



Logicbus TGW-700 Tiny Modbus TCP to RTU ASCII Gateway User Guide

[Home](#) » [Logicbus](#) » Logicbus TGW-700 Tiny Modbus TCP to RTU ASCII Gateway User Guide 



tGW-700 Tiny Modbus/TCP to RTU/ASCII Gateway Quick Start

Contents

- [1 What's in the box?](#)
- [2 Connecting the Power and Host PC](#)
- [3 Installing Software on Your PC](#)
- [4 Wiring Notes](#)
- [5 Connecting the Modbus Devices](#)
- [6 Configuring Network Settings](#)
- [7 Configuring the Serial Port](#)
- [8 Self-Test](#)
- [9 Documents / Resources](#)
 - [9.1 References](#)
- [10 Related Posts](#)

What's in the box?

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



tGW-700 Module x 1



Quick Start x1
(This Document)



CA-002 Cable x1



Model: tGW-700 Series

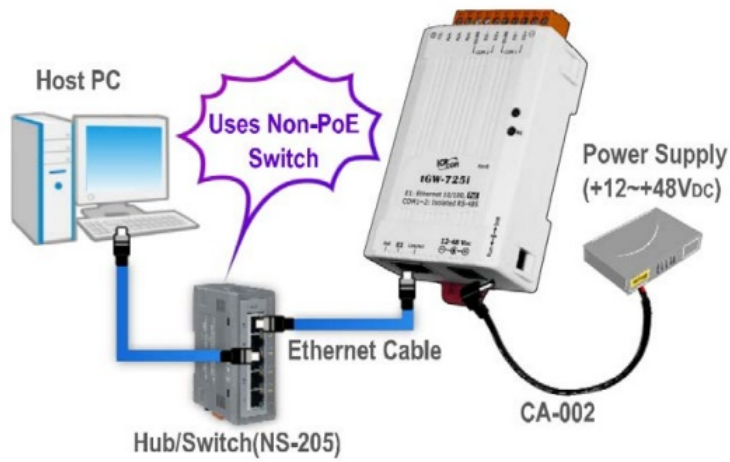
Product Website: https://www.icpdas-usa.com/tgw_700_modbus_tcp_to_rtu_ascii_device_servers.html

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” in Chapter 5 may not work. (Please contact your system Administrator)

2. Connect both the SGW-700 and your PC to the same subnetwork or the same Ethernet switch.
3. Supply power (PoE or +12~+48 VDC) to the SGW-700.



Installing Software on Your PC



Install eSearch Utility, which can be obtained from the website:

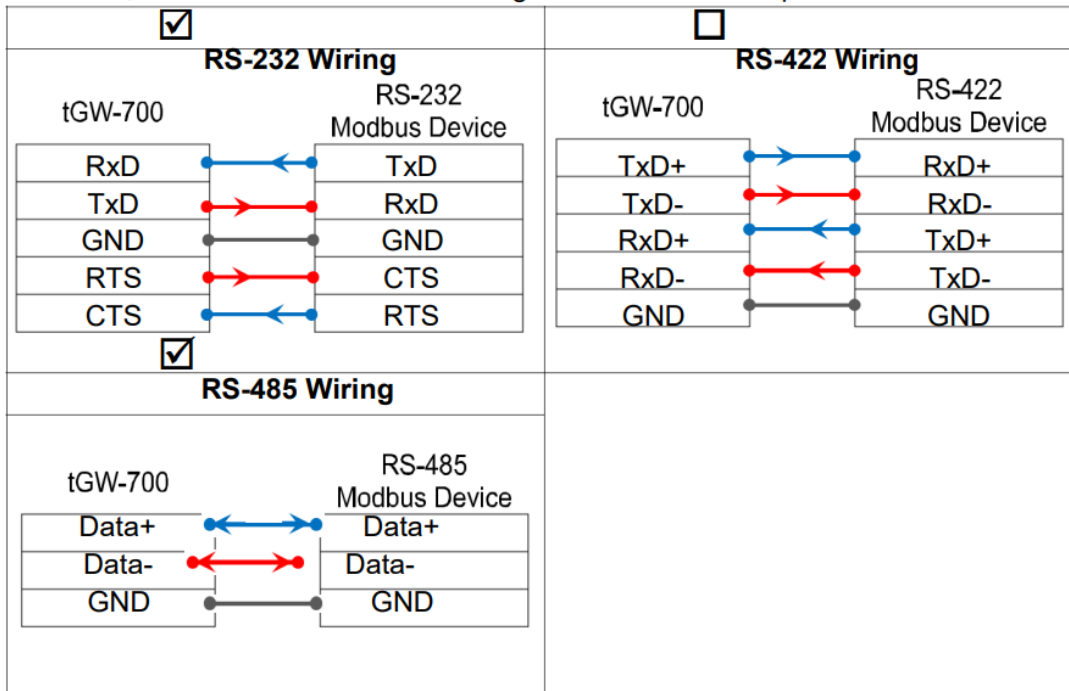
<http://ftp.icpdas.com/pub/cd/tinymodules/napdos/software/esearch/>

