



# ET-2255 Quick Start

v1.2, Jun. 2018

## What's in the box?

The package includes the following items:



ET-2255 Module x 1



Quick Start x1  
(This Document)

## Related Information

- ET-2200 Series Product Page:  
[http://www.icpdas.com/root/product/solutions/remote\\_io/ethernet\\_io/petl-7000\\_tpet\\_tet/petl\\_series\\_main\\_page.html](http://www.icpdas.com/root/product/solutions/remote_io/ethernet_io/petl-7000_tpet_tet/petl_series_main_page.html)
- Documentation & Firmware:  
<http://ftp.icpdas.com.tw/pub/cd/6000cd/napdos/et2200/>
- NS-205/MDR-20-24 Product Page (optional):  
[http://www.icpdas.com/root/product/solutions/industrial\\_ethernet\\_switch/ns-205.html](http://www.icpdas.com/root/product/solutions/industrial_ethernet_switch/ns-205.html)  
[http://www.icpdas.com/root/product/solutions/accessories/power\\_supply/mdr-20-24.html](http://www.icpdas.com/root/product/solutions/accessories/power_supply/mdr-20-24.html)

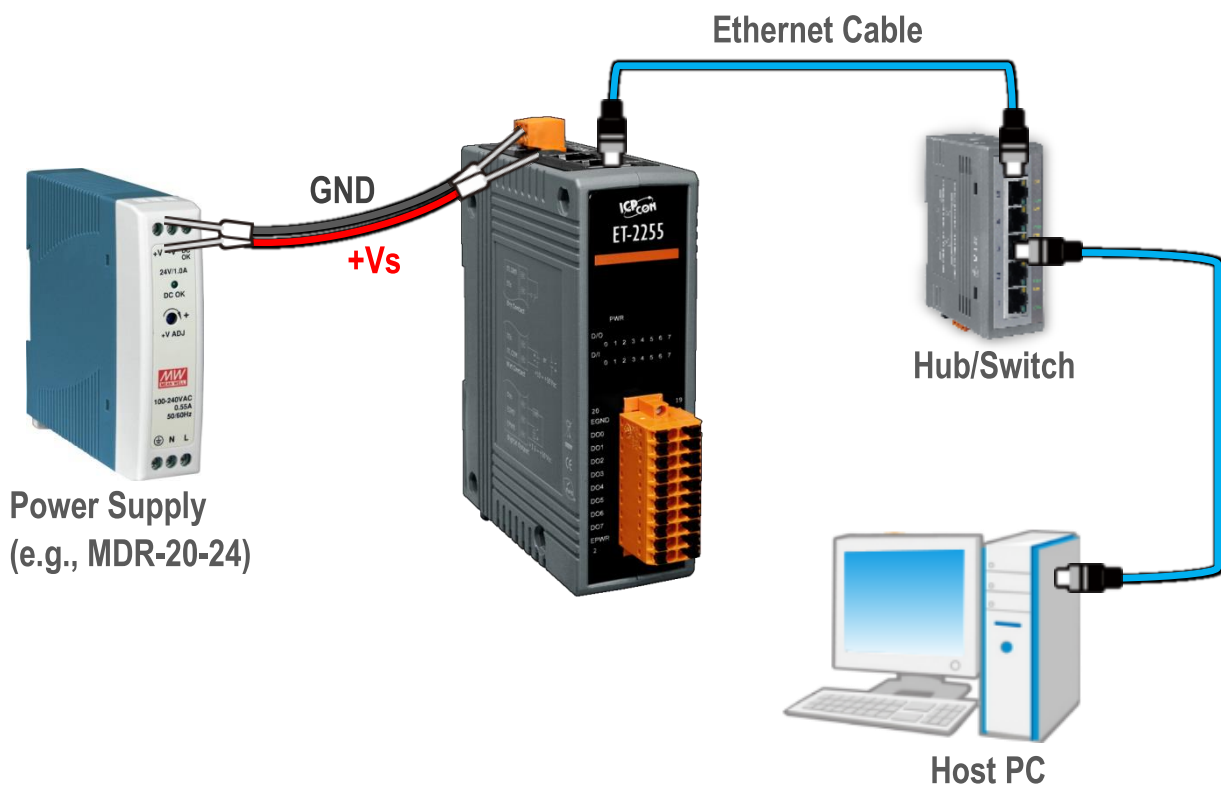
# 1 Connecting the Power and Host PC

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

## 2) Connect both the ET-2255 and your PC to the same sub network or the same Ethernet switch.

## 3) Supply power (+10~+30 VDC) to the ET-2255.



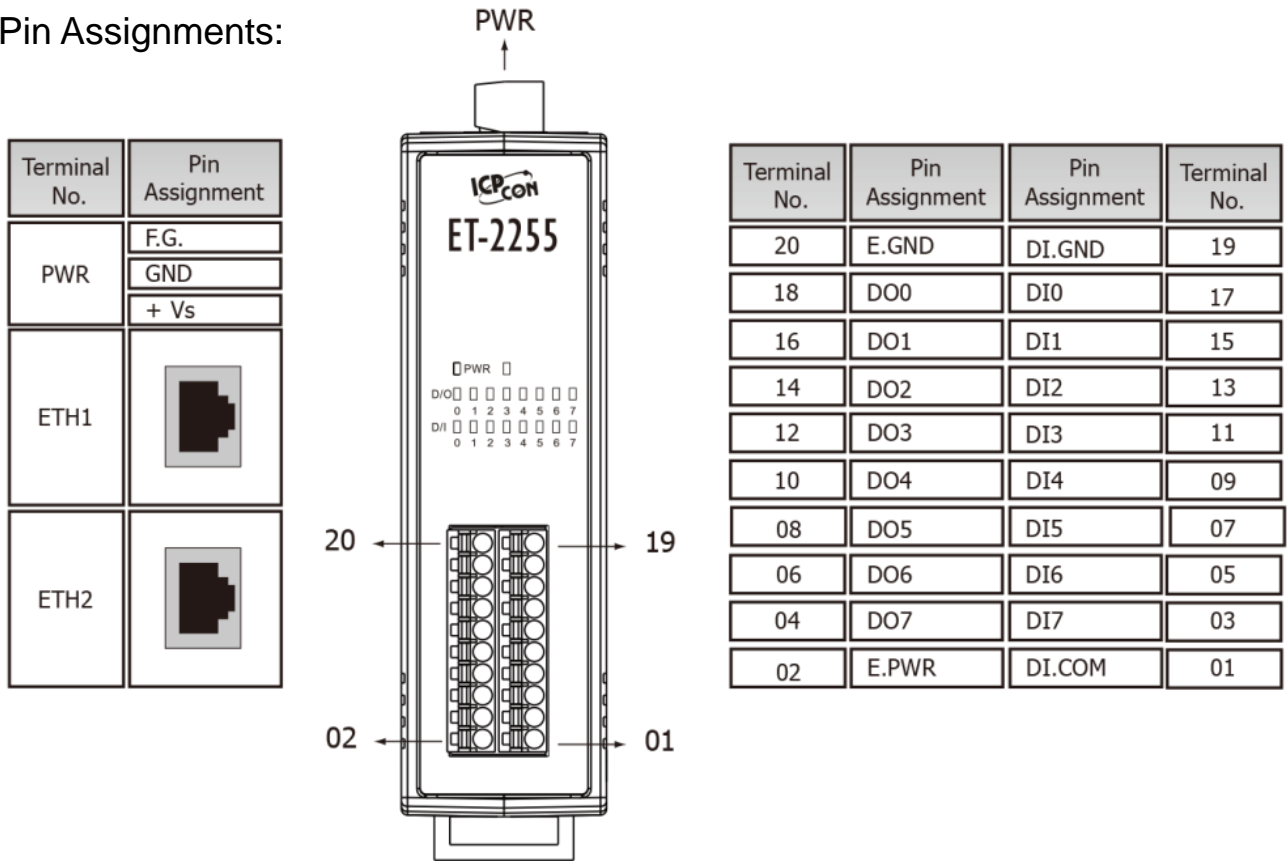
## 4) Verify that the “PWR” LED indicator on the ET-2255 is flashing.



