ET-8KP4-MTCP/ET-8KP8-MTCP Quick Start

Dec. 2016, Version 1.0

Congratulations!

Congratulations on purchasing ET-8KPn-MTCP - a Modbus TCP I/O expansion unit to expand I-87K series I/O modules and the most popular automation solution for remote monitoring and control application. This Quick Start Guide will provide information needed to get started. Please also consult the User Manual for detailed information on the setup and use of ET-8KPn-MTCP.

What's In the Box?

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

ET-8KPn-MTCP
(ET-8KP4-MTCP/ET-8KP8-MTCP)

Software Utility CD

Screw Driver
(1C016)

Technical Support

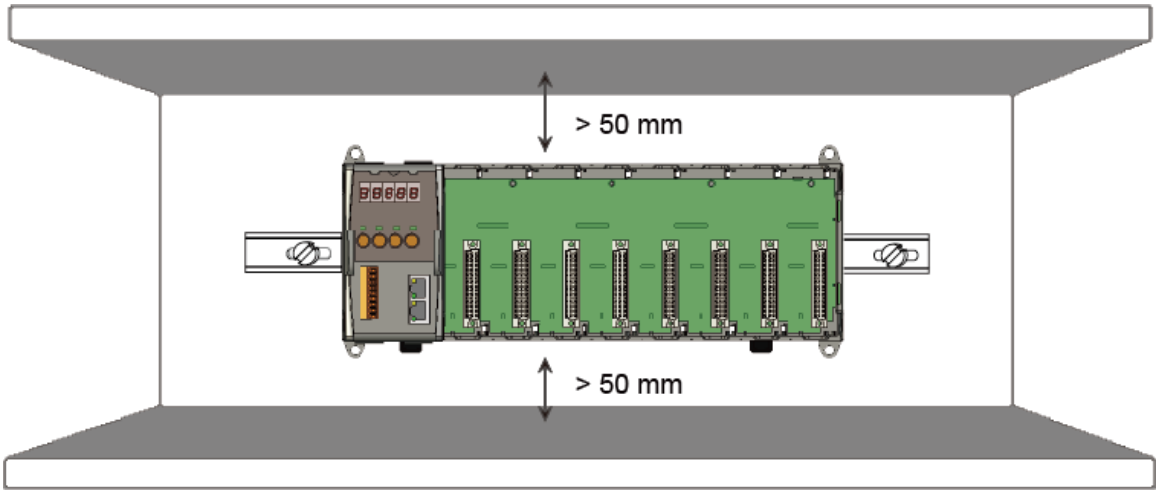
- **ET-8KPn-MTCP Reference Document**
  CD:\Napdos\Modbus\ET87Pn\Document\
  http://ftp.icpdas.com/pub/cd/8000cd/napdos/modbus/et87pn/document/

- **ET-8KPn-MTCP Website**
  http://www.icpdas.com/root/product/solutions/pac/ipac/et-87pn-mtcp.html

- **ICP DAS Website**
  http://www.icpdas.com/

1 Mounting the Hardware

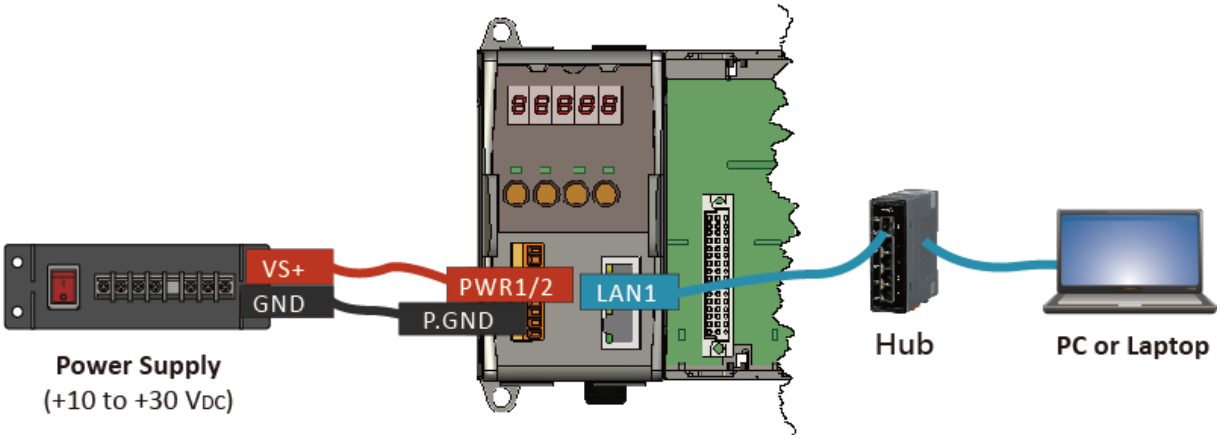
The ET-8KPn-MTCP installation must provide proper ventilation, spacing, and grounding to ensure the equipment will operate as specified. A minimum clearance of 50mm between the ET-8KPn-MTCP and the top and bottom side of the enclosure panels must be provided.



