## Quick Start Guide for RIO-9830

April 2024, Version 1.0.0

### **Congratulations!**

Congratulations on purchasing RIO-9830. This Quick Start Guide will provide information needed to get started with RIO-9830. Please also consult the User Manual for detailed information on the setup and use of RIO-9830.

### What's In the Box?

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



RIO-9830 模組

### **Technical Support**

- RIO-9830 User Manual
- RIO-9830 Website
- ICP DAS Website

# **1** Connect PC with the RIO-9830 via the Ethernet port

When RIO-9830 dip switch positions 5 and 6 are set to OFF and then powered on, it will enter Normal mode. In this mode, users can customize IP without being restricted by rotary switch.



Power off the RIO-9830, connect the PC with the RIO-9830 via the Ethernet port, and power on the RIO-9830. The Ethernet switch or hub may be needed while you connect the PC with the RIO-9830.



# **2** Installing the MiniOS7 Utility

### Step 1: Get the MiniOS7 Utility tool



The MiniOS7 Utility can be obtained from our company's website or FTP: <a href="https://www.icpdas.com/en/product/guide+Software+Development\_Tools+MiniOS7">https://www.icpdas.com/en/product/guide+Software+Development\_Tool</a> <a href="https://stylin.com/en/product/guide+Software+Development\_Tools+MiniOS7">stylin.com/en/product/guide+Software+Development\_Tool</a> <a href="https://stylin.com/en/product/guide+Software+Development\_Tools+MiniOS7">stylin.com/en/product/guide+Software+Development\_Tool</a> <a href="https://stylin.com/en/product/guide+Software+Development\_tools+MiniOS7">stylin.com/en/product/guide+Software+Development\_Tool</a> <a href="https://stylin.com/en/pub/cd/8000cd/napdos/minios7/utility/minios7">stylin.com/en/pub/cd/8000cd/napdos/minios7/utility/minios7</a> utility/

Step 2: Follow the prompts to complete the installation



After the installation has been completed, there will be a new short-cut for MiniOS7 Utility on the desktop.



# **3** Using MiniOS7 Utility to Assign a New IP

The MCU (Main Control Unit) of RIO-9830 is an Ethernet device, which comes with a default IP address. Therefore, you must first assign a new IP address to the MCU.

Item	Default
IP Address	192.168.255.1 or 192.168.255.2
Subnet Mask	255.255.0.0
Gateway	192.168.0.1
Modbus slave address	1

The factory default IP settings are as follows:

#### Step 1: Run the MiniOS7 Utility



#### Step 2: Press "F12" or choose "Search" from the "Connection" menu

After pressing F12 or choosing Search from Connection menu, the MiniOS7 Scan dialog will appear, that will display a list of all the MiniOS7 modules on your network.



Step 3: Choose the module name and then choose "IP setting" from the toolbar

Choose the module name for fields in the list, and then choose IP setting from the toolbar.

Step 4: Assign a new IP address and then choose "Set" button



**4** Reboot the RIO-9830 and finish the IP configuration

# **5** I/O Configuration By Using RIO-9830 Utility

Use RIO-9830 utility to set the configuration of IOM (I/O module). Execute the RIO-9830 and put the IP address of your RIO-9830 in the IP field and click "Connect" button. Then, the utility will get the hardware information and the original configuration from RIO-9830. You can find the RIO-9830 utility in the following website:



### Step 2: Upload/Download I/O configuration

Afterwards, you can click "Upload" button get configuration of IOM and click the IOM picture shown on the RIO-9830 picture to see and to set the configuration. After modifying the configuration, click "Download" button to save the configuration into RIO-9830.



#### Step 3: Load/Save I/O configuration

After downloading the configuration into the RIO-9830, you can click "Save" button to save these parameters into an ini file. Or use "Load" button to load the configuration from an ini file. This is useful when you have several RIO-9830 which need to be configured as the same one.

灪 RIO-9830 Utility ver 3.2.3 (Online Mode)	- 🗆 X
File Online Setting Help	
Connect Disconnect Upload Upload Monitor	Tread
IPUx-M4	Configuration (DO)
IP 192.168.12.16 Modbus ID 1 Set	Fault Value PowerOn Value
PDAAAA	
D 0041	
H-5041	
	Ch4 Ch12 Ch20 Ch28
	🗖 Ch5 🗖 Ch13 🗖 Ch21 🗖 Ch29
	🗖 Ch6 🔲 Ch14 🗖 Ch22 🗖 Ch30
	Ch7 Ch15 Ch23 Ch31

### Step 4: Finish I/O configuration

Now, you have finished the IP setting and I/O configuration. Then, you can put the RIO-9830 in your Modbus TCP application network.

About the internal Modbus memory address mapping of the RIO-9830, please refer to the file "**RCM-MTCP\_Software\_UserManual.pdf**".

Besides, RIO-9830 supports some specific Modbus commands for configuring the RIO-9830. About these commands, please refer to the file

"RCM-MTCP\_Software\_UserManual.pdf".

The above document can be obtained from our company's website.