

Packing List

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



(P)ET-2252 X 1

Resources

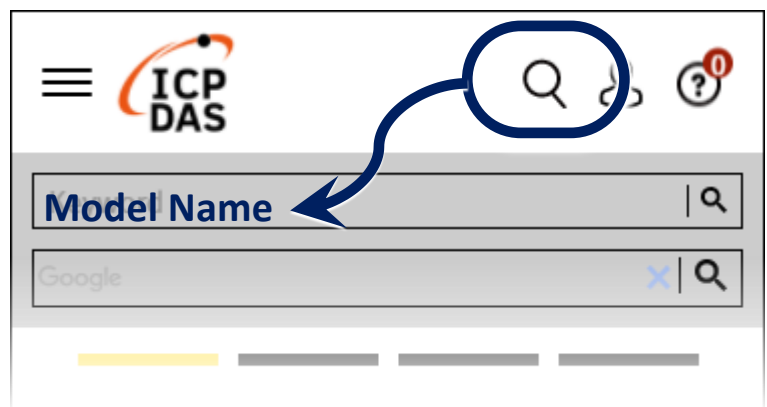
How to search for drivers, manuals and spec information on ICP DAS website.

Technical Support

service@icpdas.com

www.icpdas.com

- For Mobile Web



- For Desktop Web



1 Connecting the Power and Host PC

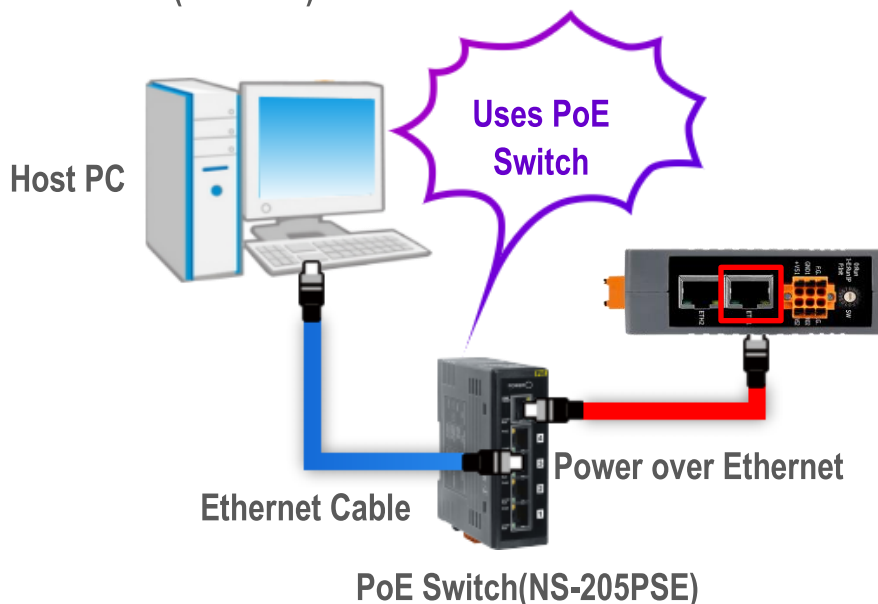
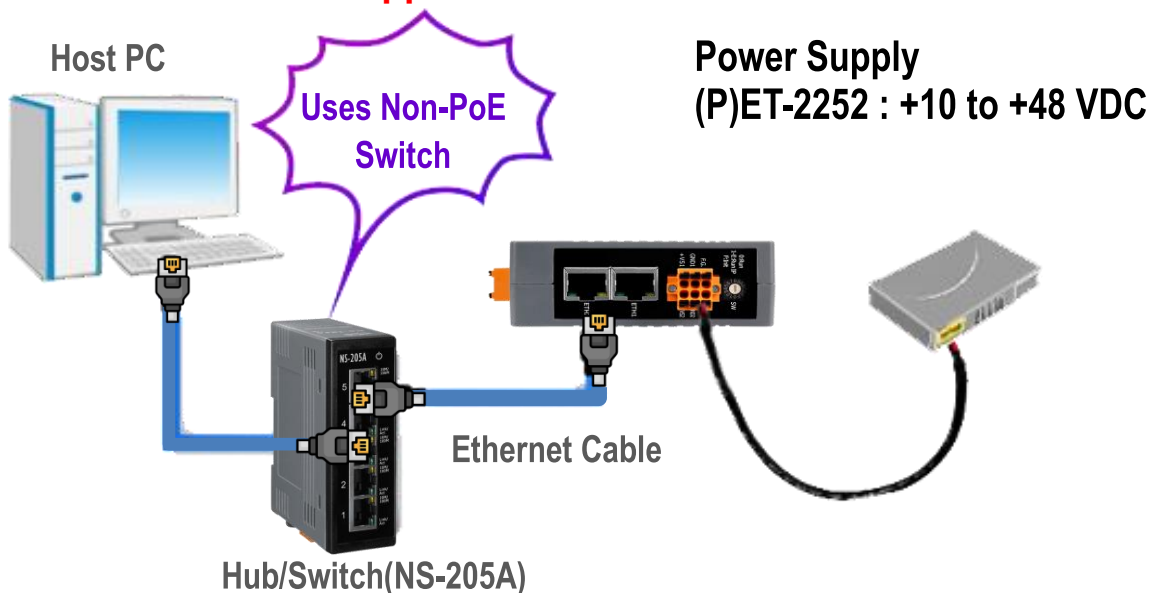
1) Make sure your PC has workable network settings.