Wiring Notes

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



: Here, the RS-232 and RS-485 wiring is used as an example.

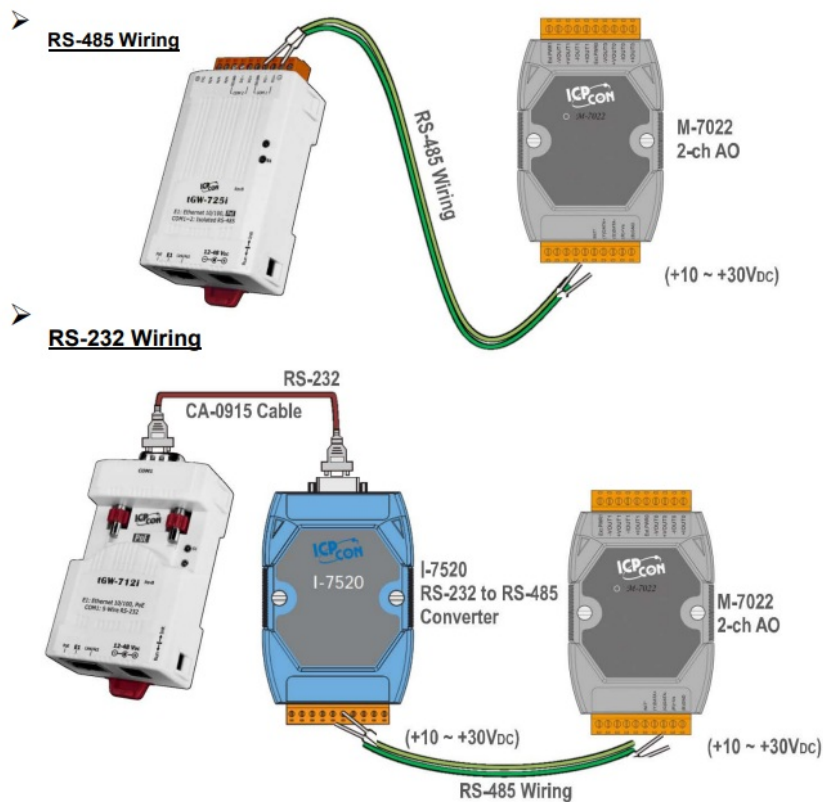


Connecting the Modbus Devices

1. Connect the Modbus device (e.g., M-7022, optional) to the COM1 on tGW-700.
2. Supply power to the Modbus device (e.g., M-7022, Device ID:1).

