



PPDS-700-MTCP Series Quick Start

v1.5, Aug. 2018

What's in the box?

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

PPDS-700-MTCP PPDSM-700-MTCP

For PPDS-700-MTCP Only



or



PPDS(M)-700-MTCP
Series x 1



Quick Start x 1
(This Document)



Plastic Rack x1



CA-0910 Cable x1



Screw Driver x1



Pin Terminal

PPDS(M)-720-MTCP : 16 pcs

Other PPDS(M)-700-MTCP : 32 pcs

Related Information

- PDS Series Product Page:
http://www.icpdas.com/products/Industrial/pds/PDS-700_Series.htm
- Documentation:
http://ftp.icpdas.com/pub/cd/8000cd/napdos/pds/ds_pds-700/document/
- Firmware:
http://ftp.icpdas.com/pub/cd/8000cd/napdos/pds/ds_pds-700/firmware/
- MDR-20-24, NS-205, NS-205PSE Product Page (optional):
http://www.icpdas.com/products/Accessories/power_supply/power_list.htm
http://www.icpdas.com/products/Switch/industrial/industrial_list.htm

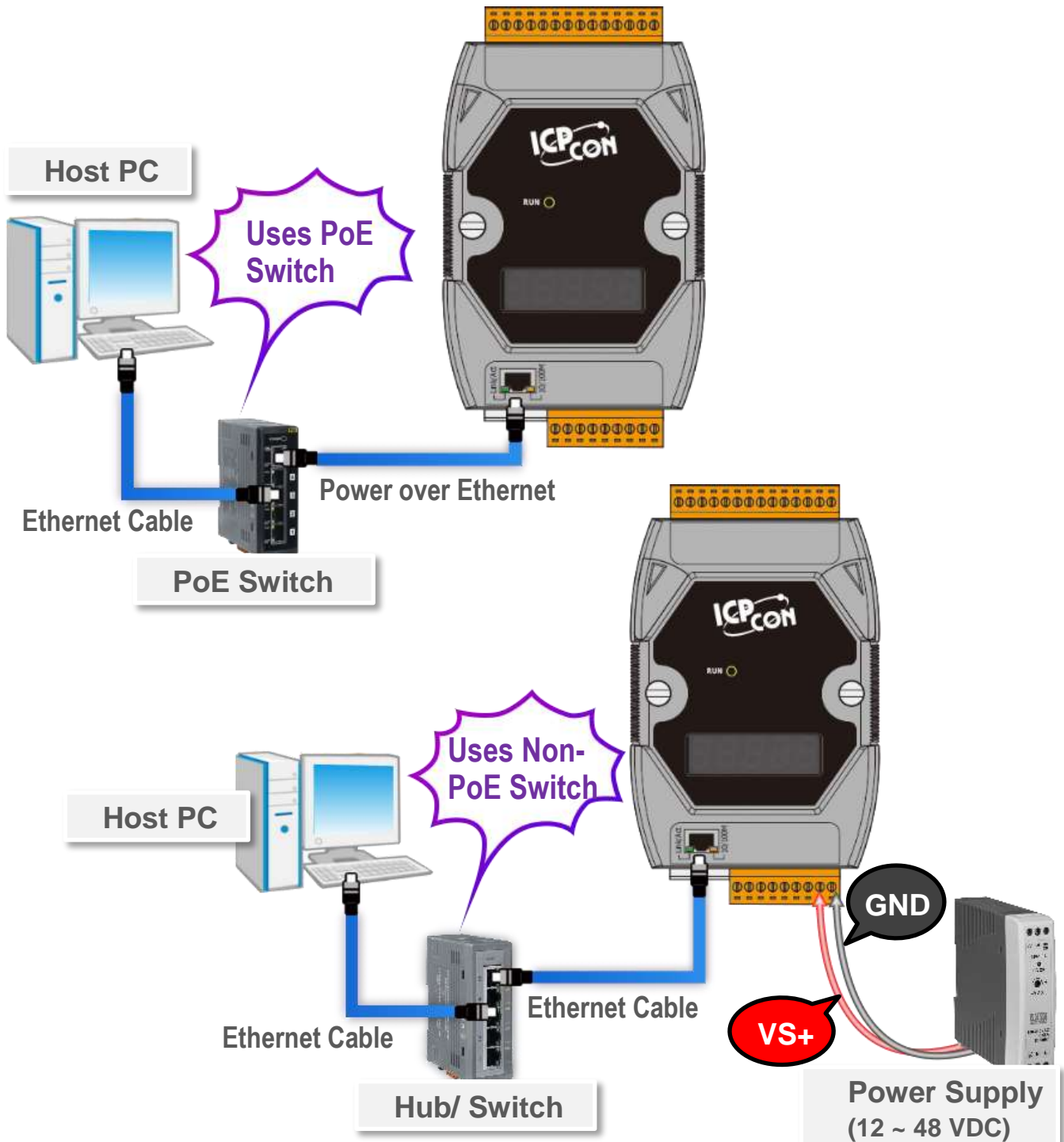
1

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 3** may not work. (Please contact with your system Administrator)

- 2) Connect both the PPDS-700-MTCP and your PC to the same sub network or the same Ethernet switch.
- 3) Supply power (**PoE or +12 ~ +48 Vdc**) to the PPDS-700-MTCP.

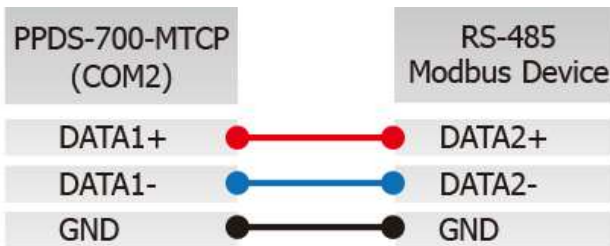


2

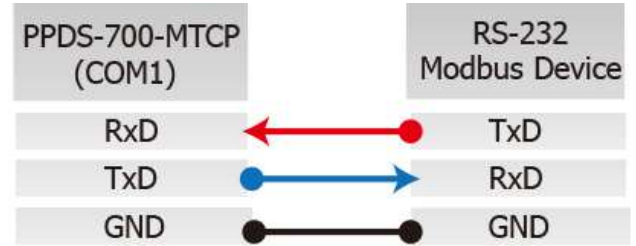
Connecting the Modbus Device

1) Connect the Modbus device (e.g., M-7055-D, Optional) to the COM2 (RS-485 bus) on the PPDS-700-MTCP.