2 Connecting to PC, Network and Setting up the Power

i. Connect **PC** to **LAN1** port through a **hub**. The ET-8KPn-MTCP is equipped with RJ-45 Ethernet ports for connection to an Ethernet hub/switch and PC. You can also link directly the ET-8KPn to PC with an Ethernet cable

ii. Connect the **+24 V_{DC} power supply** to **PWR1/PWR2** and **GND** terminals



3 Installing the Modbus Utility

The Modbus Utility can be obtained from companion CD or ICP DAS FTP site:
CD:\Napdos\Modbus\Modbus_Utility\
ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/modbus/modbus_utility/

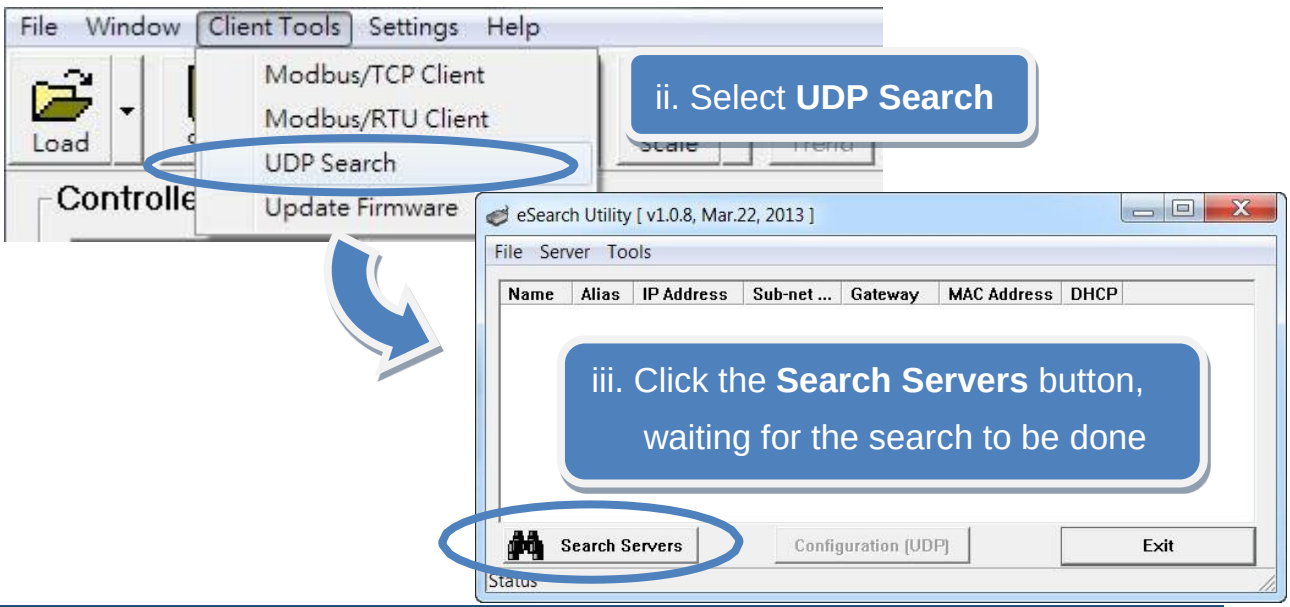
4 Using the Modbus Utility to Assign a New IP Address

UDP Search of the Modbus Utility can be used to configure the IP address. Before starting the configuration process, ensure that the **LAN1** are used to connect to network and make the controller under **the running firmware mode**. The default IP addresses are as follows:

Item	LAN1 (default)
IP Address	192.168.255.1
Subnet Mask	255.255.0.0
Gateway	192.168.0.1

Step 1: Run the Modbus Utility, and then search the ET-8KPn-MTCP

i. Double-click the **Modbus Utility** shortcut on the desktop
ii. Select **UDP Search** from the **Client Tools** menu
iii. Click the **Search Servers** button of the **eSearch Utility** dialog, waiting for the search to be done



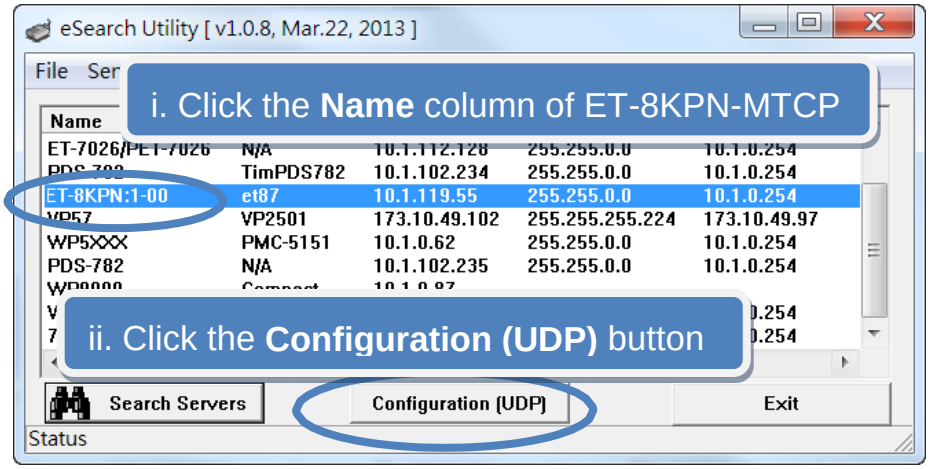
Step 2: Configure IP Address

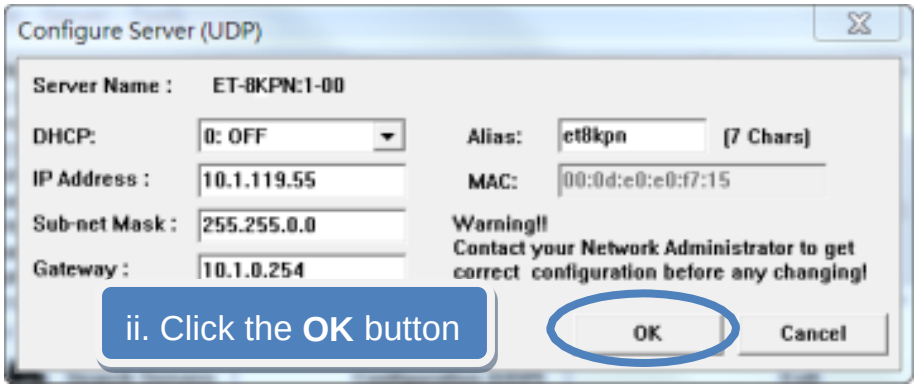
i. Select the "Name" field from the default IP address row of ET-8KPn-MTCP

ii. Click the **Configuration (UDP)** button to open the setting dialog

iii. Configure the IP settings

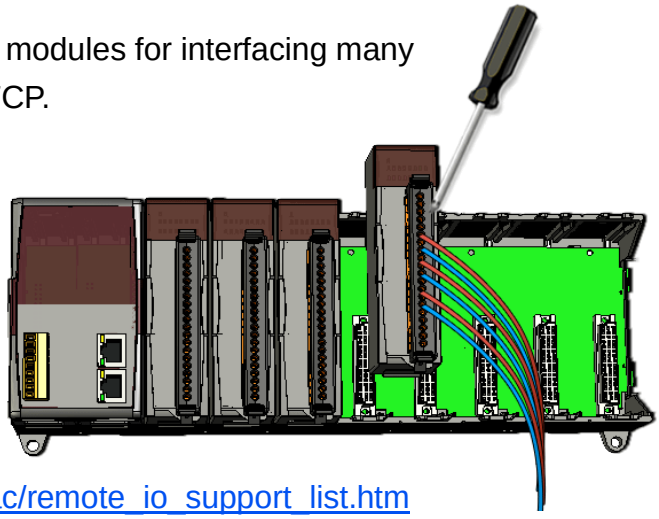
iv. Click the **OK** button to save the configuration





5 Inserting and Wiring the I/O Modules

There are various types of I/O expansion modules for interfacing many different field devices to the ET-8KPn-MTCP.



