

ET-2255 Quick Start

v1.2, Jun. 2018

What's in the box?

The package includes the following items:





Quick Start x1 (This Document)

Related Information

- ET-2200 Series Product Page: <u>http://www.icpdas.com/root/product/solutions/remote_io/ethernet_io/petl-7000_tpet_tet</u> /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

Connecting the Power and Host PC

1) Make sure your PC has workable network settings.

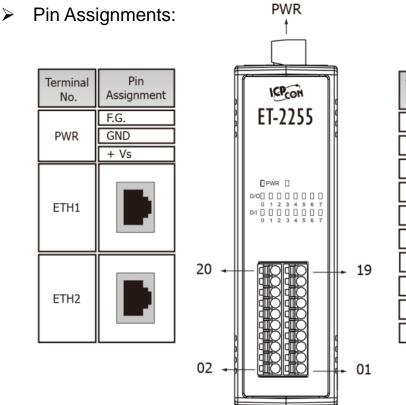
Disable or well configure your Windows firewall and Anti-Virus firewall first, else the "**Search Servers**" on **Chapter 5** may not work. (Please contact with your system Administrator)

- 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



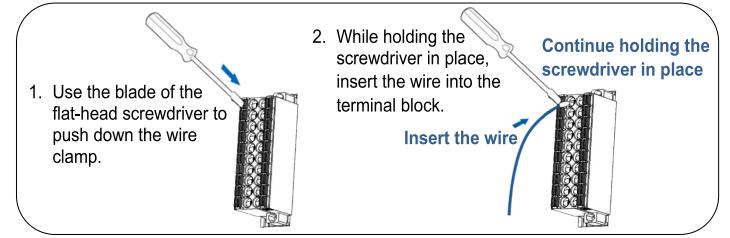
Terminal No.	Pin Assignment	Pin Assignment	Terminal No.
20	E.GND	DI.GND	19
18	DO0	DI0	17
16	DO1	DI1	15
14	DO2	DI2	13
12	DO3	DI3	11
10	DO4	DI4	09
08	DO5	DI5	07
06	DO6	DI6	05
04	D07	DI7	03
02	E.PWR	DI.COM	01

Wire Connections:

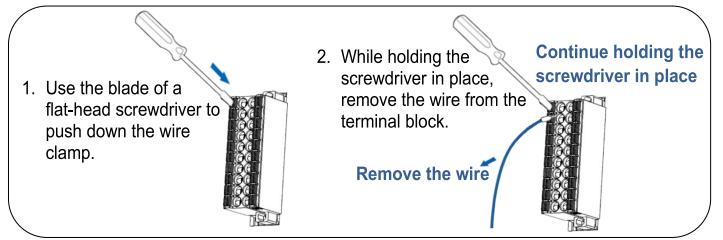
Digital Input/ Counter	Readback as 1	Readback as 0	Digital Output	Readback as 1 ON State	Readback as 0 OFF State
	Close to GND	Open			
Dry Contact	$\rightarrow \text{GND} \qquad \qquad$	GND •••••+55 V	Drive Relay	- - - + + + + + + → - - + → - - - - - - - - - - - - -	→ → + + + → + → → → → → → → → → → → → →
	+5 ~ +50 Vdc	OPEN or <1 VDC			
Sink	DIx 7.5K	DIx 7.5K	Resistance Load	- + + − + − − − □ □ □ □ □ □ □ □ □ □ □ □ □	- ↓ + + + ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
	+5 ~ +50 Vdc	OPEN or <1 VDC			
Source	DIx 7.5K	DIX 7.5K			



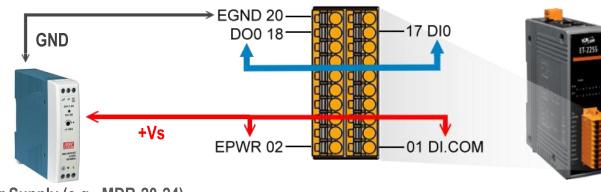
A tip for connecting the wire to the connector



A tip for removing the wire from the connector



- 1) Connect the DIO pin (Pin17) to the DOO pin (Pin18).
- 2) Connect the <u>External Power +24V</u> to the <u>DI.COM pin (Pin01)</u> and <u>E.PWR</u> <u>pin (Pin02)</u>.
- 3) Connect the External Power GND to the E.GND (Pin20).