RS-485 Wiring

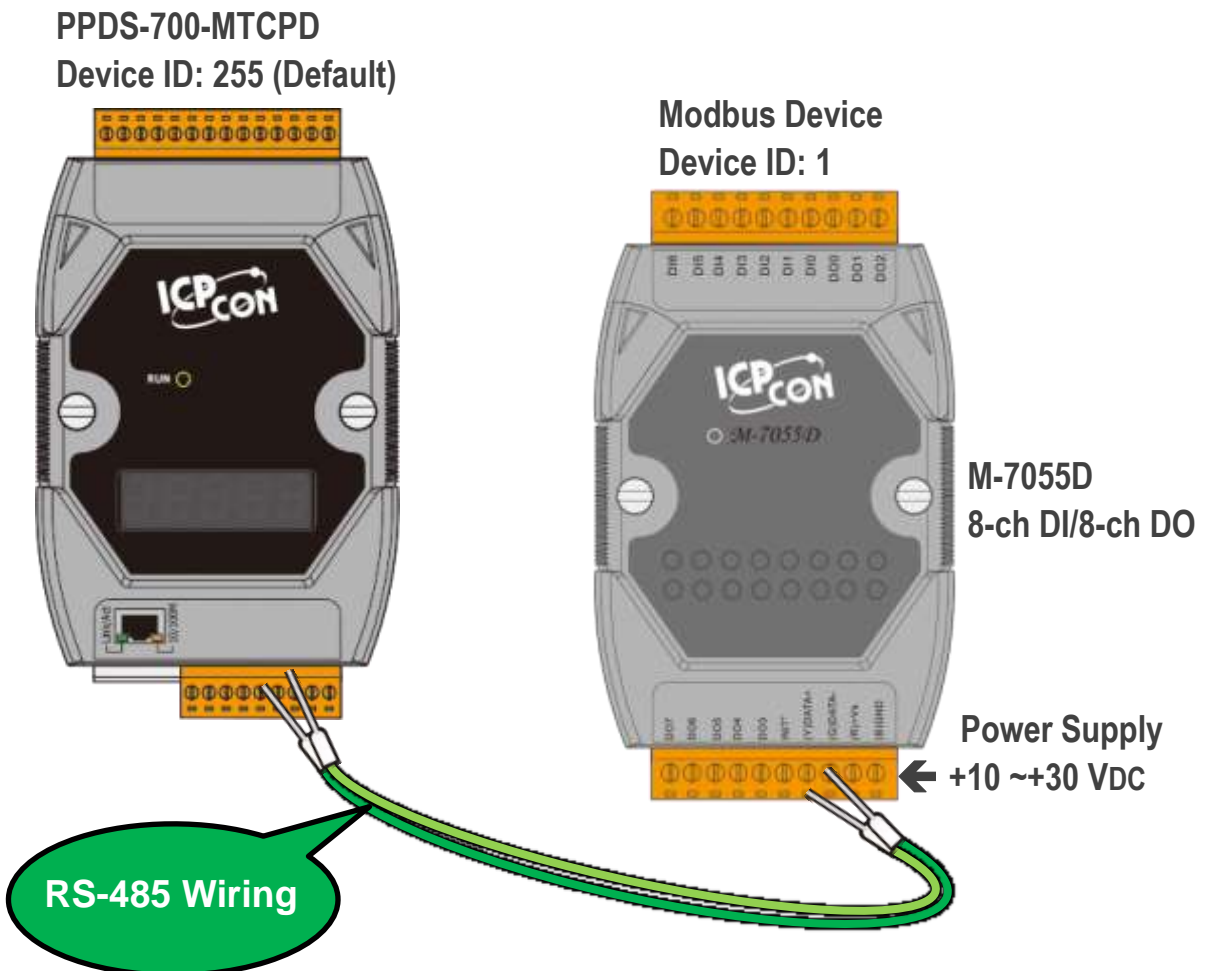


RS-232 Wiring



2) Supply power (+10 ~ +30 VDC) to the Modbus device (e.g., M-7055D, Device ID: 1).

⚠ Note that wiring method and supply power depends on your Modbus device.



3

Configuring Network Settings



VxCommW7_v2.13.12_setup.exe

1) Install the VxComm Utility, which can be obtained from the web site:

 http://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/vxcomm_driver/windows/

2) Double click the VxComm Utility shortcut on the desktop.

3) Click the “**Search Servers**” to search your PPDS-700-MTCP.

4) Double click the **name of PPDS-700-MTCP** to open the “Configure Server (UDP)” dialog box.

5) Contact your Network Administrator to obtain a **correct network configuration (such as IP/Mask/Gateway)**. Enter the network settings and click “OK”. **⚠Note: The PPDS-700-MTCP will use the new settings 2 seconds later.**

The screenshot shows the VxComm Utility interface. On the left, a desktop icon for 'VxComm Utility' is shown with a red circle '1' and an arrow pointing to the 'Search Servers' button in the software's main menu. The main window displays a table of 'VxComm Servers' with the following data:

Name	Alias	IP Address	Subnet Mask	Gateway
PPDS-755-MTCP	N/A	192.168.255.1	255.255.0.0	192.168.0.1

A red circle '2' highlights the 'Search Servers' button, and a red circle '3' highlights the selected server row. Below this, the 'Configure Server (UDP)' dialog box is open, showing the following settings:

Server Name :	PPDS-755-MTCP	Alias :	[7 Chars]
DHCP :	0: OFF	Sub-net Mask :	255.255.255.0
IP Address :	10.0.8.46	Gateway :	10.0.8.254
Warning!!		MAC :	00:0d:e0:50:0d:48
Contact your Network Administrator to get correct configuration before any change.		OK	Cancel