Disable or well configure your Windows firewall and Anti-Virus firewall first, else the “**Search Servers**” on **Chapter 3** may not work. (Please contact with your system Administrator)

2) Connect both the (P)ET-2252 and your PC to the same sub network or the same Ethernet switch.

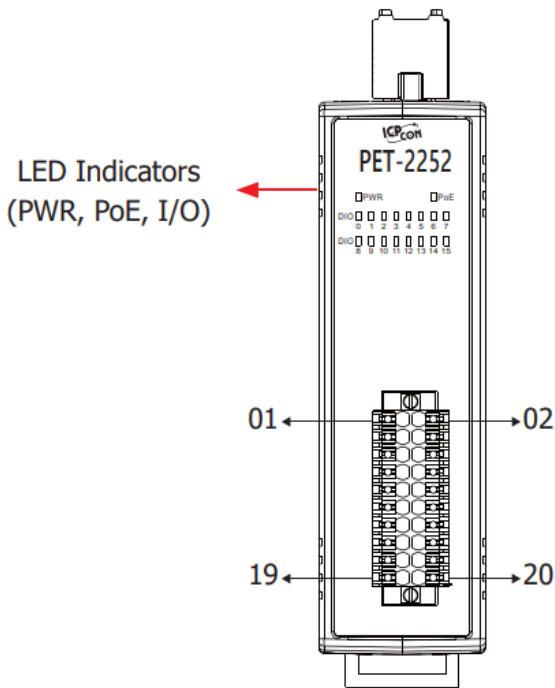
3) Supply power (PoE or +10 to +48 V_{DC}) to the (P)ET-2252. °

⚠ Note: Please use the first RJ-45 jack (ETH1) to connect the PoE Switch for powering through PoE. The second RJ-45 jack (ETH2) doesn't support the PoE function.



2 Pin Assignments & Wiring Note

➤ Pin Assignments:



Pin Assignment	Terminal No.		Pin Assignment
DIO0	01	02	DIO8
DIO1	03	04	DIO9
DIO2	05	06	DIO10
DIO3	07	08	DIO11
DIO4	09	10	DIO12
DIO5	11	12	DIO13
DIO6	13	14	DIO14
DIO7	15	16	DIO15
EXT.PWR	17	18	EXT.PWR
DI.COM	19	20	EXT.GND

