USB-87P1/2/4/8 Quick Start

v1.1, Mar 2023

Packing List

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

(The USB cable is included with USB-87P2/ USB-87P4/ USB-87P4 only.)

USB-87Pn   USB Cable (1.8M)   Software CD   Screw Driver
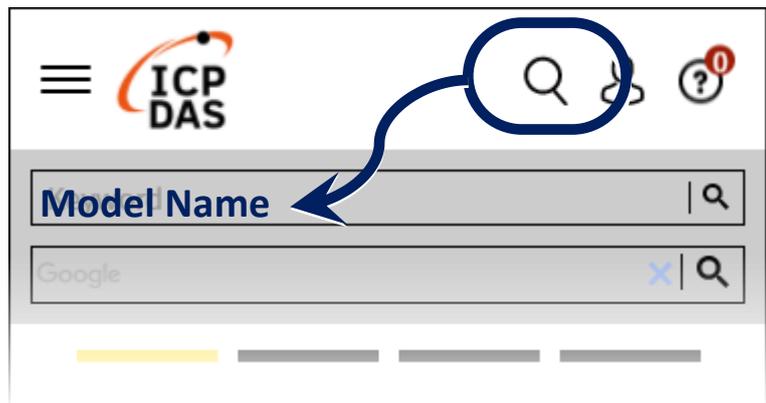
Technical Support

service@icpdas.com

www.icpdas.com

Resources

How to search for drivers, manuals and spec information on ICP DAS website.
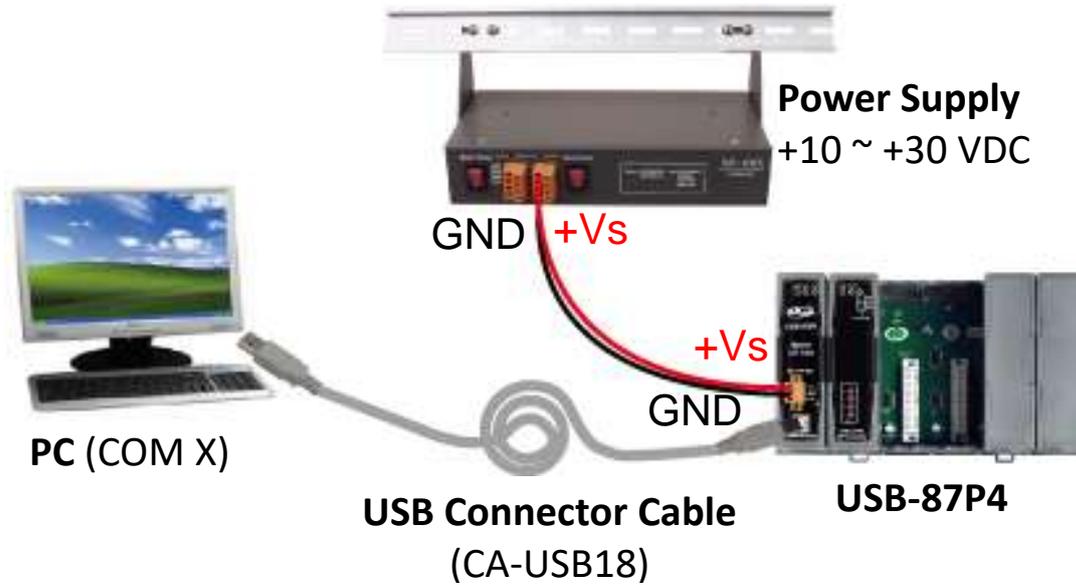
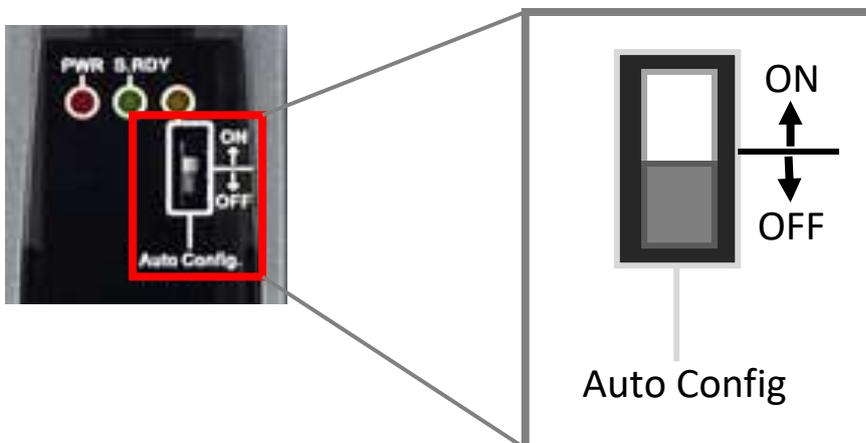- For Mobile Web