For more information about I/O expansion module, please refer to:

http://www.icpdas.com/products/PAC/xpac/remote_io_support_list.htm

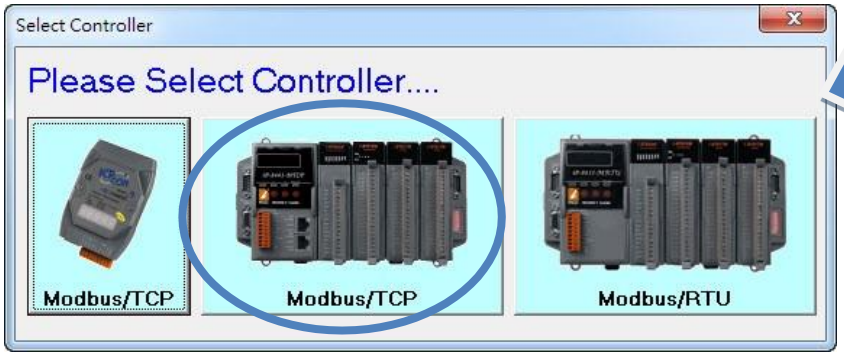
6 Using the Modbus Utility to Configure the Module

The Modbus Utility can be used to make the communication between the ET-8KPn-MTCP and PC/Laptop via the Modbus/TCP protocol.

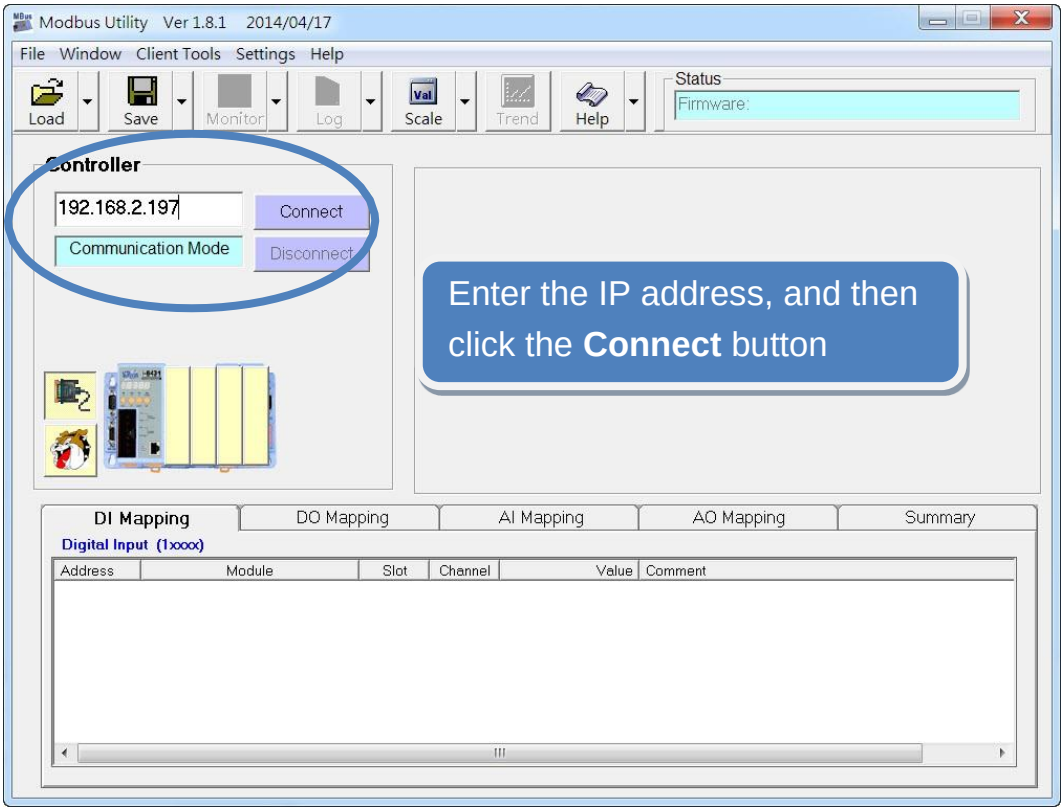
Step 1: Run the Modbus Utility and connect to ET-8KPn-MTCP

i. Double-click the **Modbus Utility** shortcut on the desktop

ii. Click the **Modbus/TCP** button in the middle of the **Select Controller** dialog