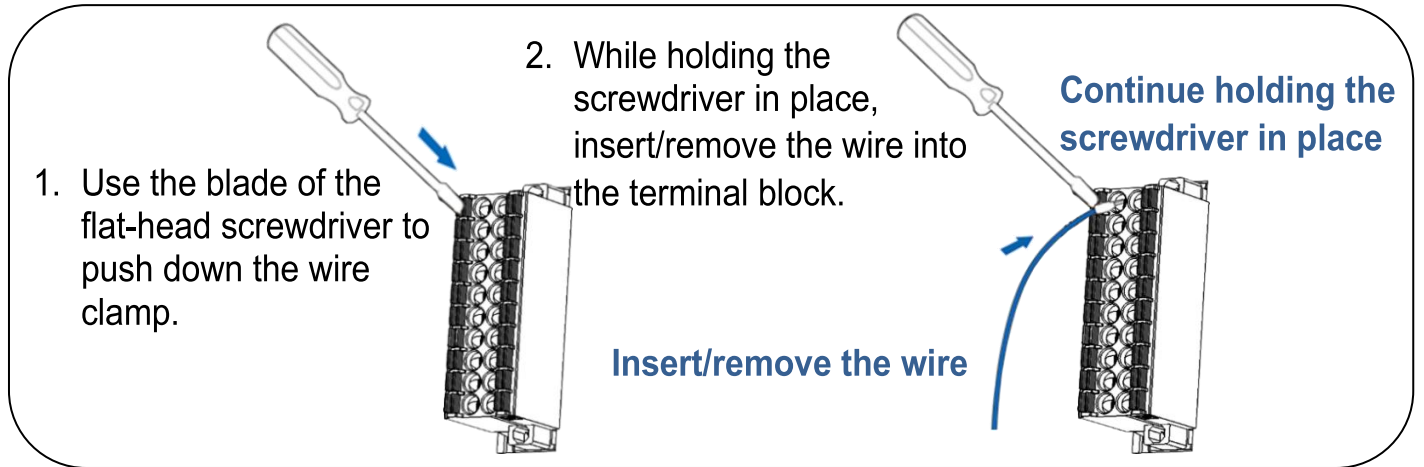
20-pin Connector

➤ Wire Connections:

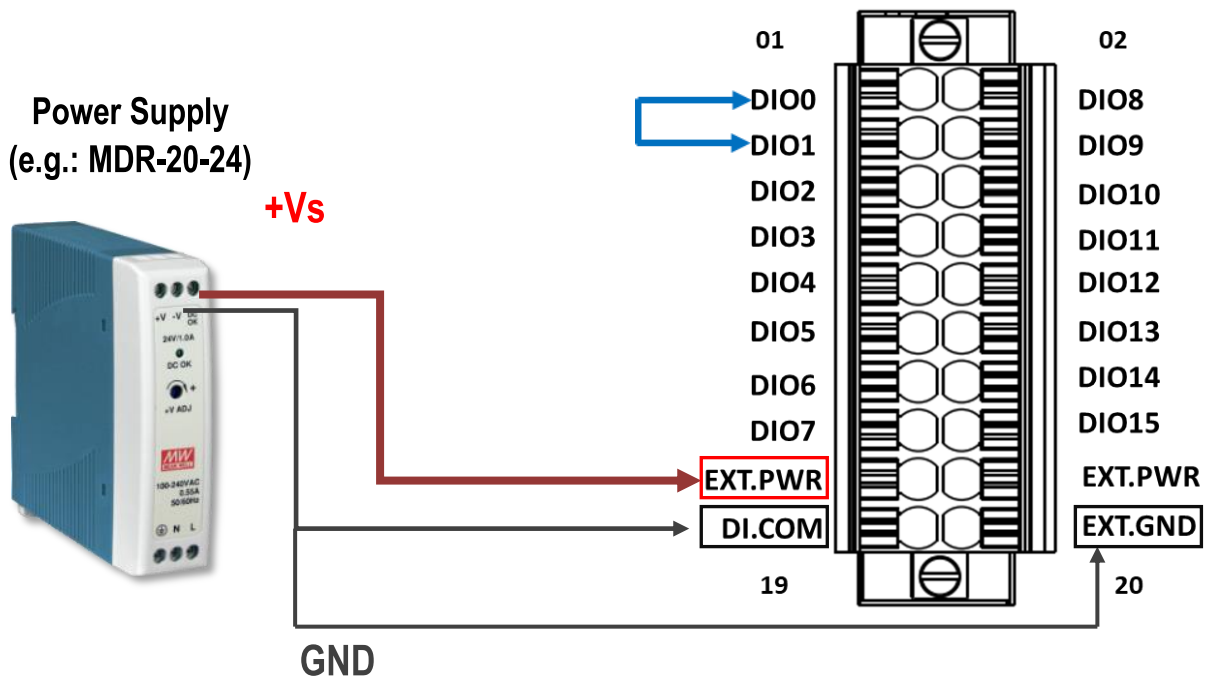
Input Type	ON State LED ON, Readback as 1	OFF State LED OFF, Readback as 0
Wet Contact (Sink)	+5 ~ +50 VdC	OPEN or <1 VdC
Output Type	ON State, Readback as 1	OFF State, Readback as 0
Inductive Load		
Resistance Load		

3 Wiring the DI and DO for Self-test

- A tip for insert/remove the wire to the connector.