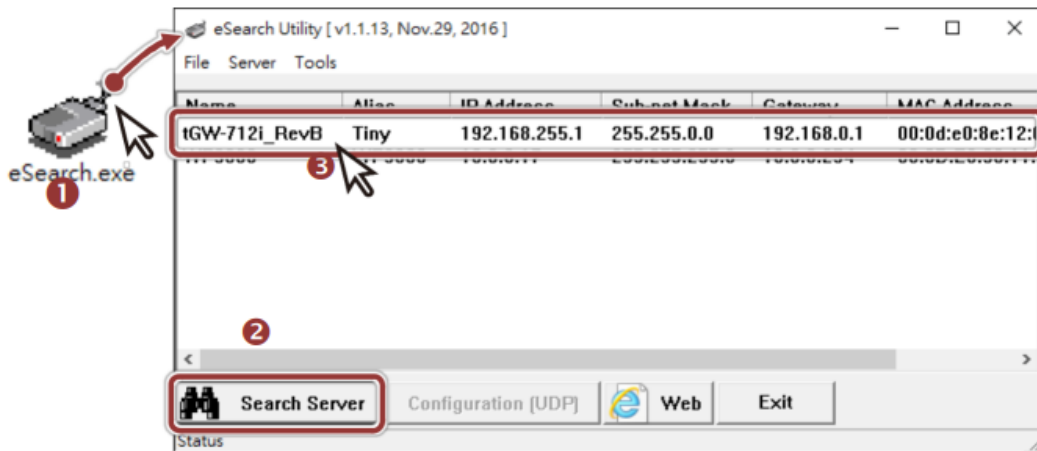


Note: The wiring and supply power method depends on your Modbus device.



Configuring Network Settings

1. Double-click the eSearch Utility shortcut on the desktop.
2. Click the “Search Servers” to search your tGW-700.
3. Double-click the name of tGW-700 to open the “Configure Server (UDP)” dialog box.



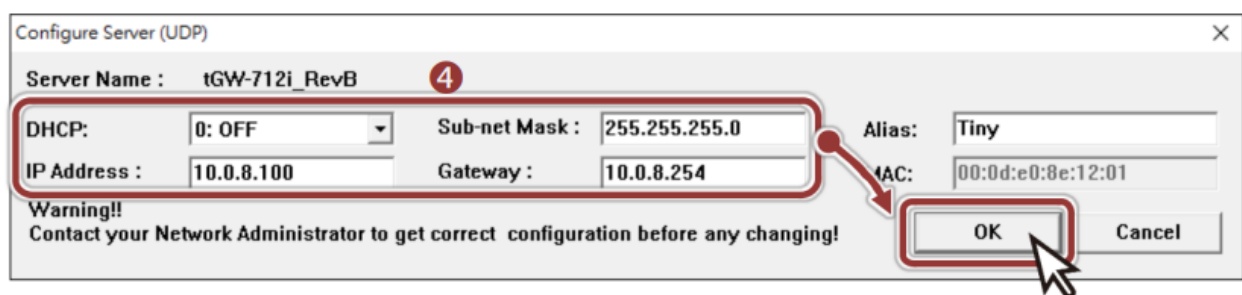
Factory Default Settings of tGW-700:

IP Address	192.168.255.1
Subnet Mask	255.255.0.0
Gateway	192.168.0.1

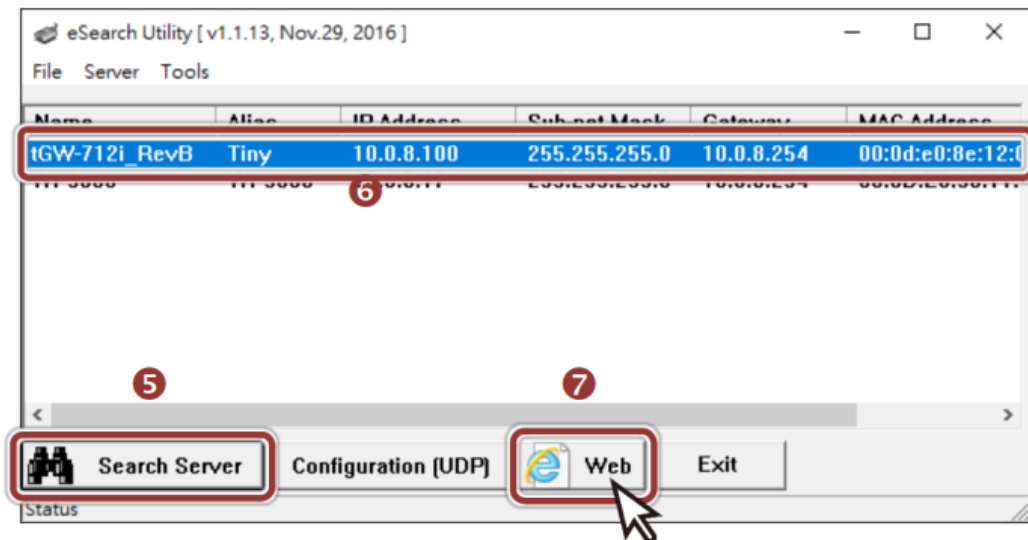
4. Contact your Network Administrator to obtain a correct network configuration (such as IP/Mask/Gateway). Enter the network settings and click “OK”.