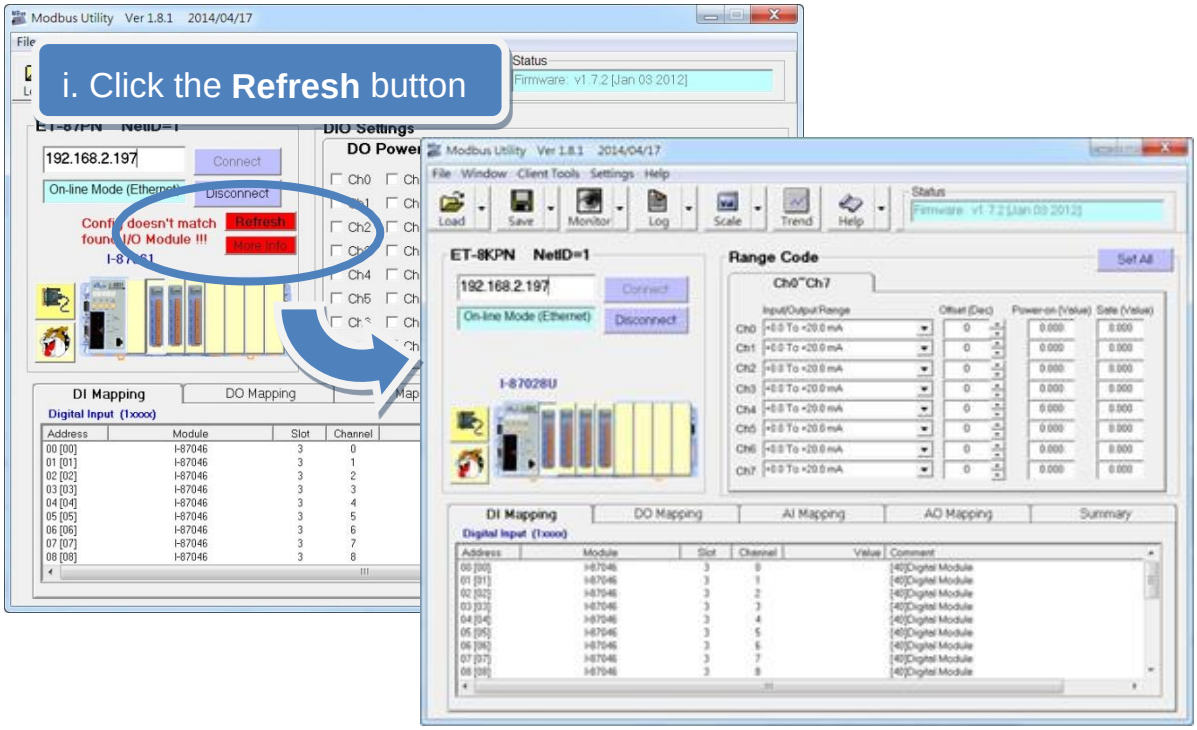


iii. Enter the IP address, and then click the **Connect** button



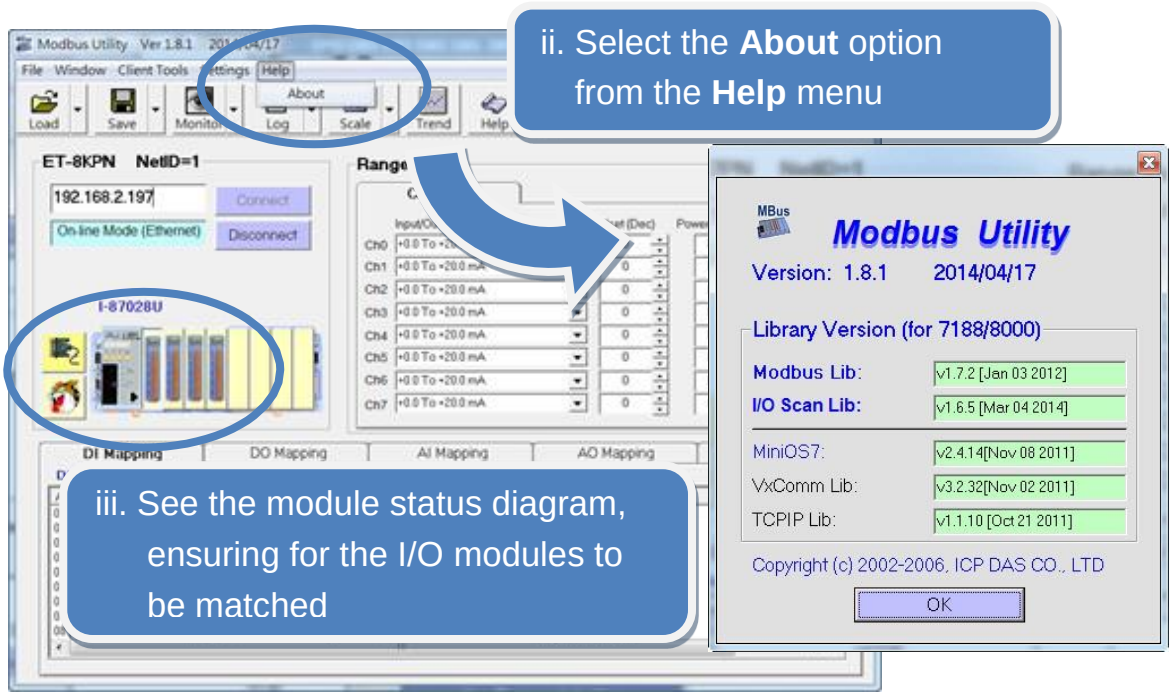
Step 2: Match the I/O module and then get the I/O configuration information