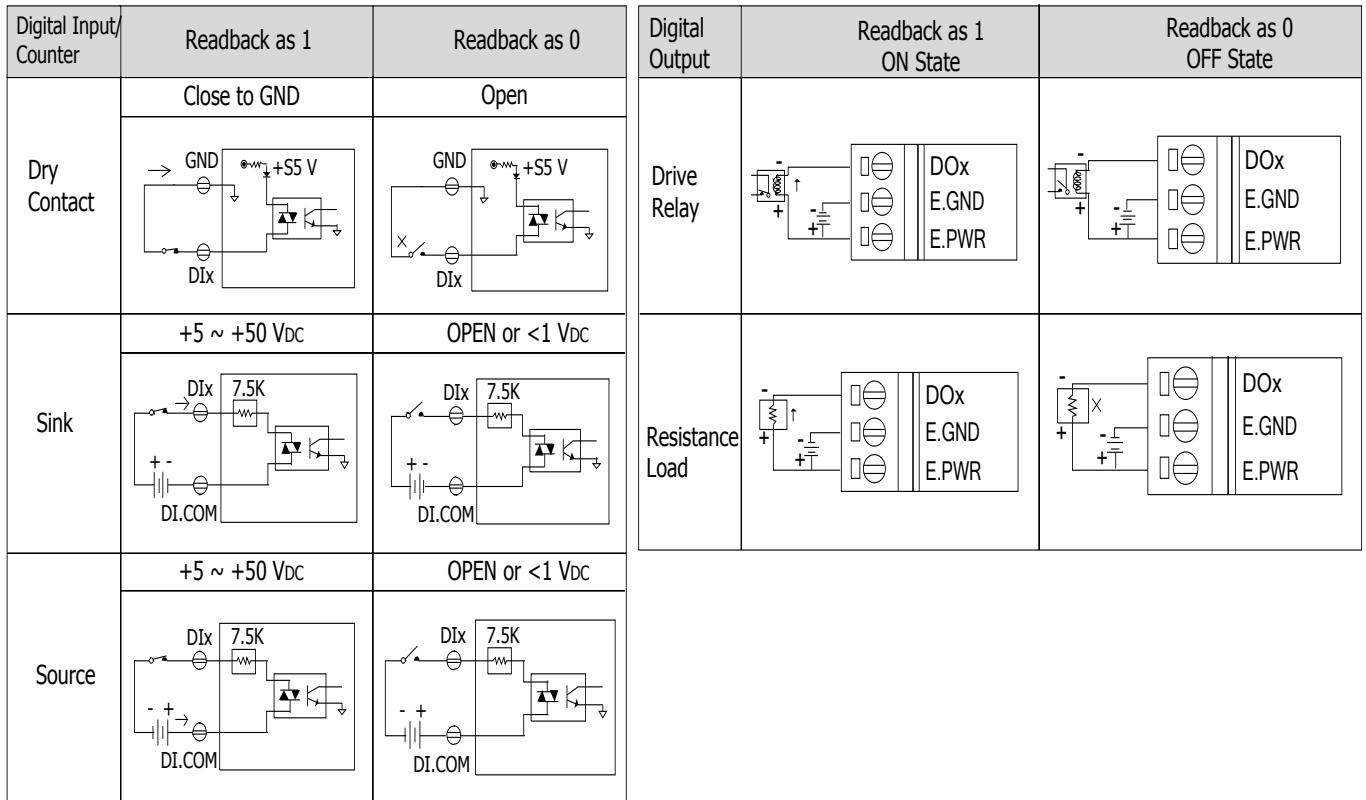
# 2

## Pin Assignments & Wiring Note

### ➤ Pin Assignments:



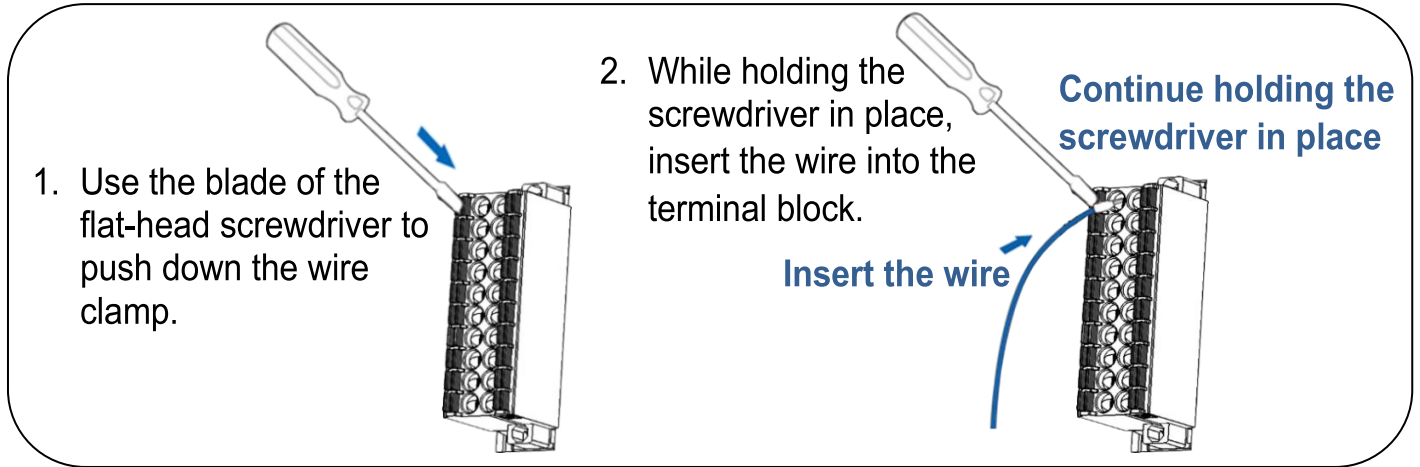
### ➤ Wire Connections:



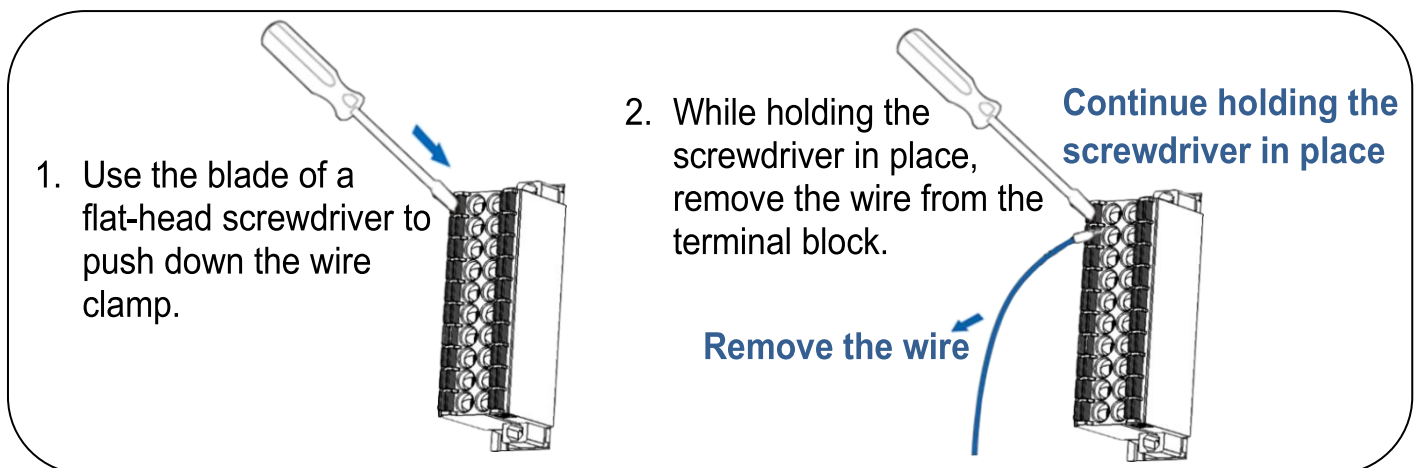
# 3

## Wiring the DI and DO for Self-test

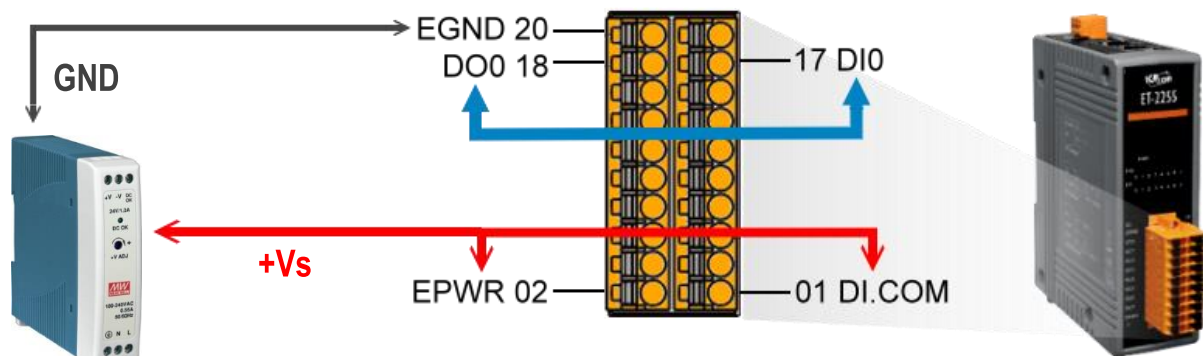
### ➤ A tip for connecting the wire to the connector



### ➤ A tip for removing the wire from the connector



- 1) Connect the **DI0 pin (Pin17)** to the **DO0 pin (Pin18)**.
- 2) Connect the **External Power +24V** to the **DI.COM pin (Pin01)** and **E.PWR pin (Pin02)**.
- 3) Connect the **External Power GND** to the **E.GND (Pin20)**.



Power Supply (e.g., MDR-20-24)

# 4 Modbus Address

## ➤ (0xxxx) DO address:

Begin address	Points	Description	Bits Per Point	Range	Access Type
0 (0x0)	1~6	Digital Output Channels	1	0: OFF, 1: ON	R/W
32 (0x20)	1	Clears the status of all high latched DI channels	1	1: Clear	W
33 (0x21)	1	Clears the status of all low latched DI channels	1	1: Clear	W
⋮	⋮	⋮	⋮	⋮	⋮
190 (0xBE)	1~6	Enables frequency measurement for all DI Channels	1	0: Disable 1: Enable (Default: 0)	R/W/F