- For Desktop Web

Hardware Configuration

NOTE: USB-87Pn is **only for High Profile I-87K I/O modules**, please **DO NOT** use Low Profile I/O modules.

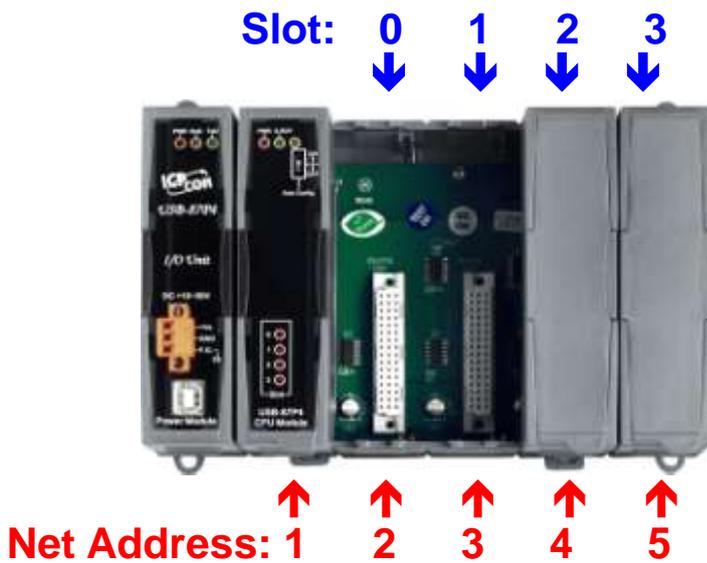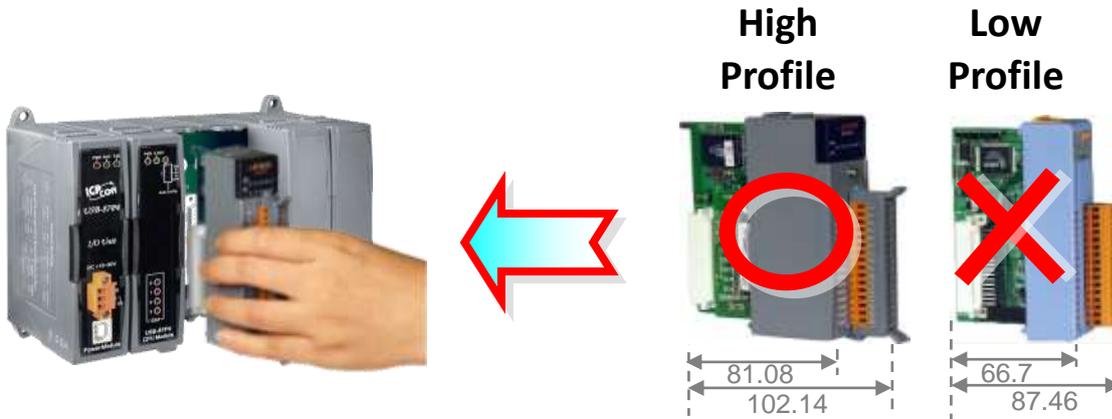1. Wire the I-87Pn unit to power and PC.