- 1) Connect the DIO0 pin (Pin01) to the DIO1 pin (Pin03).
- 2) Connect the External Power +24V to the EXT.PWR pin (Pin17).
- 3) Connect the External Power GND to the DI.COM (Pin19) and EXT.GND (Pin20).



4 Configuring Network Settings

1) Run the eSearch Utility.

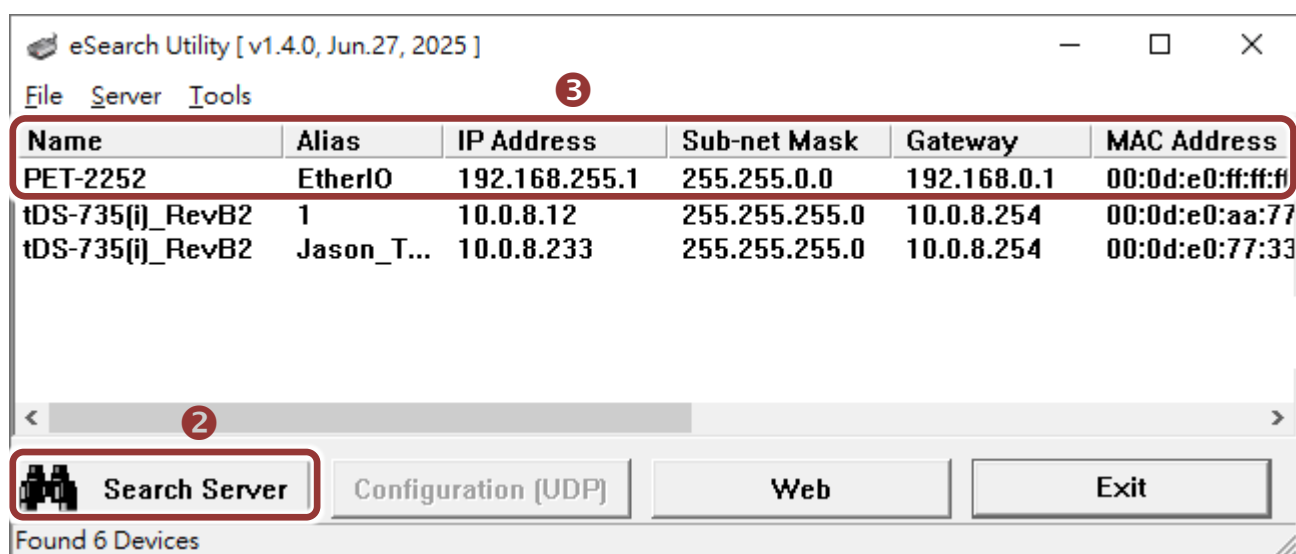
eSearch Utility download link:

<https://www.icpdas.com/en/download/index.php?nation=US&kind1=&model=&kw=eSearch>



2) Click the “Search Servers” to search your (P)ET-2252.

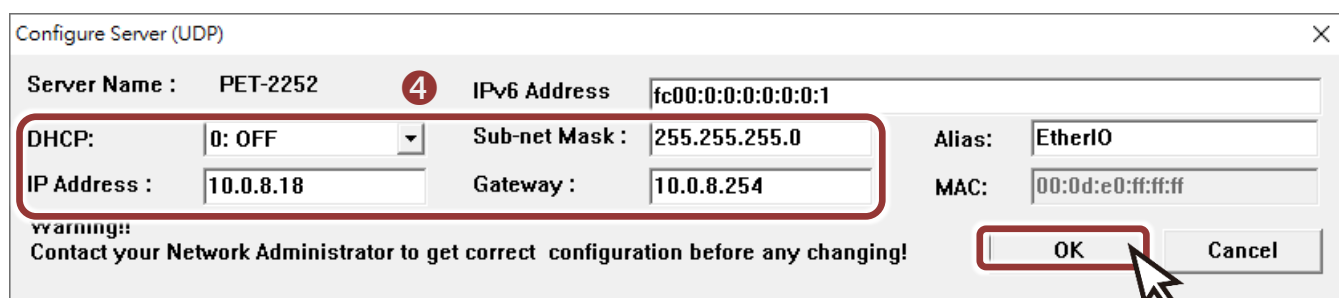
3) Double-click your (P)ET-2252 to configure the settings.