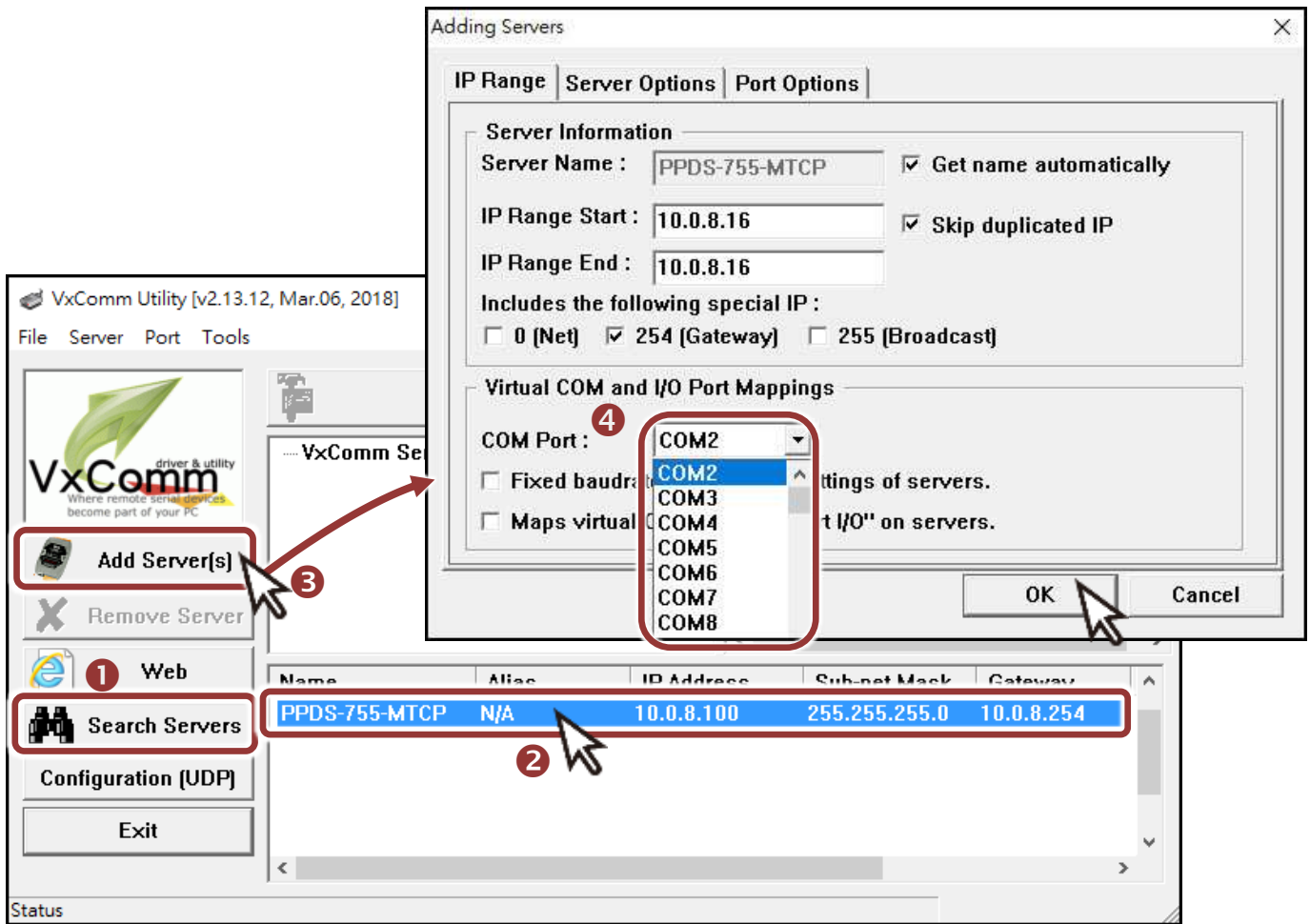
A red circle '4' highlights the 'Server Name' field in the dialog box.

Factory Default Settings of PPDS-700-MTCP:

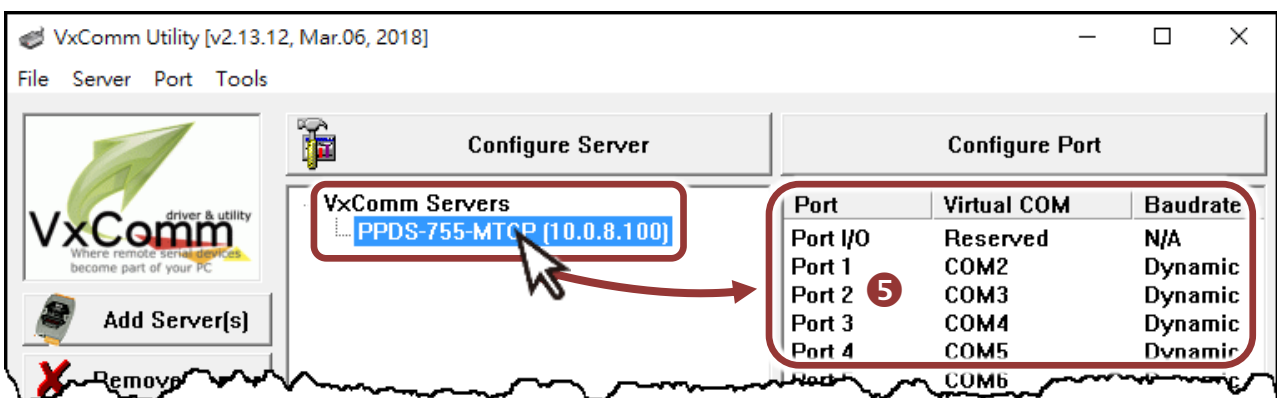
IP Address	192.168.255.1
Subnet Mask	255.255.0.0
Gateway	192.168.0.1

4 Configuring Virtual COM Ports

- 1) Wait 2 seconds and click “**Search Servers**” button again to ensure the PPDS-700-MTCP is working well with new configuration.
- 2) Click the name of PPDS-700-MTCP to select it.
- 3) Click the “**Add Server[S]**” button.
- 4) **Assign a COM Port number** and click “**OK**” to save your settings.

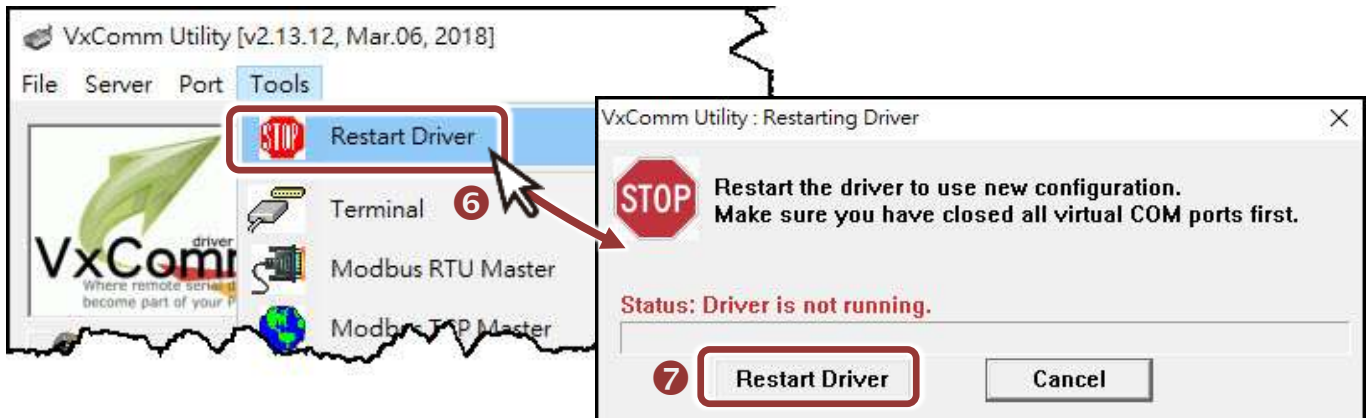


- 5) Click on PPDS-700-MTCP name and check the virtual COM Port mappings on the PC.



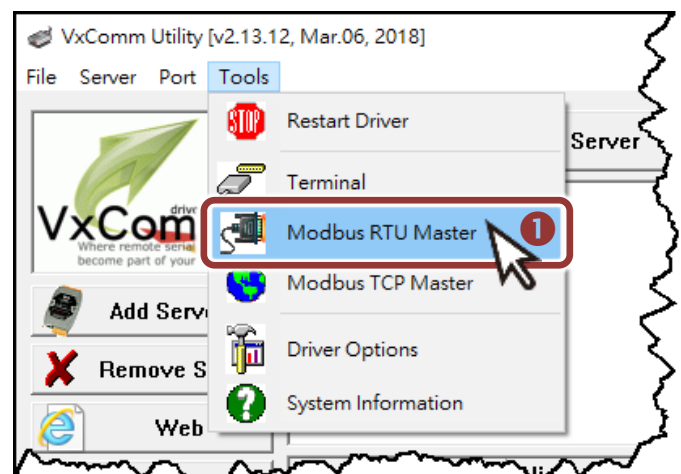
6) Click the “Restart Driver” item in the “Tools” menu to display the “VxComm Utility: Restarting Driver” dialog box.