Power Supply
+10 ~ +30 VDC

GND +Vs

+Vs

GND

PC (COM X)

USB Connector Cable
(CA-USB18)

USB-87P4

2. Make sure that the **Auto Config** switch is in the **ON** position.

ON

OFF

Auto Config

3. Plug in the **High Profile** I/O modules and power on the I-87Pn unit.

Example: Plug in I-87018R to Slot 0.
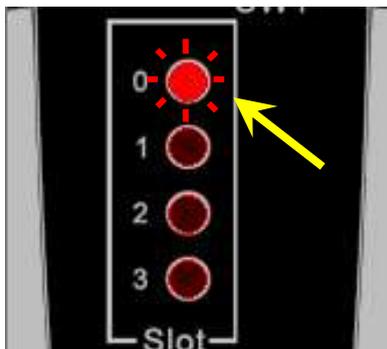
(I-87018R is a High Profile analog input module.)

High Profile | **Low Profile**

81.08
102.14

66.7
87.46

Slot: 0 1 2 3

I-87018R is auto-configured:
 Baud Rate: 115200
 Checksum: Disable
 Net Address: 2

Note: The Net Address of
 USB-87PN is always 1.

Net Address: 1 2 3 4 5

■ After a module is plugged in, the slot indicator flashes once per 2 seconds.

■ When software configuration is completed, the LED becomes off.

■ If configuration is failed, the LED is always on.
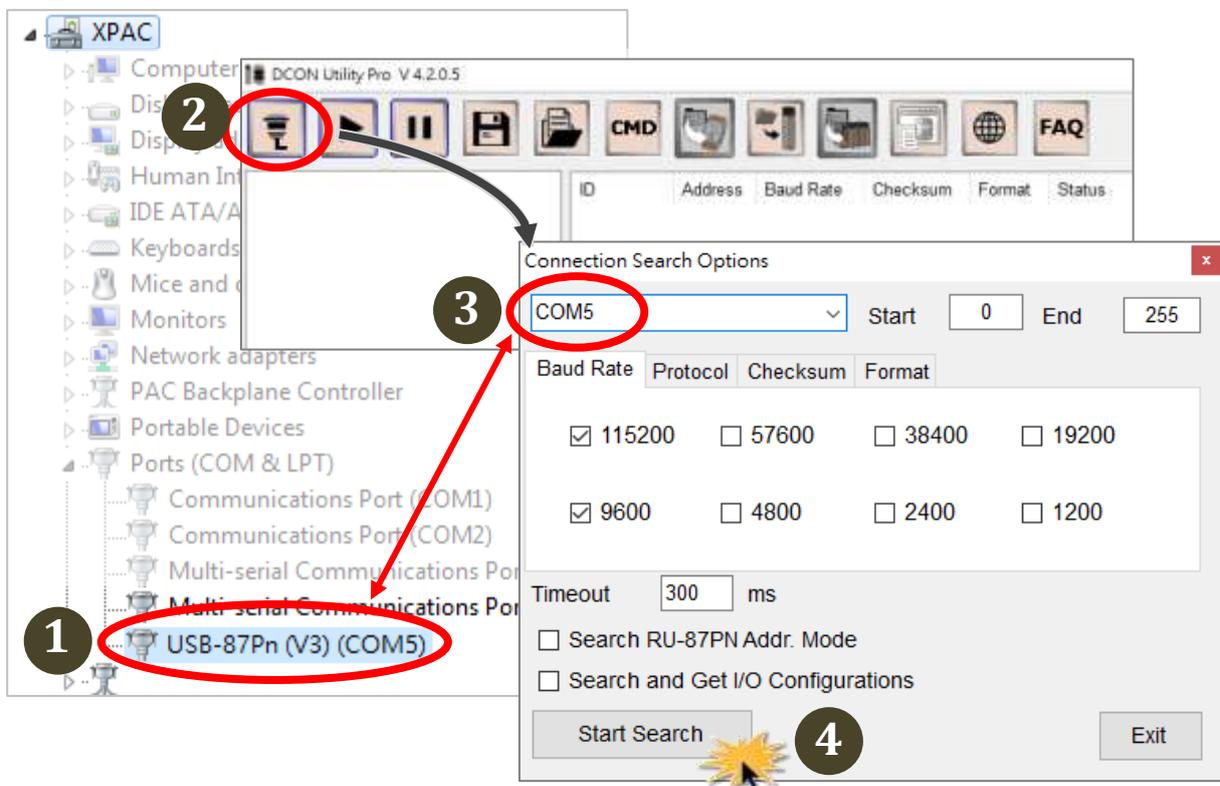
Software Configuration