Factory Default Settings of (P)ET-2252:

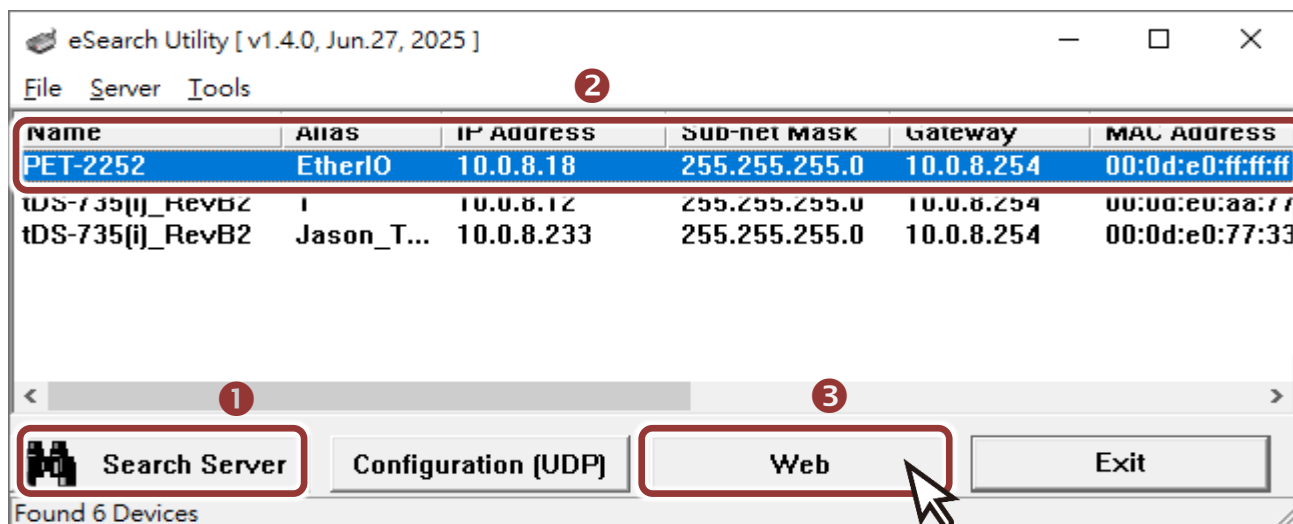
IP Address	192.168.255.1
Subnet Mask	255.255.0.0
Gateway	192.168.0.1

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 (P)ET-2252 will use the new settings 2 seconds later.**



5 Testing your Ethernet I/O Module

- 1) Wait 2 seconds and click “Search Servers” button again to ensure the (P)ET-2252 is working well with new configuration
- 2) Click the name of (P)ET-2252 to select it.
- 3) Click the “Web” button to log in to the web configuration pages. (Or enter the URL address of the (P)ET-2252 in the address bar of the browser.)



- 4) For the first time using the module, you have to change the password and click the “Submit” button.

ICP DAS Ethernet I/O Module

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

MQTT (Topics: [DO](#) | [DI](#))

Change Password
The length of the password is 12 characters maximum.

Authentication	Defaults
Password	Admin

Current password:

New password:

Confirm new password:

Submit

- 5) Enter the new password in the “Login password” field and click the “Submit” button.

