



ET-2251 Quick Start

v1.2, Jun. 2018

What's in the box?

The package includes the following items:



ET-2251 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
- 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/accessories/power_supply/mdr-20-24.html

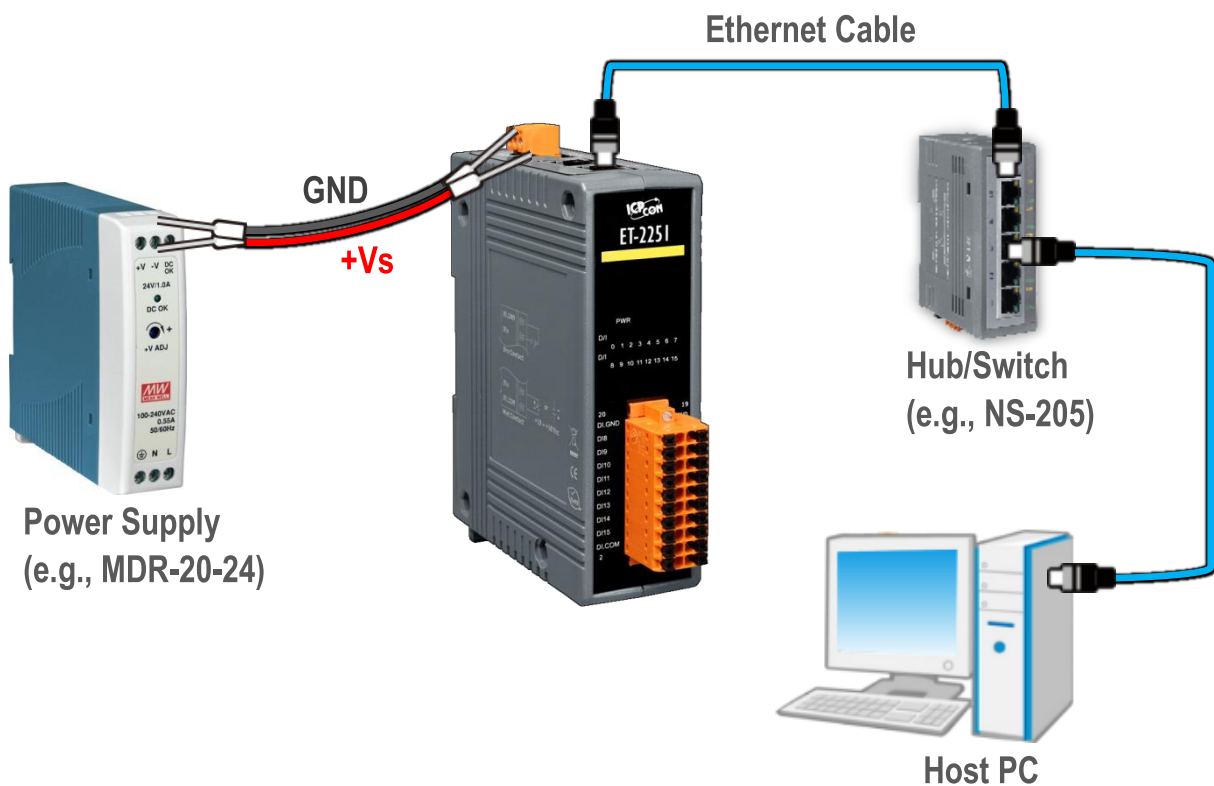
1 Connecting the Power and Host PC

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-2251 and your PC to the same sub network or the same Ethernet switch.

3) Supply power (+10~+30 VDC) to the ET-2251.