1. Install the USB-87Pn driver
   https://www.icpdas.com/en/download/show.php?num=2974

2. Download the DCON Utility Pro and decompress the file
   https://www.icpdas.com/en/download/show.php?num=1046

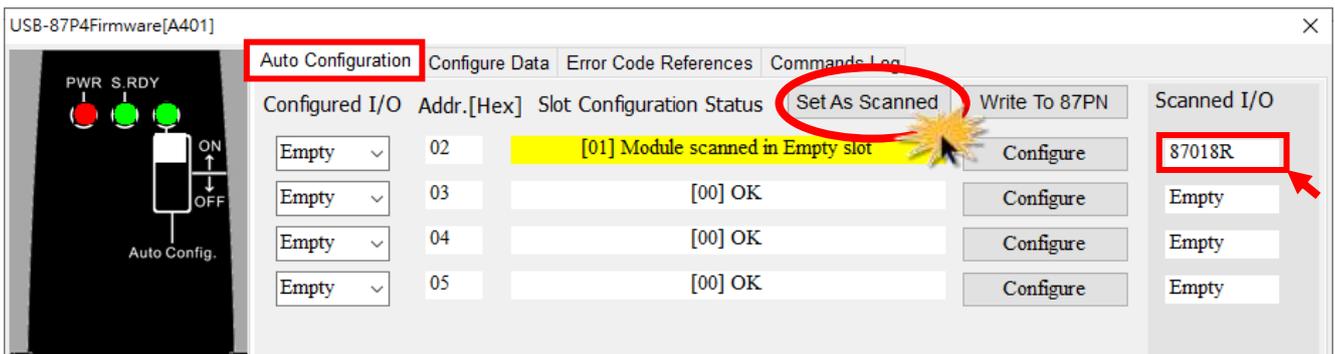3. Run **DCON_Utility_Pro.exe** to search the USB-87Pn (e.g. USB-87P4)

- Check the COM port number created for the USB-87Pn unit in **Device Manager** under Ports (COM & LPT) section.