ICP DAS Ethernet I/O Module

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

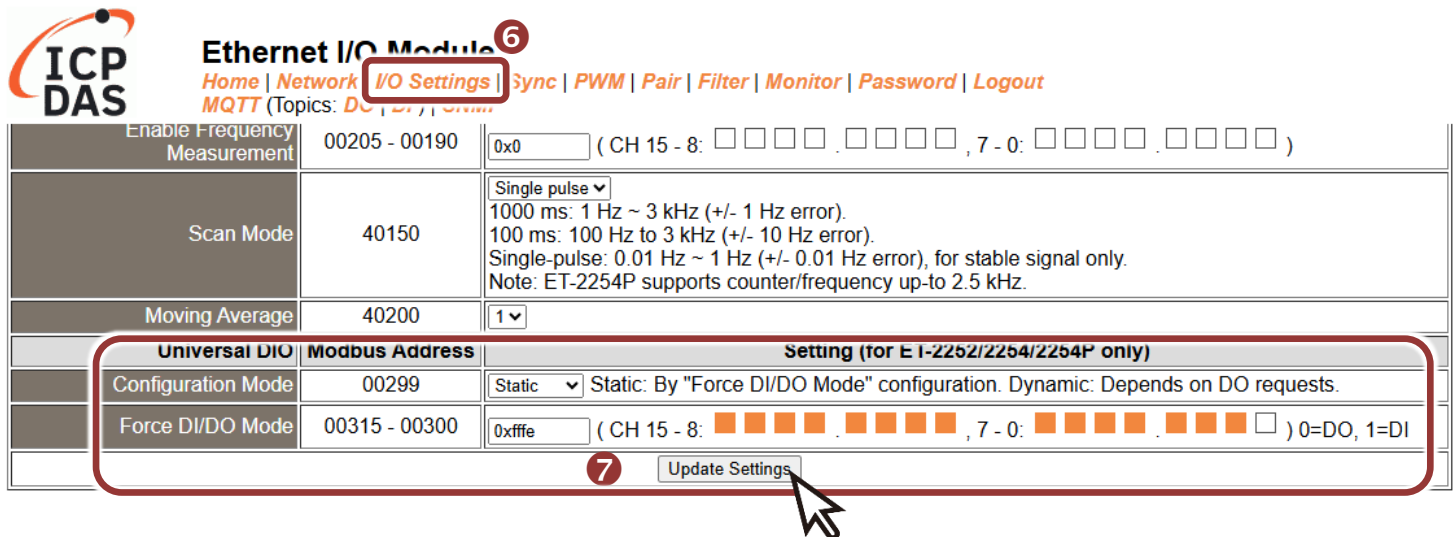
MQTT (Topics: [DO](#) | [DI](#))

The system is logged out.
To enter the web configuration, please type password in the following field.

Login password:

Submit

- 6) Click the “I/O Settings” tab to set the Universal DIO.
- 7) In the “Force DI/DO Mode” section, select the “Static” from the drop down options and uncheck the checkbox for “Ch0” to set Ch0 is DO Port then click the “Update Settings” button to save the revised settings to the (P)ET-2252 module.