235 (0xEB)	1~6	Sets the Power-on value for all DO Channels	1	0: OFF, 1: ON (Default: 0)	R/W/F
267 (0x10B)	1~6	Sets the Safe value for all DO Channels	1	0: OFF, 1: ON (Default: 0)	R/W/F

“R”: Read; “W”: Write; “F”: Settings are recorded in flash memory by default

## ➤ (1xxxx) DI address:

Begin address	Points	Description	Bits Per Point	Range	Access Type
0 (0x0)	1~6	Digital Input	1	0:Off 1:On	R
32 (0x20)	1~6	Digital latched status (high)	1	0:no 1:latched	R
64 (0x40)	1~6	Digital latched status (low)	1	0:no 1:latched	R

“R”: Read

### Note

For detail “DI/DO Modbus Address” information, refer to Section 6.3 Modbus Register Table of user’s manual (<http://ftp.icpdas.com/pub/cd/6000cd/napdos/et2200/document/>).

# 5

## Configuring Network Settings

1) Run the eSearch Utility.

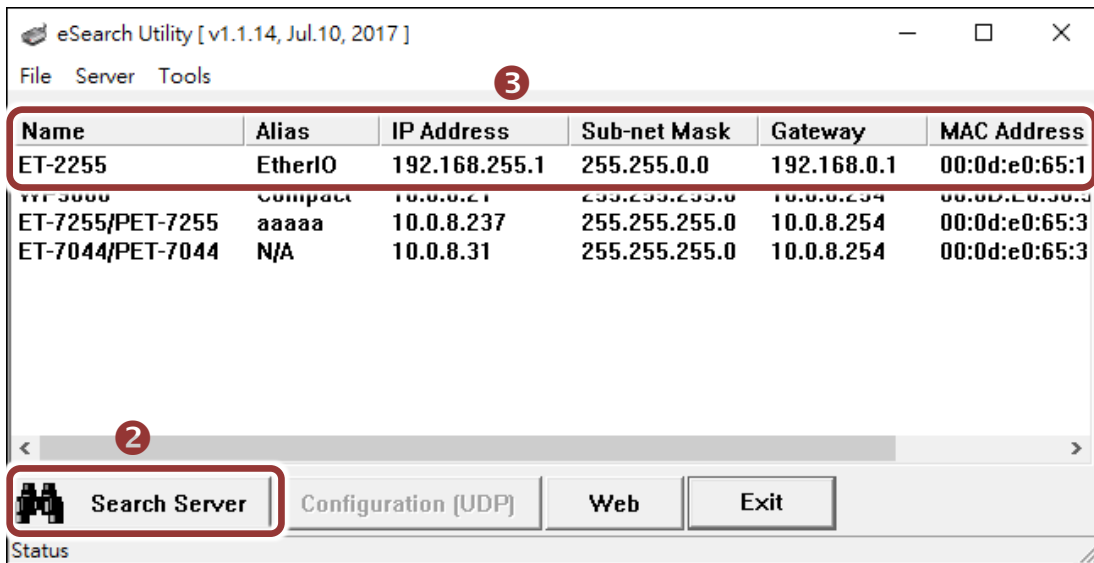
The eSearch Utility is located at:

<http://ftp.icpdas.com/pub/cd/6000cd/napdos/software/esearch/>



2) Click the “**Search Servers**” to search your ET-2255.

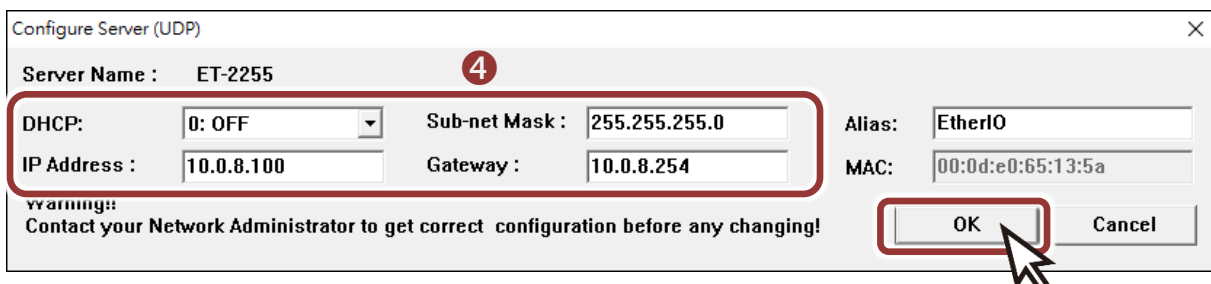
3) Double-click your ET-2255 to configure the settings



### Factory Default Settings of ET-2255:

IP Address	192.168.255.1
Subnet Mask	255.255.0.0
Gateway	192.168.0.1

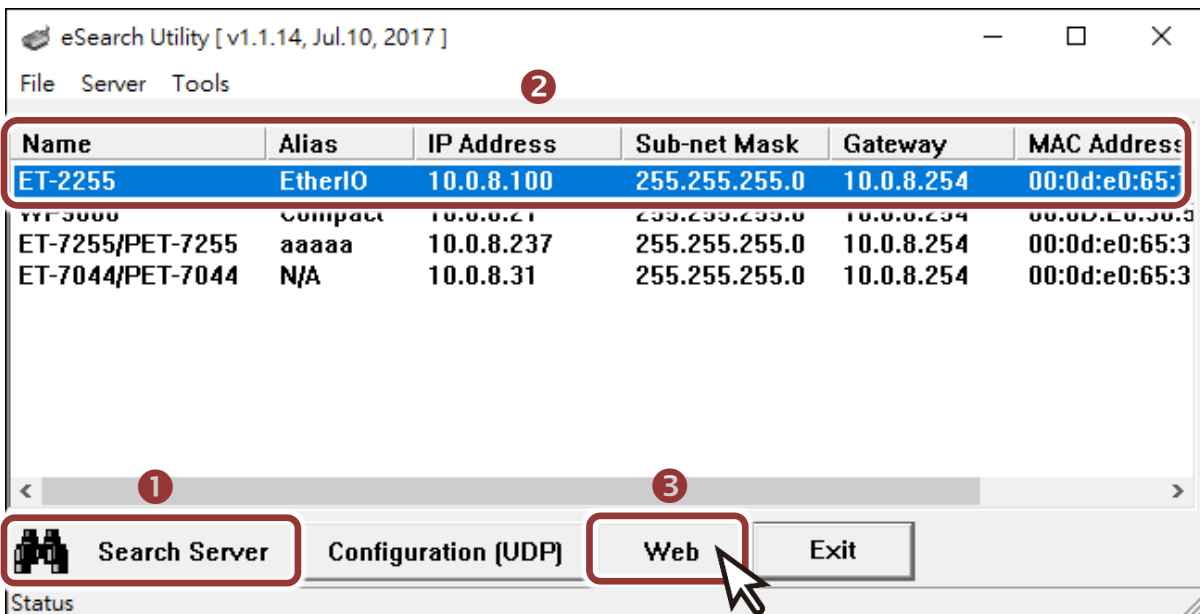
4) Contact your Network Administrator to obtain a correct network configuration (such as **IP/Mask/Gateway**). **Enter the network settings** and click “**OK**”. **⚠ Note: The ET-2255 will use the new settings 2 seconds later.**