Note: The tGW-700 will use the new settings 2 seconds later.



5. Wait 2 seconds and click the “Search Servers” button again to ensure the tGW-700 is working well with the new configuration.
6. Click the name of tGW-700 to select it.
7. Click the “Web” button to log in to the web configuration pages.
(Or enter the URL address of the tGW-700 in the address bar of the browser.)



Configuring the Serial Port

Note that if you intend to use Internet Explorer, ensure that the cache function is disabled in order to prevent browser access errors, please disable your Internet Explorer cache as follows: **(If you are not using IE browser, please skip this step.)**

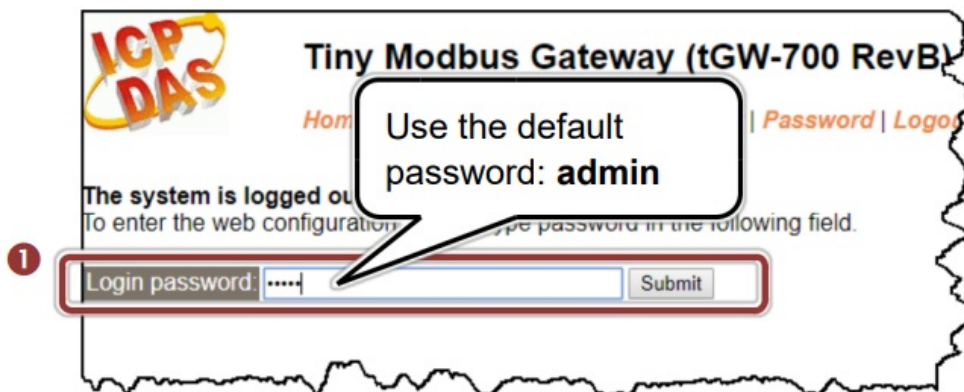
Step: Click “**Tools**” >> “**Internet Options...**” in the menu items.

Step 2: Click the “**General**” tab and click the “**Settings...**” button in the Temporary Internet files frame.

Step3: Click “**Every visit to the page**” and click the “**OK**” in the Settings box and Internet Options box.

For more detail, refer to “[FAQ: How to avoid a browser access error that causes a blank page to be displayed when using Internet Explorer](#)”

1. Enter the password in the log-in 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 Baud Rate, Data Format, and Modbus protocol settings depend on your Modbus device.

4. Click “Submit” to save your settings.

ICP DAS **Tiny Modbus Gateway (tGW-700 RevB)**

Home **2** Network | Filter | Monitor | Password | Logout

Port 1 Settings

Port Settings	Current	Updated	Comment
Baud Rate (bps)	115200	19200 3	bits/second
Data Size (bits)	8	8	bits/character
Parity	None	None	
Stop Bits (bits)	1	2	
Flow Control	None	None	
Timeout (ms)	300		Default: 300

Read Cache (ms)	980	980	10, 20... 65530, Disable: 0
Local TCP Port	502	502	Default: 502
Connection Idle (seconds)	180	180	1 ~ 65535, Default: 180, Disable: 0
Protocol	Modbus RTU	Modbus RTU 3	

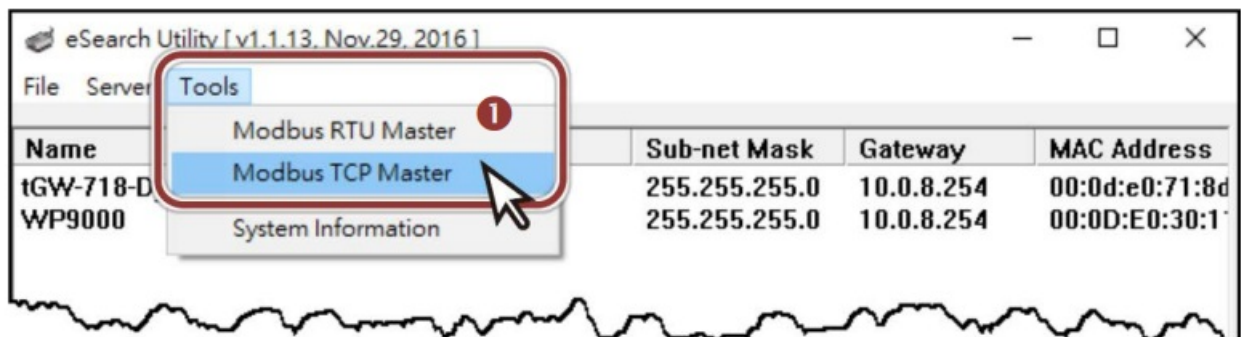
Pair-Connection Settings (Master/Slave Mode)