7) Click the “Restart Driver” button.

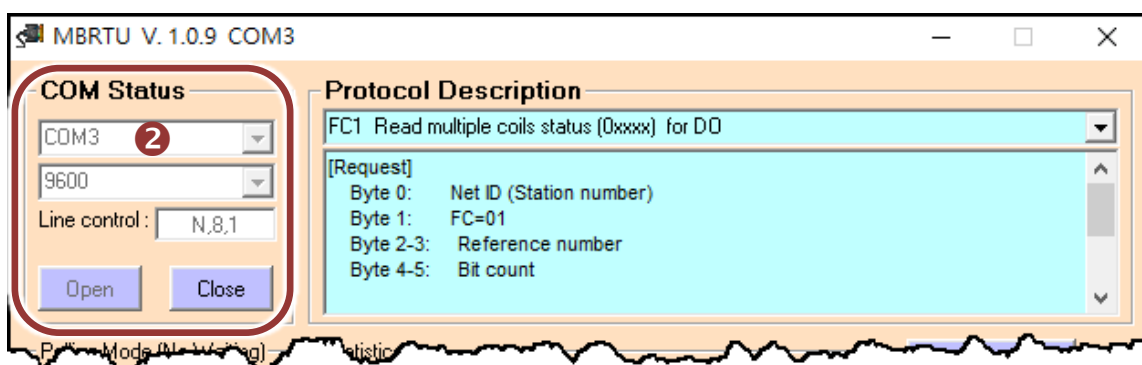


5 Testing Modbus Device through Virtual COM Port

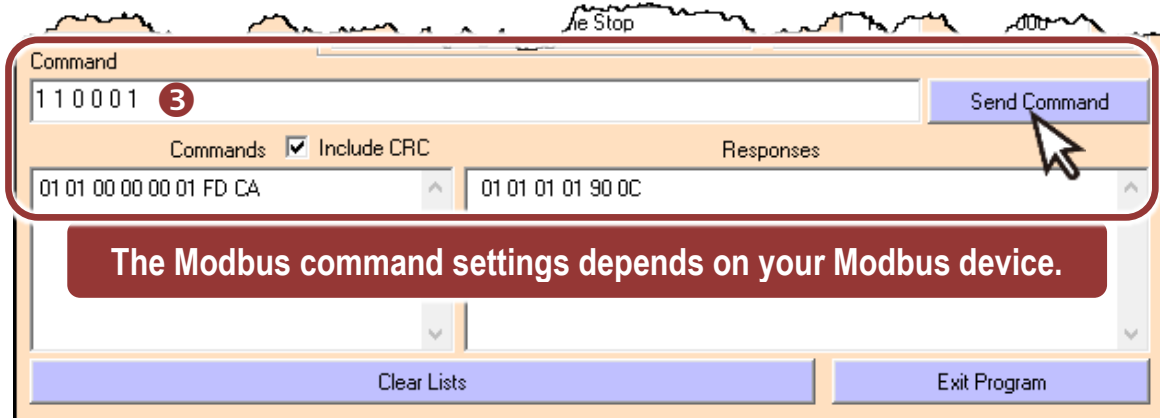
1) In the VxComm Utility, click the “Modbus RTU Master” option from the “Tools” menu to open the Modbus RTU Master Utility.



2) In the Modbus RTU Modbus Utility, select your **virtual COM Port** and **Baud Rate/Data Format (default: 9600/N, 8, 1)** on PPDS-700-MTCP, and then click the “Open” button.