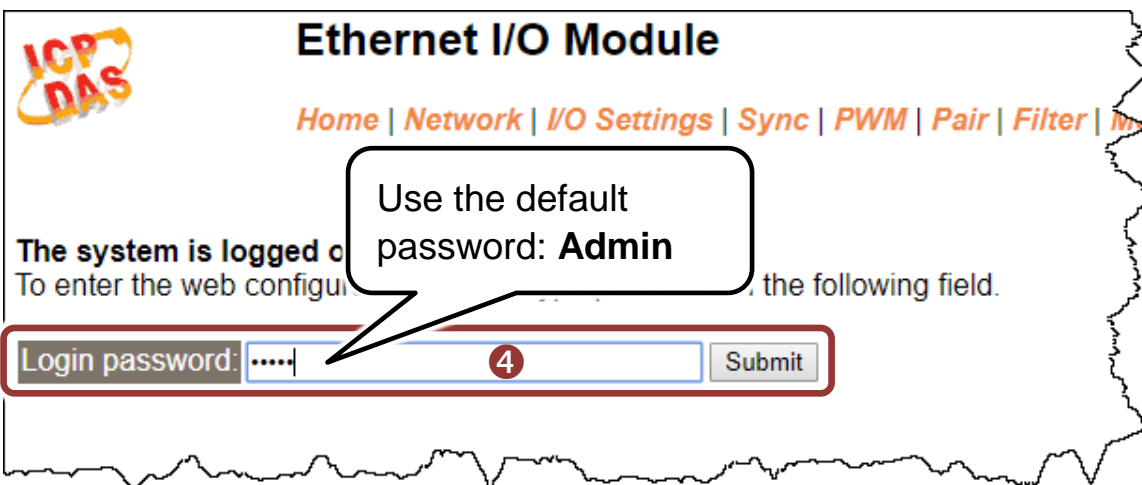
# 6

## Testing your Ethernet I/O Module

- 1) Wait 2 seconds and click “**Search Servers**” button again to ensure the ET-2255 is working well with new configuration.
- 2) Click the name of ET-2255 to select it.
- 3) Click the “**Web**” button to log in to the web configuration pages.  
(Or enter the URL address of the ET-2255 in the address bar of the browser.)



- 4) Enter the password (default: **Admin**) in the “login password” field and click “**Submit**”.



5) In the “Home” page allows a simple test to be performed to verify the Digital Input and Output functionality.

**Ethernet I/O Module**

5 [Home](#) | [Network](#) | [I/O Settings](#) | [Sync](#) | [PWM](#) | [Pair](#) | [Filter](#) | [Monitor](#) | [Change Password](#)

Model Name:	ET-2255	Alias Name:	Eth
Firmware Version:	v1.4.7 [Nov.20 2017]	MAC Address:	00-00
IP Address:	10.0.8.100	Initial Switch:	OFF
TCP Port Timeout: (Socket Watchdog, Seconds):	180	System Timeout: (Network Watchdog, Seconds)	0

**Digital I/O (Modbus Address: DO=00000 to 00015, DI=10000 to 10015)**

DO7 DO6 DO5 DO4 DO3 DO2 DO1 DO0

DI Channel	Value (10000)	Counter (30016) / Frequency (30064)	High Latched (10032)
DI0:		-	-
DI1:		-	-
DI2:		-	-

6) In the “Digital I/O” section, click the “DO0” button to ON (Red).

7) The corresponding DI becomes green for DI0 is ON.

8)

**Ethernet I/O Module**

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DI0:		-	-	-
DI1:		-	-	-
DI2:		-	-	-