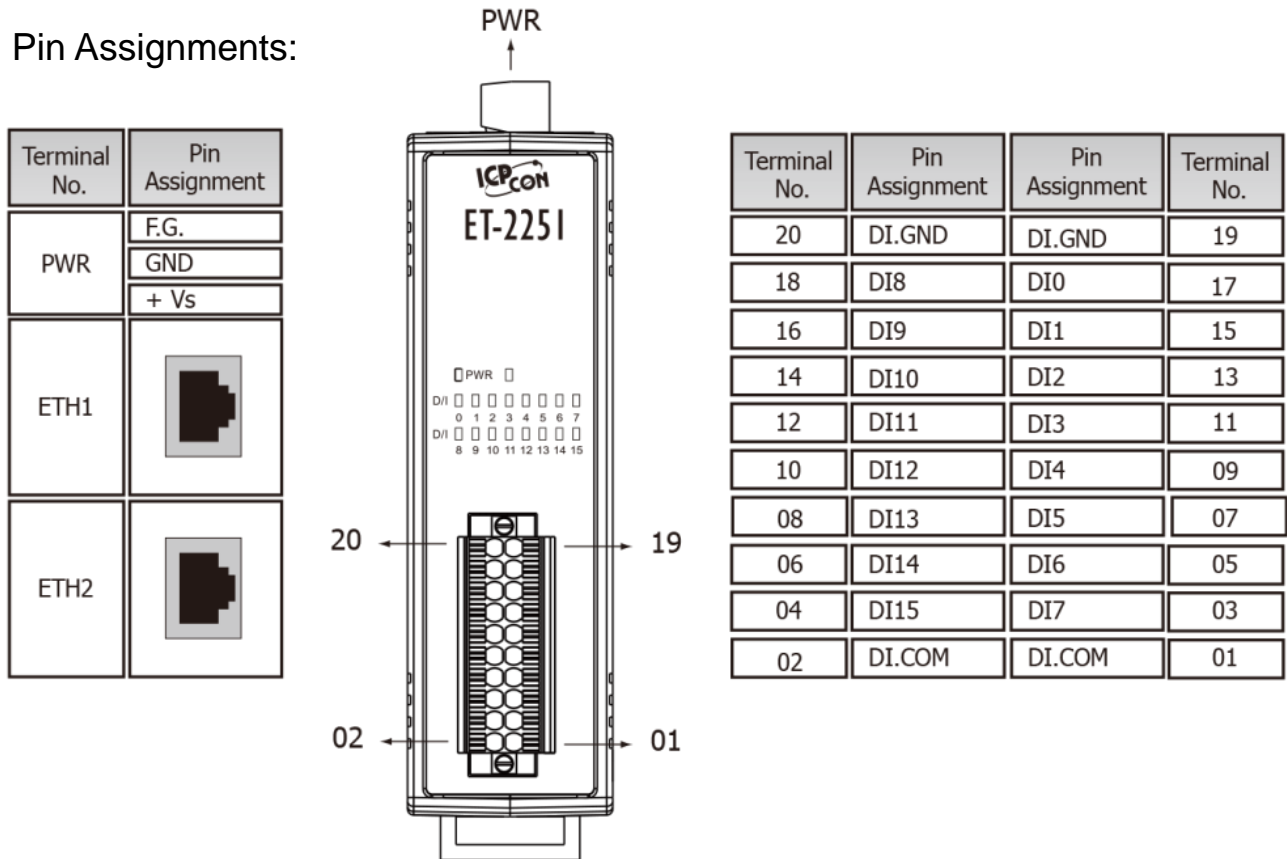
4) Verify that the “PWR” LED indicator on the ET-2251 is flashing.