	Current	Updated	Comment
Application Mode	Server		Server=Slave, Client=Master

4

Self-Test

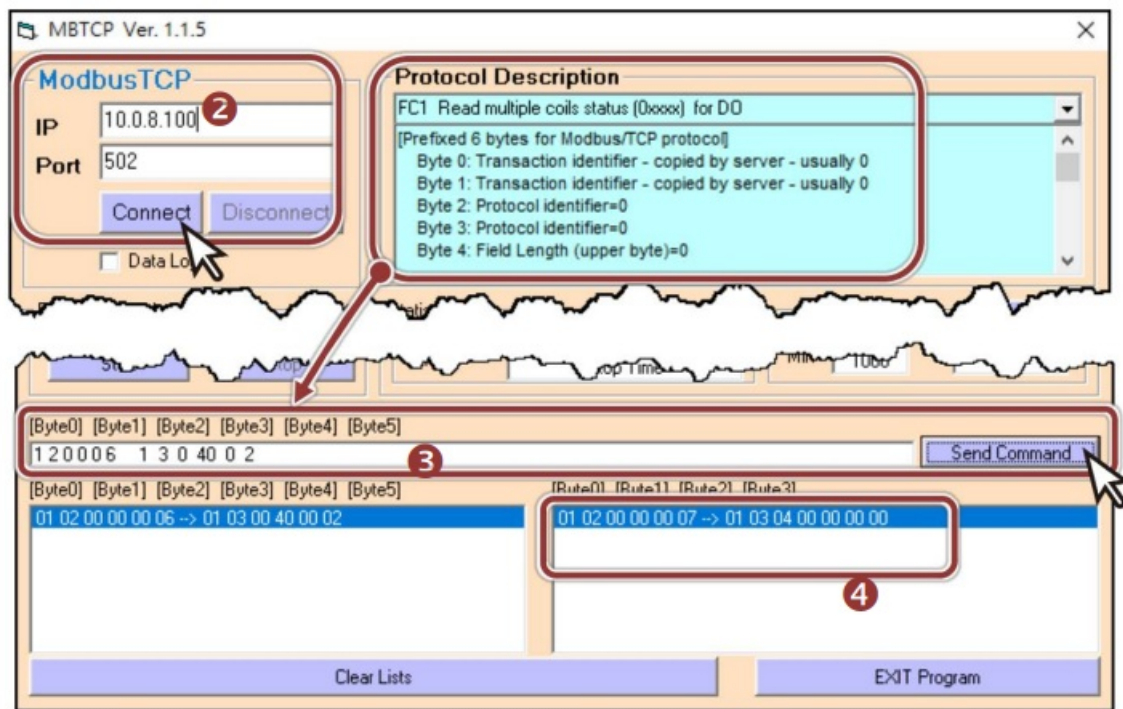
1. In the eSearch Utility, select the "Modbus TCP Master" item from the "Tools" menu to open the Modbus TCP Master Utility.



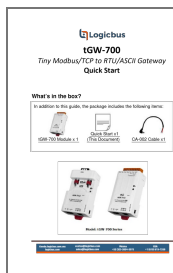
- 2) In the Modbus TCP Modbus Utility, enter the IP address of tGW-700 and click "Connect" to connect the tGW-700.
- 3) Refer to the "Protocol Description" section and type the Modbus command in the "Command" field then click "Send command".
- 4) If the response data is correct, it means the test is successful.



Note: The Modbus command settings depend on your Modbus device.



Documents / Resources



[Logicbus tGW-700 Tiny Modbus TCP to RTU ASCII Gateway](#) [pdf] User Guide
tGW-700, Tiny Modbus TCP to RTU ASCII Gateway

References

- [ftp.icpdas.com - /pub/cd/tinymodules/napdos/software/eseach/](http://ftp.icpdas.com/-/pub/cd/tinymodules/napdos/software/eseach/)
- [tGW-700 and GW-200 Modbus TCP to RTU/ASCII Device Servers | ICP DAS USA Inc](#)