- Select the COM port on the "**Configuration Search Options**" dialog box, make sure that 115200 bps is checked on Baud Rate tab and click the Start Search button.
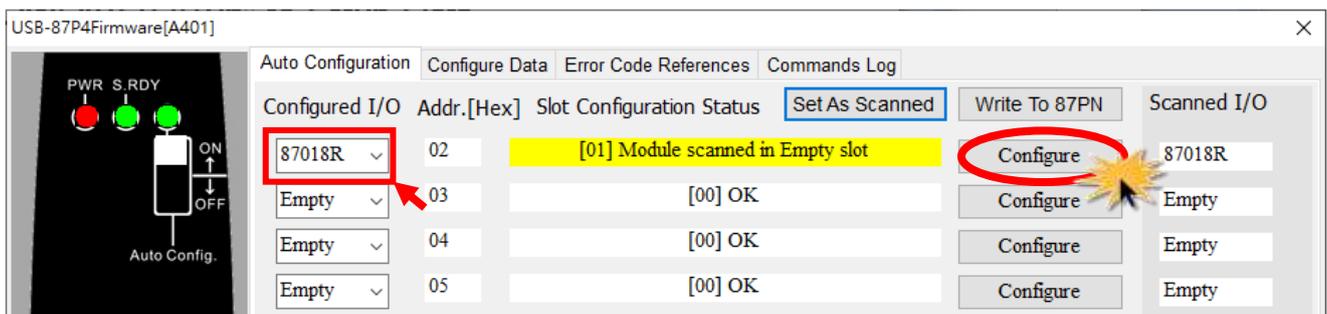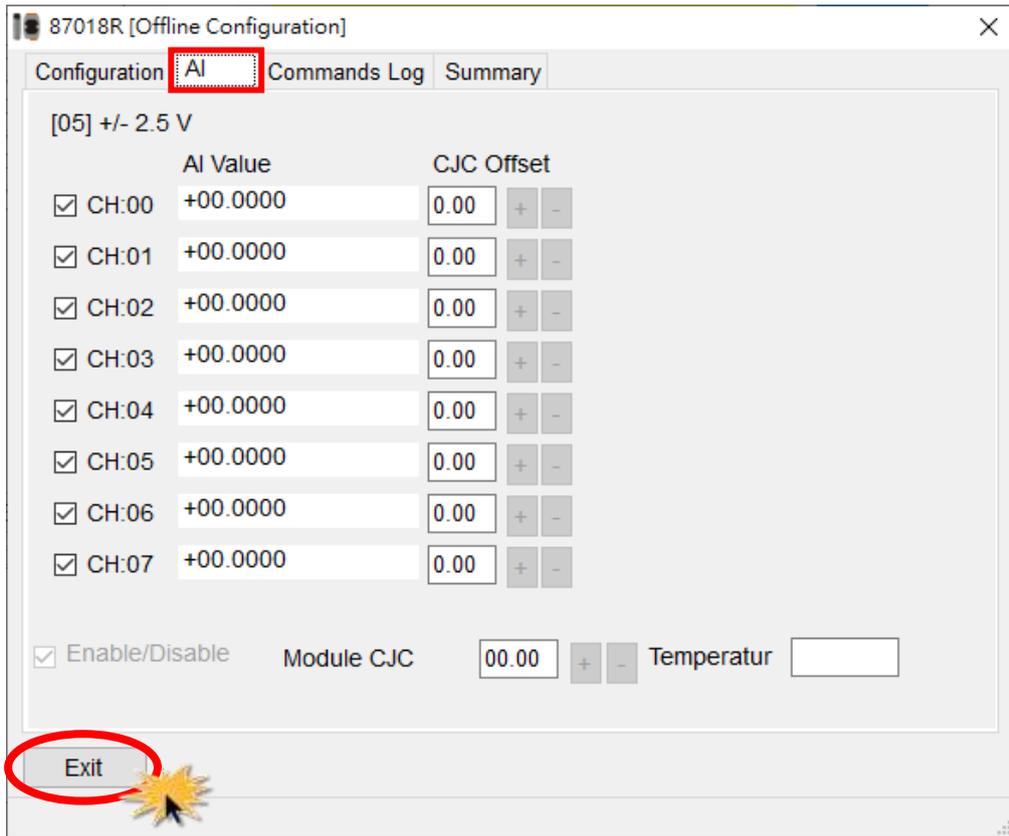
4. Click on the name of the searched module.

5. Make sure that the module name (e.g. I-87018R) is displayed in the text box for Addr 02 (slot 0) in the Scanned I/O field, and click the **Set As Scanned** button.
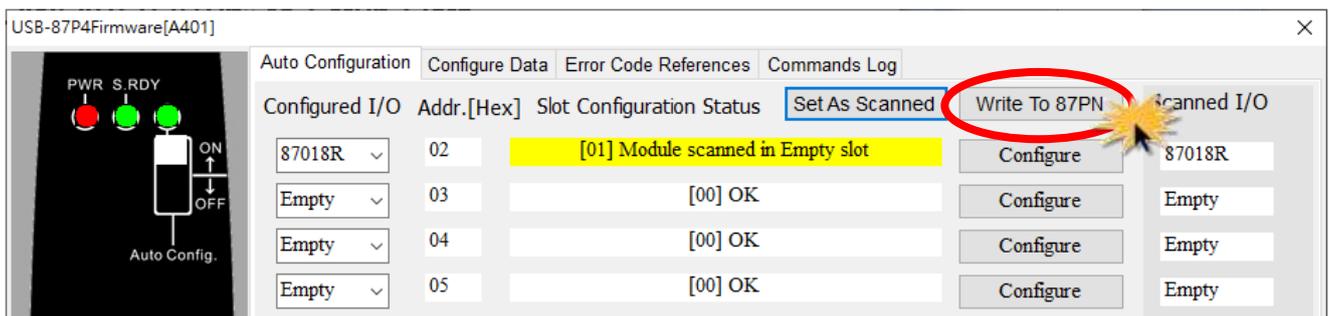