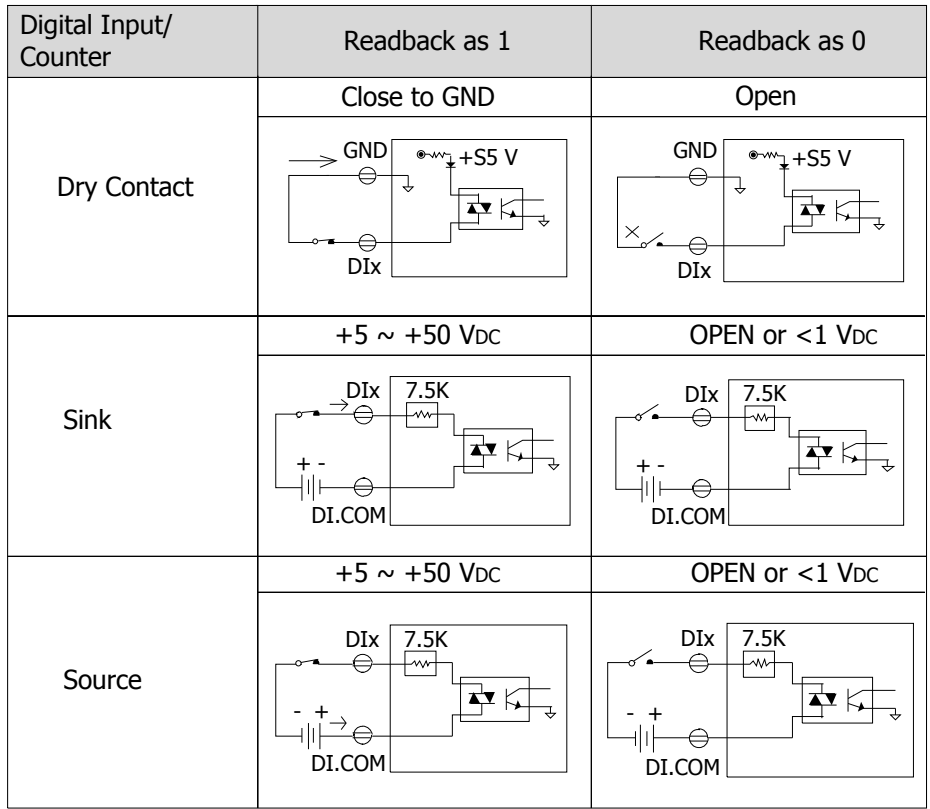
2

Pin Assignments & Wiring Note

➤ Pin Assignments:



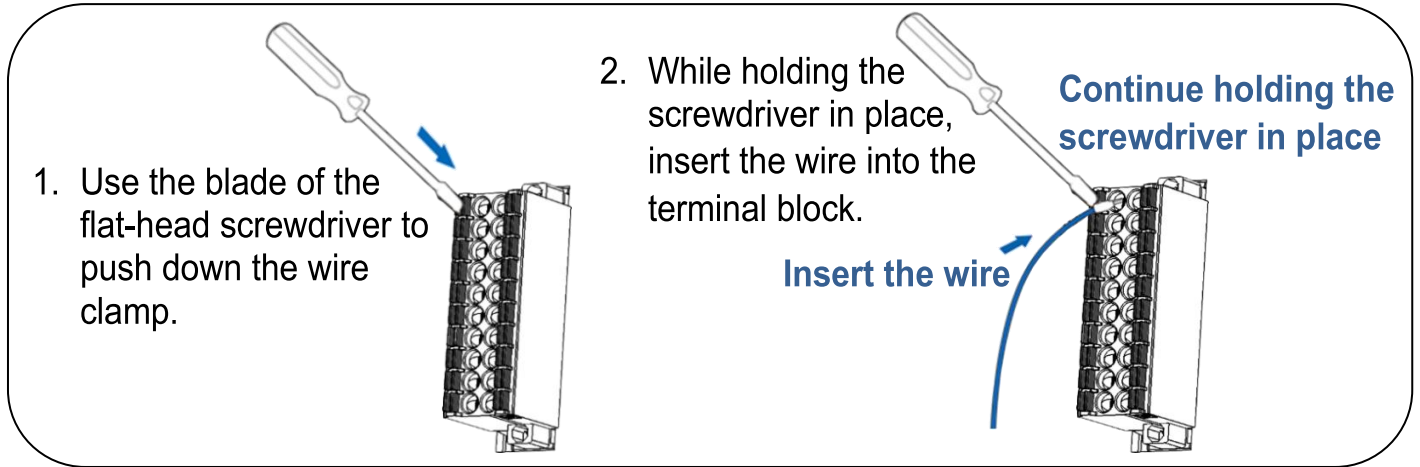
➤ Wire Connections:



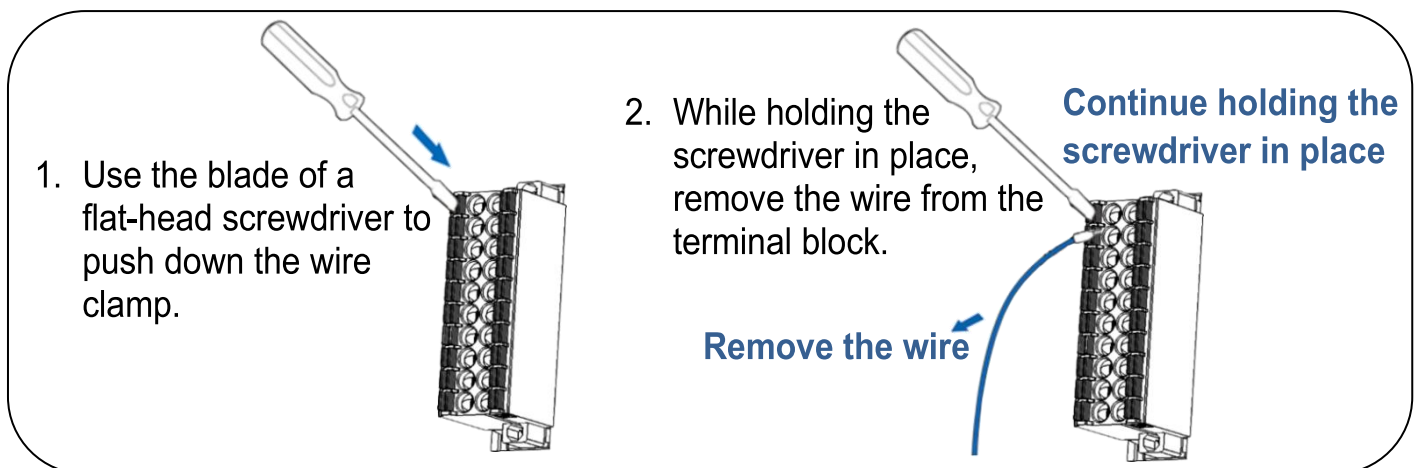
3

Wiring the DI and DO for Self-test

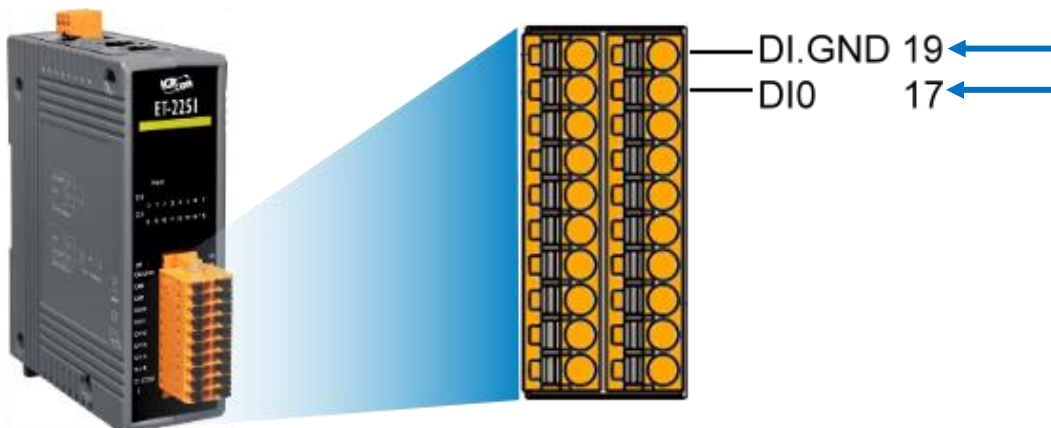
➤ A tip for connecting the wire to the connector



➤ A tip for removing the wire from the connector



1) Connect the DI0 pin (Pin17) to the DI.GND pin (Pin19).



4 Modbus Address

➤ (0xxxx) DO address:

Begin address	Points	Description	Bits Per Point	Range	Access Type
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
⋮	⋮	⋮	⋮	⋮	⋮
150 (0x96)	1	Enables the high and low latches for all DI Channels	1	0: Disable 1: Enable (Default: 0)	R/W/F
151 (0x97)	1~16	Enables the high speed digital counter for all DI Channels	1	0: Disable 1: Enable (Default: 0)	R/W/F
190 (0xBE)	1~16	Enables frequency measurement for all DI Channels	1	0: Disable 1: Enable (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)	1~16	Digital Input	1	0:Off 1:On	R
32 (0x20)	1~16	Digital latched status (high)	1	0:no 1:latched	R
64 (0x40)	1~16	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.