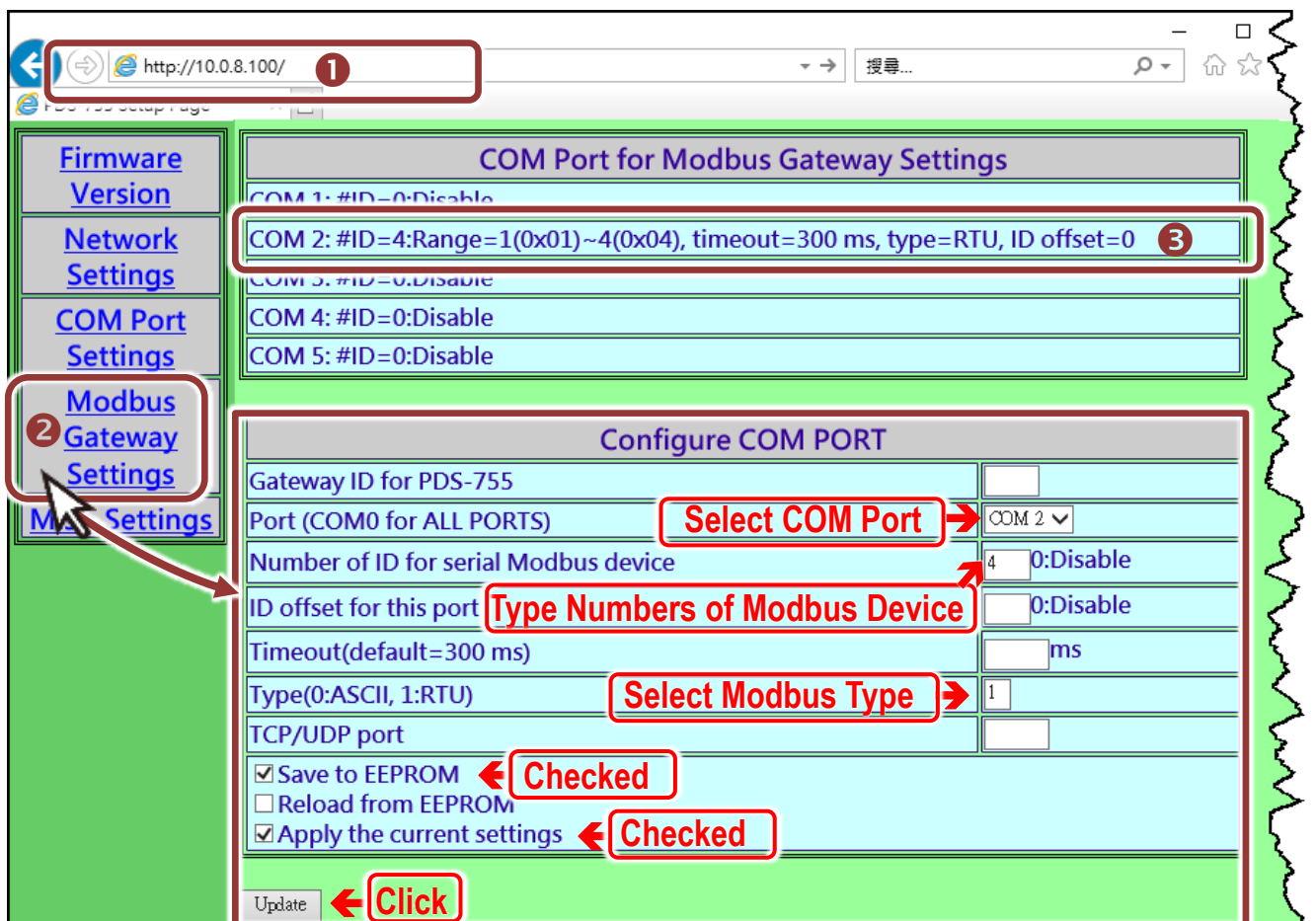


- 3) Refer to “**Protocol Description**” and **type the Modbus command** in the “**Command**” field then click the “**Send Command**” button. If the response data is correct, it means the test is success.