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

Technical support: service@icpdas.com



> (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

A Note

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

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

🥩 eSearch Utility [v1.	1.14, Jul.10, 20)17]		_	
File Server Tools		3			
Name ET-2255	Alias EtherIO	IP Address 192.168.255.1	Sub-net Mask 255.255.0.0	Gateway 192.168.0.1	MAC Address 00:0d:e0:65:1
ET-7255/PET-7255 ET-7044/PET-7044	aaaaa N/A	10.0.8.237 10.0.8.31	255.255.255.0 255.255.255.0 255.255.255.0	10.0.8.254 10.0.8.254 10.0.8.254	00:00:20.30.3 00:0d:e0:65:3 00:0d:e0:65:3
< 2					>
Search Serve	r Config	uration (UDP)	Web E	×it	
Status					

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". A Note: The ET-2255 will use the new settings 2 seconds later.

Configure Server (UDP)			\times
Server Name : ET-2255			
DHCP: 0: OFF Sub-net Mask : 255.255.255.0	Alias:	EtherIO	
IP Address : 10.0.8.100 Gateway : 10.0.8.254	MAC:	00:0d:e0:65:13:5a	_
warning:: Contact your Network Administrator to get correct configuration before any changing!		OK Cancel	

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.)

🥩 eSearch Utility [v1.1	.14, Jul.10, 20	17]		-	- 0	×
File Server Tools		2				
Name	Alias	IP Address	Sub-net Mask	Gateway	MAC Ad	dress
ET-2255	EtherIO	10.0.8.100	255.255.255.0	10.0.8.254	00:0d:e	0:65:j
ET-7255/PET-7255 ET-7044/PET-7044	aaaaa N/A	10.0.8.237	255.255.255.0 255.255.255.0 255.255.255.0	10.0.8.254 10.0.8.254 10.0.8.254	00:00:Cd:e 00:0d:e	0:65:3
< 1			B			>
Search Server	Configu	uration (UDP)	Web	xit		
Status			\sim			/

4) Enter the password (default: Admin)in the "login password" field and click "Submit".

Eti	nernet I/O Modu	le Z
Hon	ne Network I/O Setting	gs Sync PWM Pair Filter 🌆
The system is logged o To enter the web configu	Use the default password: Admin	, the following field.
Login password:	4	Submit
have	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

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

Ether	net I/O Mo	dule			5
COAS 5 Home	Vetwork I/O Se	ettings Sync PWI	M Pair Filter	Monitor Chang	ge Par
					5
Model Nar	ne: ET-2255			Alias Name:	Ethe
Firmware Versi	on: v1.4.7 [Nov.	20 2017]		MAC Address:	00-06
IP Addre	ss: 10.0.8.100			Initial Switch:	OFF {
TCP Port Timeo (Socket Watchdog, Second	ut: s): 180		(Network Wa	System Timeout: tchdog, Seconds)	0 5
Digital I/O (Modbus Add	ress: DO=00	000 to 00015, DI=	=10000 to 10	015)	$\langle \rangle$
D07 🕐 D06 🕐	D05 C	D04	DO3	DO2	DQ
DI Channel Value	10000)	/ Counter (30016) (30064		High Latched (10	032)
DI0:		-		-	Ş
DI1:		-		-	Ś
DI2:		-		-	Ś
man man	have and the second sec	~~~~~~~~/	$\sim\sim\sim\sim\sim\sim$	\sim	~~5

- 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)				
ICP2	Ethernet I/O Modu	ule		
(DA ⁵	Home Network I/O Settin	ngs Sync PWM Pair Filter M	onitor Change Password	Logout
Digital I/O (Mo	odbus Address: DO=0000) to 00015, DI=10000 to 1001	5)	6
D07	D06 🕐 D05 🔮	D04 🕐 D03 🔮	D02 🕐 D01	
DI Channel	Value (10000)	Counter (30016) / Frequency (30064)	High Latched (10032)	Low Latched (10064)
D10:		-	-	-
DI1:		-	-	-
DI2:		-	-	-
-	my my			www.