Port Settings	Current	Updated	Comment
Baud Rate	115200	115200 (select)	bps (bits/second)
Data Size	8	8	bits/char
Parity	None	None	
Stop Bits	1	1	
Flow Control	None	None	
Remove Errors	FE BE	Parity Error Framing Error 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. **(Note)**
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	0 - 247	0 to 247	Range: 0 to 247. Note: Gateway skips the Modbus messages if its ID is NOT in the specified range.
Virtual ID Offset	0	0	Offset: -246 to 246, No change=0. For example: Virtual ID = 1 to 10, offset = 10, then physical Slave ID = 11 to 20. Virtual ID = 31 to 40, offset = -10, then physical Slave ID = 21 to 30.
Modbus TCP Settings	**Current**	**Updated**	**Comment**
Queue Timeout	1000	1000	1000 - 65000 ms (step 10), Default: 1000. **(Note)**
Read Cache	980	980	0 - 65000 ms (step 10), Disable: 0
Local TCP Port	502	502	Default: 502
MTCP Length Swap	0	0	**0**:TX/RX=High byte first. **1**:TX=High, RX=Low byte first. **3**:TX/RX=Low byte first. **2**:TX=Low, RX=High byte first.
Connection Idle	180	180	0 - 65000 seconds, Default: 180, Disable: 0
Pair-Connection Settings (Master/Slave Mode)	**Current**	**Updated**	**Comment**
Application Mode	Server	Server	Server: Modbus TCP/UDP master to Modbus RTU/ASCII slave Client: Modbus RTU/ASCII master to Modbus TCP/UDP slave

Submit

7 Self-Test

1) In the eSearch Utility, select the **“Modbus TCP Master”** item from the **“Tools”** menu to open the Modbus TCP Master Utility.



2) In the Modbus TCP Modbus Utility, enter the IP address of GW-2500iM and click **“Connect”** to connect the GW-2500iM.

3) Refer to **“Protocol Description”** section and type the Modbus command in the “Command” field then click **“Send command”**.

4) If the response data is correct, it means the test is success**.**

⚠Note: The Modbus command settings depends on your Modbus device.