6. Click the **Configure** button for Addr 02 (slot 0).

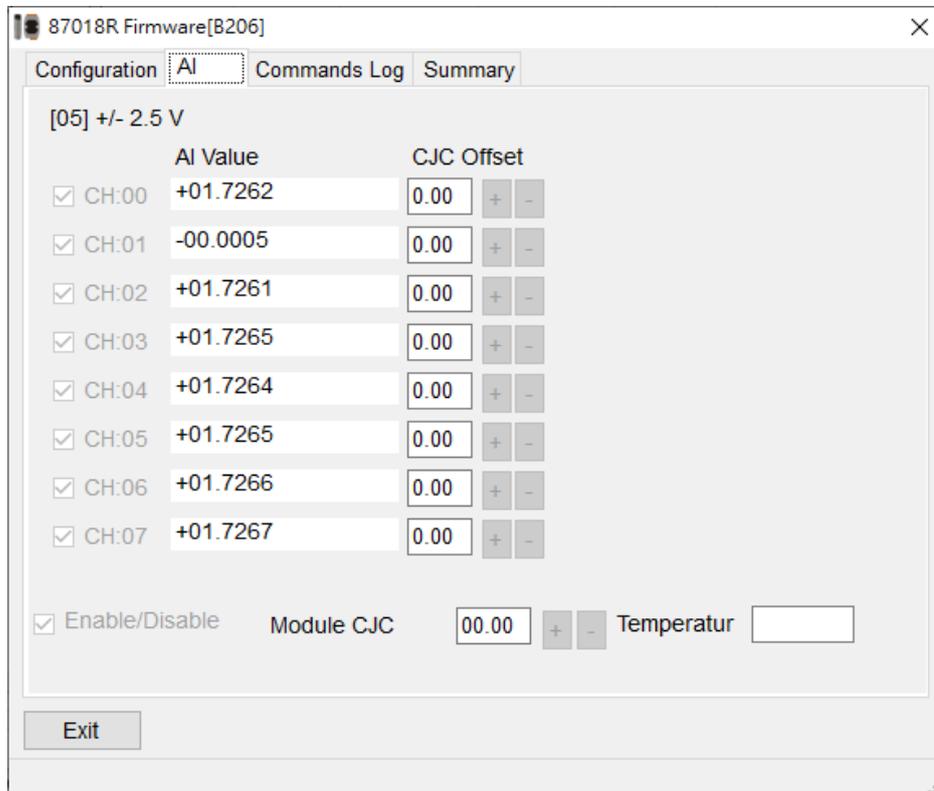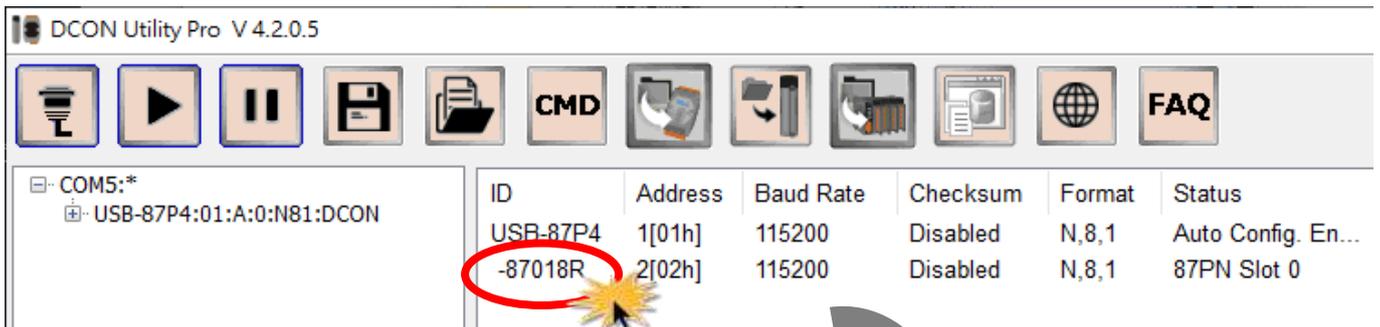**7.** Configure the module and then click the **Exit** button.

8. Click the **Write to 87Pn** button and click the **Yes** button in the pop-up box.

9. Click the **Start Search** icon to search module again.

10. Click the I/O module name to view real-time data on the module.

Quick replacement of damaged modules

In the case of replacing a damaged module, you only need to replace the module with a new one. It is needless to repeat the configurations any more.

Remove the damaged module.

Plug in a new one.