i. Click the **Refresh** button to match the I/O modules to configuration of the controller



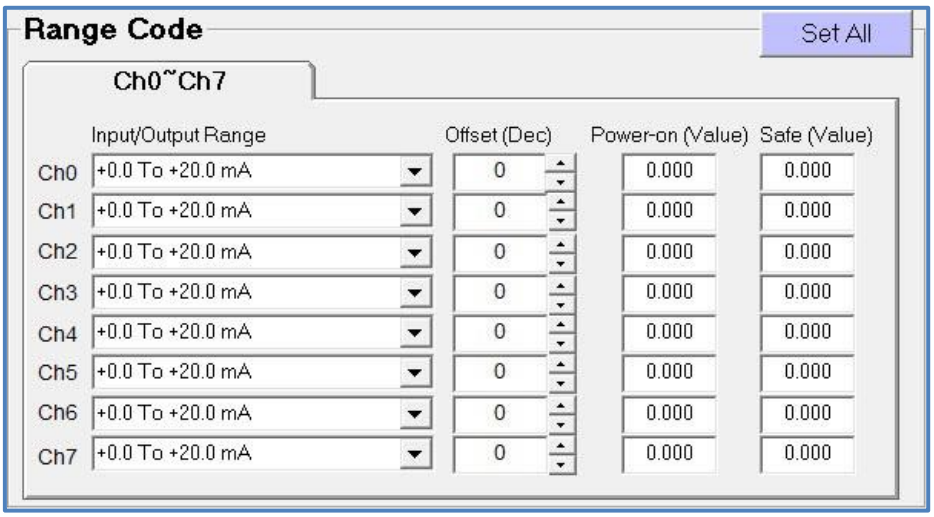
ii. Select the **About** option from the **Help** menu to get the I/O configuration and firmware information