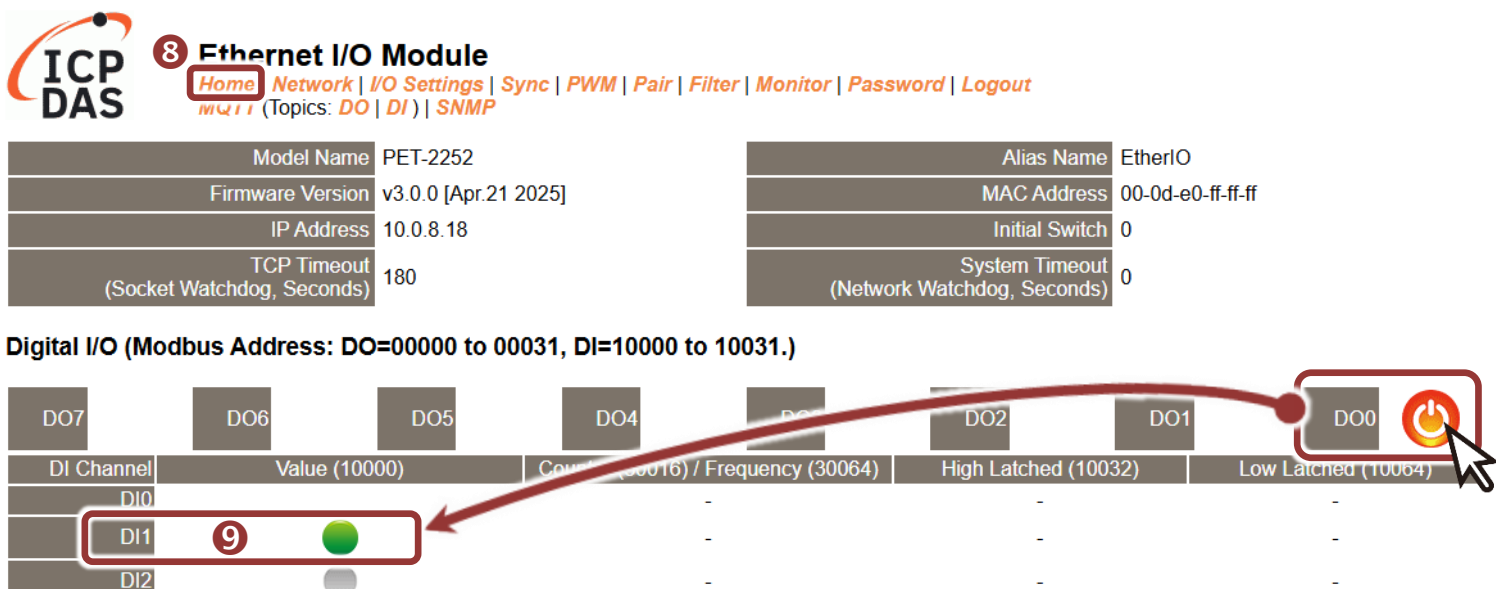
ICP DAS Ethernet I/O Module

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

MQTT (Topics: DO | DI | PWM | Filter | Monitor | Password | Logout)

Enable Frequency Measurement	00205 - 00190	0x0 (CH 15 - 8: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ , 7 - 0: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐)									
Scan Mode	40150	Single pulse 1000 ms: 1 Hz ~ 3 kHz (+/- 1 Hz error). 100 ms: 100 Hz to 3 kHz (+/- 10 Hz error). Single-pulse: 0.01 Hz ~ 1 Hz (+/- 0.01 Hz error), for stable signal only. Note: ET-2254P supports counter/frequency up-to 2.5 kHz.									
Moving Average	40200	1									
<table border="1"> <thead> <tr> <th>Universal DIO</th> <th>Modbus Address</th> <th>Setting (for E I-2252/2254/2254P only)</th> </tr> </thead> <tbody> <tr> <td>Configuration Mode</td> <td>00299</td> <td>Static Static: By "Force DI/DO Mode" configuration. Dynamic: Depends on DO requests.</td> </tr> <tr> <td>Force DI/DO Mode</td> <td>00315 - 00300</td> <td>0xfffe (CH 15 - 8: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ , 7 - 0: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐) 0=DO, 1=DI</td> </tr> </tbody> </table>			Universal DIO	Modbus Address	Setting (for E I-2252/2254/2254P only)	Configuration Mode	00299	Static Static: By "Force DI/DO Mode" configuration. Dynamic: Depends on DO requests.	Force DI/DO Mode	00315 - 00300	0xfffe (CH 15 - 8: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ , 7 - 0: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐) 0=DO, 1=DI
Universal DIO	Modbus Address	Setting (for E I-2252/2254/2254P only)									
Configuration Mode	00299	Static Static: By "Force DI/DO Mode" configuration. Dynamic: Depends on DO requests.									
Force DI/DO Mode	00315 - 00300	0xfffe (CH 15 - 8: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ , 7 - 0: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐) 0=DO, 1=DI									
		Update Settings									

- 8) Click the “Home” tag to allow a simple test to be performed to verify the Digital Input and Output functionality
- 9) In the “Digital I/O” section, click the “DO0” button to “ON” (Red) and verify that the “DI1” LED status for “high (green)”



ICP DAS Ethernet I/O Module

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

MQTT (Topics: DO | DI | SNMP)

Model Name	PET-2252	Alias Name	EtherIO
Firmware Version	v3.0.0 [Apr.21 2025]	MAC Address	00-0d-e0-ff-ff-ff
IP Address	10.0.8.18	Initial Switch	0
TCP Timeout (Socket Watchdog, Seconds)	180	System Timeout (Network Watchdog, Seconds)	0

Digital I/O (Modbus Address: DO=00000 to 00031, DI=10000 to 10031.)

DO7	DO6	DO5	DO4	DO3	DO2	DO1	DO0
DI Channel	Value (10000)	Count (30016) / Frequency (30064)	High Latched (10032)	Low Latched (10064)			
DI0		-	-	-			
DI1	9	-	-	-			
DI2		-	-	-			