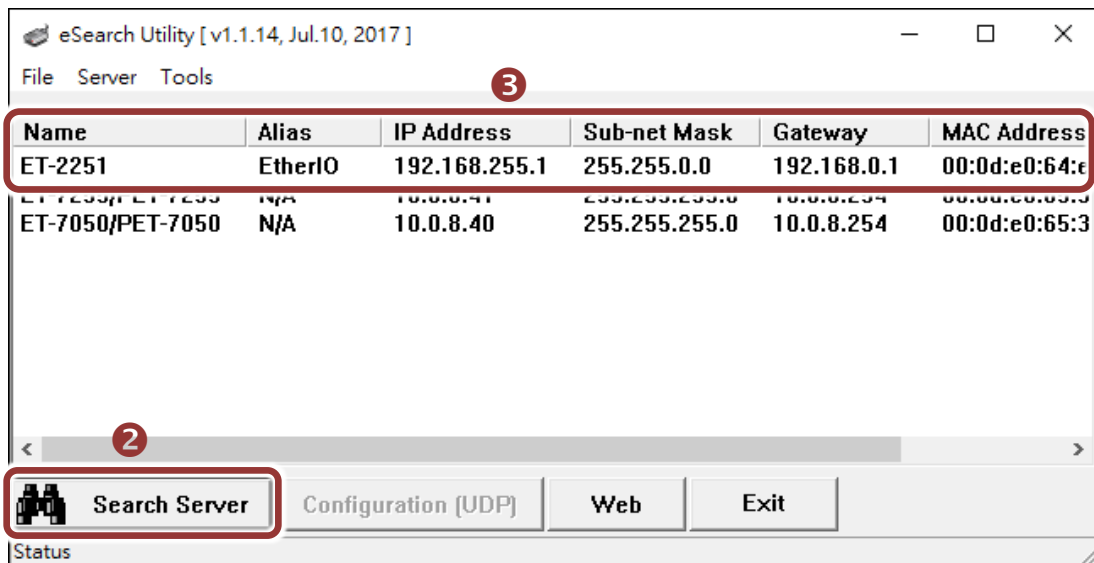
The eSearch Utility is located at:

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



2) Click the “Search Servers” to search your ET-2251.

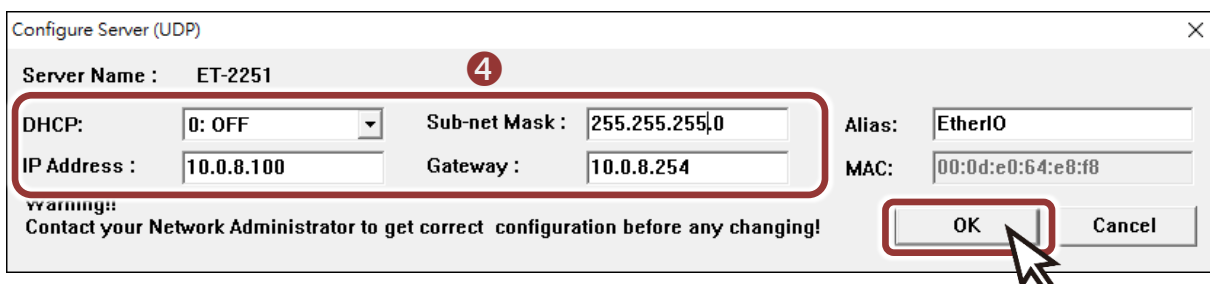
3) Double-click your ET-2251 to configure the settings



Factory Default Settings of ET-2251:

IP Address	192.168.255.1
Subnet Mask	255.255.0.0
Gateway	192.168.0.1

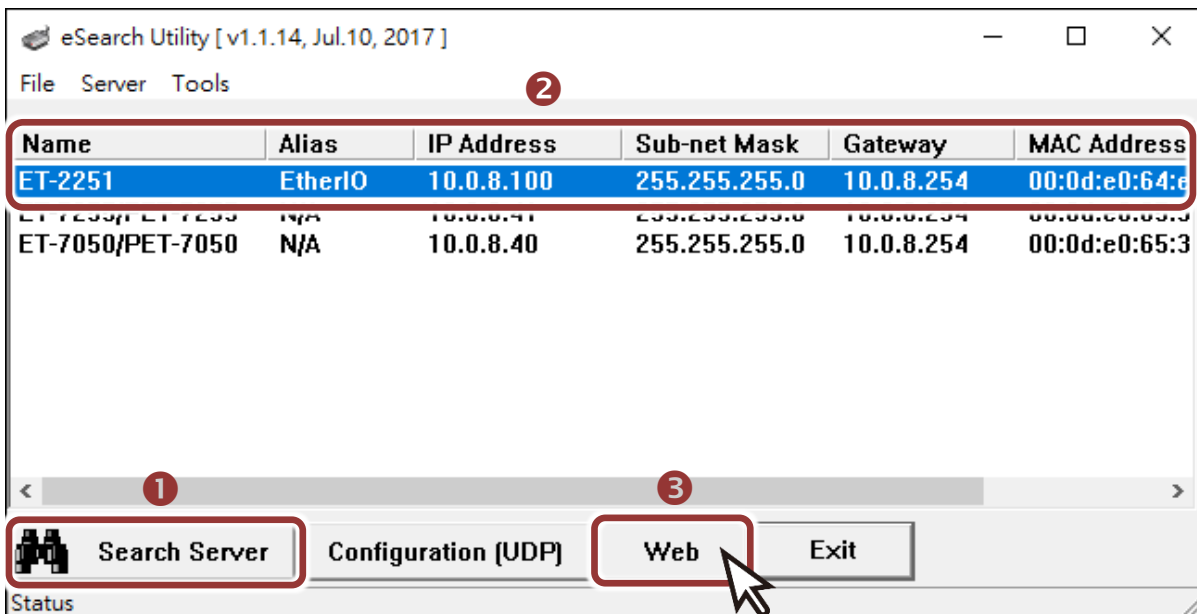
4) Contact your Network Administrator to obtain a correct network configuration (such as **IP/Mask/Gateway**). Enter the network settings and click “OK”. **⚠ Note: The ET-2251 will use the new settings 2 seconds later.**



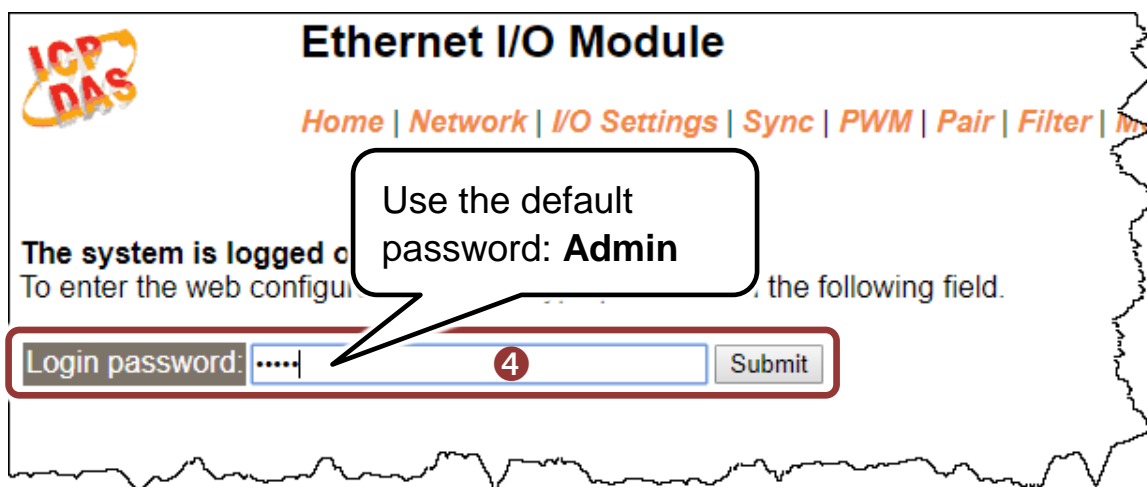
6

Testing your Ethernet I/O Module

- 1) Wait 2 seconds and click “**Search Servers**” button again to ensure the ET-2251 is working well with new configuration.
- 2) Click the name of ET-2251 to select it.
- 3) Click the “**Web**” button to log in to the web configuration pages.
(Or enter the URL address of the ET-2251 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 functionality.
- 6) In the “**Digital I/O**” section, verify that status for the both **DI0 is ON (green)**.

Ethernet I/O Module

5 **Home** | Network | I/O Settings | Sync | PWM | Pair | Filter | Monitor | Change Password | Logout

Model Name:	ET-2251	Alias Name:	EtherIO
Firmware Version:	v1.4.7 [Nov.20 2017]	MAC Address:	00-0d-e0-64-e8-f8
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)

DI Channel	Value (10000)	Counter (30016) / Frequency (30064)	High Latched (10032)	Low Latched (10064)
DI0:	6	-	-	-
DI1:		-	-	-
DI2:		-	-	-
DI3:		-	-	-
DI4:		-	-	-
DI5:		-	-	-
DI6:		-	-	-
DI7:		-	-	-