iii. Check the module status diagram, ensuring for the I/O modules to be matched

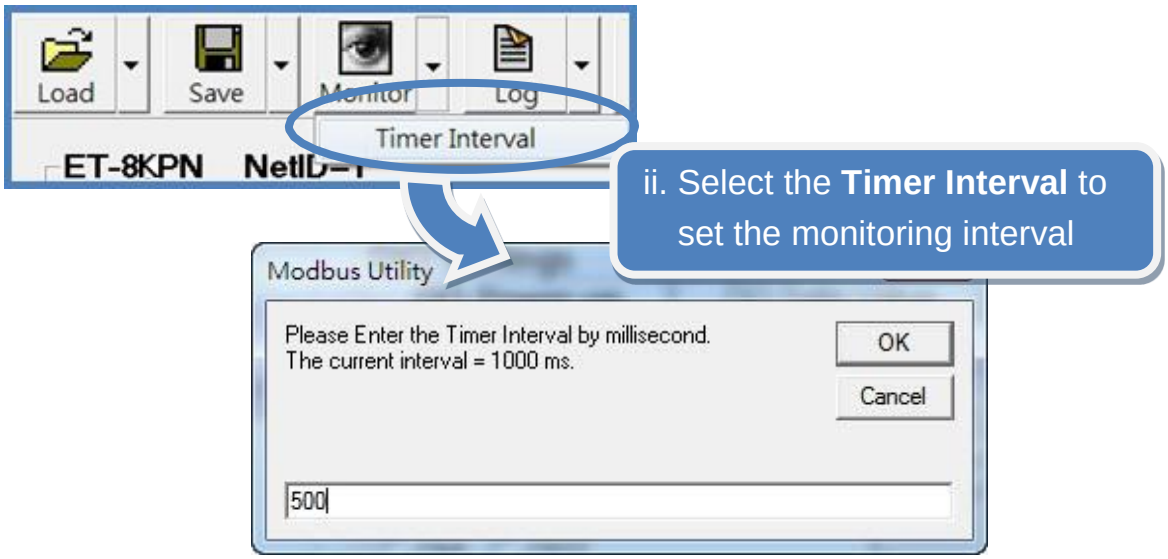


Step 3: Set I/O configuration, get the I/O values and then save the I/O configuration

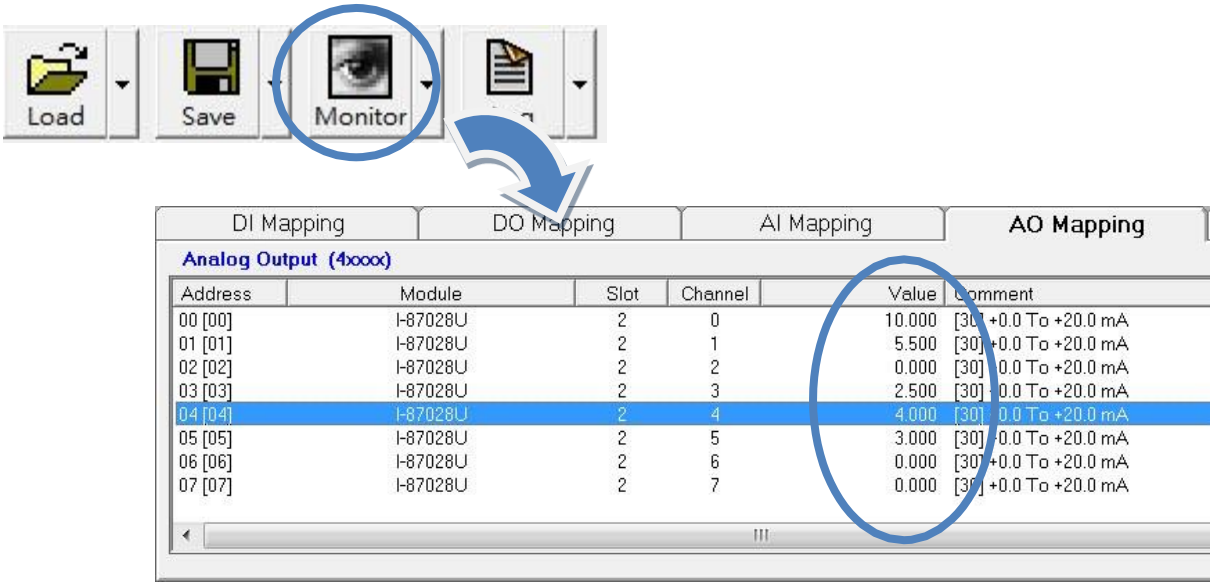
i. Configure the I/O settings, such as Range Code, Power-on and Safe values



ii. Select the **Timer Interval** from the **Monitor** menu to set the monitoring interval



iii. Click the **Monitor** icon to start retrieving I/O values. The I/O values will be displayed in the Mapping tables



iv. Select **File** option from the **Save** menu and select a location where the configuration file is about to be saved. This operation can save the controller configuration and I/O settings to an “ini” file, and the file can be loaded by **Load** function at the next time when using the same controller and I/O modules