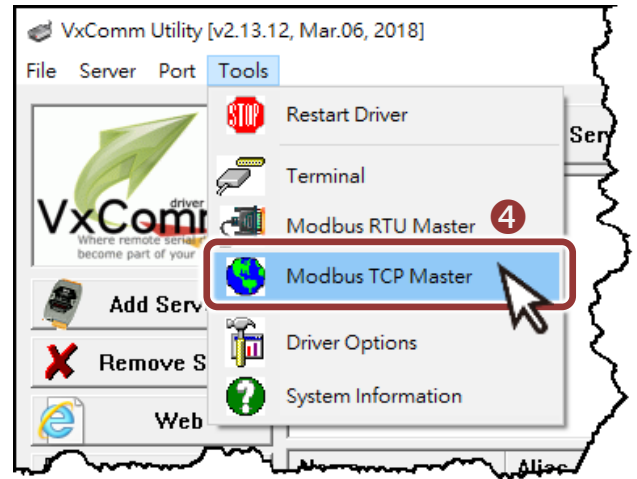


6 Modbus/TCP to Modbus/RTU Gateway

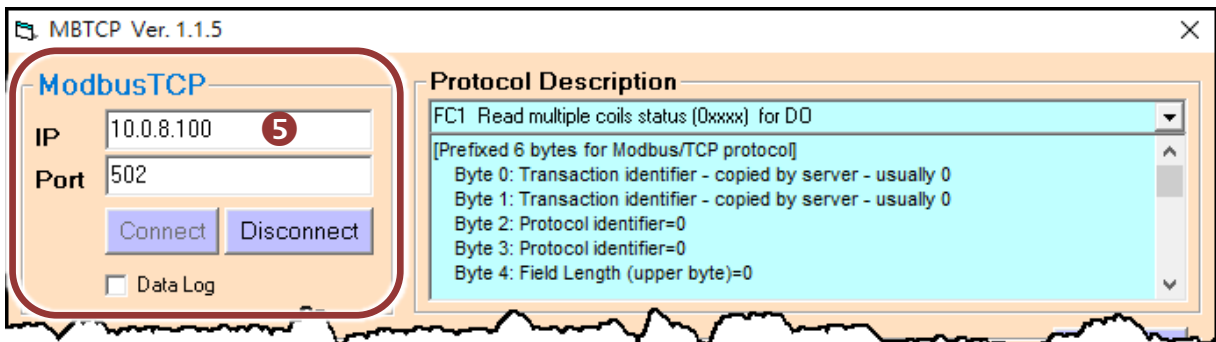
- 1) Open web browser, **type the URL address of the PPDS-700-MTCP** and press “**Enter**” to connect to the PPDS-700-MTCP.
- 2) Click the “**Modbus Gateway Setting**” in the web page to **configure the COM Ports**.
- 3) Check the COM Port for Modbus setting.



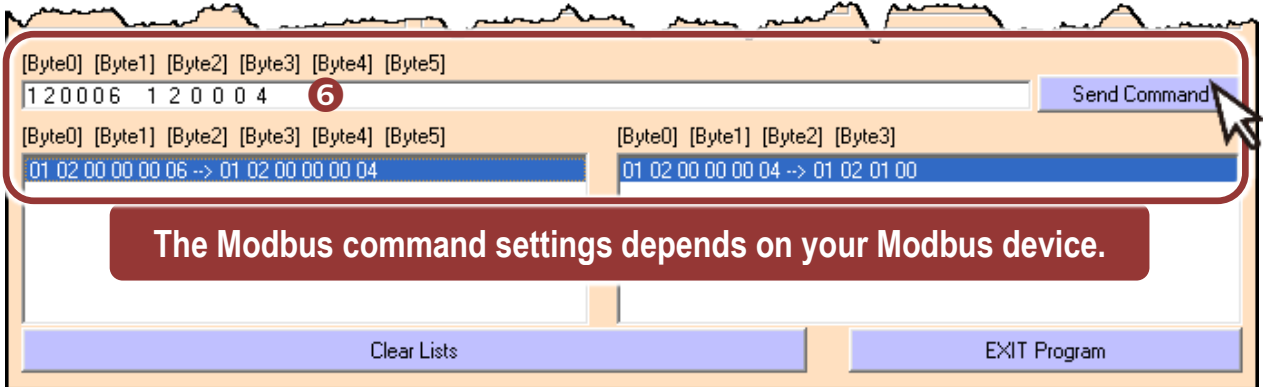
4) In the VxComm Utility, click the **“Modbus TCP Master”** option from the **“Tools”** menu to open the Modbus TCP Master Utility.



5) In the Modbus TCP Master Utility, **type the IP address of PPDS-700-MTCP** and click the **“Connect”** button.



6) Refer to **“Protocol Description”** and **type the Modbus command in the “Command” field** then click the **“Send Command”** button. If the response data is correct, it means the test is success.



NOTE: The flash protection function is disabled for factory default settings. User can modify the program or update the firmware. If you want to enable flash protection function, refer to **Section 2.10 Flash Protection Function** of PDS-700 user manual. The location of the download addresses are shown below:
http://ftp.icpdas.com/pub/cd/8000cd/napdos/pds/ds_pds-700/document/