

### iWSN-2200-E Quick Start

v1.00, Mar. 2019

#### What's in box

Without "Quick Start", The package includes the following items:



iWSN-2200-E (includes antenna)



Screw Driver (1C016)





Number	Instructions
1	LED indicators
2	Antenna connector (type RP-SMA)
3	Rotary switch of Communication parameter setting
4	Terminal and Ethernet port (RJ-45 interface)
5	DIP switch of operation mode





Number	Name	Instructions
3	+Vs	+10V~+30VDC
2	GND	Ground
1	F.G.	Shield ground

Switch	Instructions	
Init	Initial mode	
Run	Run mode	

#### **3** Communication Parameter



Rotary switch	Instructions
RF Channel	0 ~ F = ch 0 ~ ch F
Group ID	0 ~ 7 = GID 0 ~ GID 7 8 ~ F = Reserved, fix GID 0

## **4** LED indicators

The module provides three LED indicators, including power, wireless transmission and wireless reception status. The table below will show the LED status indicator.

Indicator	Status	Instructions
	ON	Power on
	OFF	Power off
RF_Tx	ON	Wireless data has been transmitted
	OFF	No data be transmitted
RF_Rx	ON	Wireless data has been received
	OFF	No data be received

## **5** Connecting power and computer to module

- A. Confirm the Ethernet setting of your computer is correct and be worked. Confirm both firewalls of Windows and Anti-virus has closed or correct setting in your computer to avoid "**Search Servers**" function in chapter 6 can't search to iWSN-2200-E. (Please conform to your administrator)
- B. Connecting iWSN-2200-E and computer to same Hub/Switch or same sub network.
- C. Confirm the Init/Run switch of module to Run position, and adjust the RF channel and Group ID switch to same with iWSN-1110X series.
- D. Supplying power (+10~+30VDC) to iWSN-2200-E.



# **6** Configuring the correct network parameter

There are two methods to configure network parameter, the user can use eSearch Utility or browser as below.

#### - Vising eSearch Utility software:

A. Installing eSearch Utility, the user can download from ICP DAS website as below link:





http://ftp.icpdas.com/pub/cd/tinymodules/napdos/software/esearch/

- B. Double click the eSearch Utility shortcut icon in desktop.
- C. Click "eSearch Servers" button to search your iWSN-2200-E.
- D. Double click your iWSN-2200-E to open "Configure Server (UDP)" configuration dialog.



The factory default values of iWSN-2200-E as below table:

IP Address	192.168.255.1
Sub-net Mask	255.255.0.0
Gateway	192.168.0.1

E. Contacting your network administrator, and get correct network configuration (ex: IP/Mask/Gateway). Key in the network configuration (IP/Mask/Gateway), and then click "OK" button.
 A Note: iWSN-2200-E will use new setting after 2 seconds.

Configure Server (UI Server Name :	DP) iwsn-2200-e	D	20.25.48 100.00		C.C.L.C.	×
DHCP:	0: OFF 🔹	Sub-net Mask :	255.255.0.0	Alias:	iWSN	
IP Address :	192.168.255.10	Gateway :	192.168.0.1	MAC:	00:0d:e0:16:	4a:02
Warning!! Contact your Network Administrator to get correct configuration before any changing! OK Cancel						

F. After 2 seconds, click "**eSearch Servers**" to search iWSN-2200-E, and confirm the network configuration of previous step whether be correct set.

🥑 eSearch Utility [ v1.1.19, Jun.26, 2018 ]					
<u>File</u> <u>S</u> erver <u>T</u> ools					
Name	Alias	IP Address	Sub-net Mask	Gateway	MAC Address
iWSN-2200-E	iWSN	192.168.255.10	255.255.0.0	192.168.0.1	00:0d:e0:16:4a:0;
		F			
					+
Search S	erver	Configuration (UDP)	0	Web	Exit
Status					

#### 

Note: If your using browser is Internet Explorer, in order to ensure the web server of iWSN-2200-E can display properly, please be sure to close the IE cache first, the step as below: (If your using browser isn't Internet Explorer, please skip these steps.)

<u>Step1</u> : In the IE browser menu, click "Tools (T)"  $\rightarrow$  "Internet Options (O)".

**Step2**: After entry the option box, click "**General**" tab, and then click "**Settings (S)**" button in the browsing history record to entry network data setting box.

<u>Step3</u>: In the "Temporary Internet Files" label, click "Every visit to the page (E)", and then click "OK" button to finish setting.

A. After key in password in Login password field, click "Submit" button.



B. After click "Network" item, the web will display IP Address Selection page. Key in network configurations (IP/Mask/Gateway), and click "Update Setting" button.

IWSN B ta Concentrator (IWSN-2200-E) Home   Port1 Network Filter   Monitor   Password   Logout				
Address Type	Static IP •			
Static IP Address	192 . 168 . 255 . 123			
Subnet Mask	255 . 255 . 0 . 0			
Default Gateway	192 . 168 . 0 . 1			
MAC Address	00-0d-e0-16-4a-02 (Format: FF-FF-FF-FF-FF)			
Update Settings				

C. After click "**Port1**" item, the web will display Setting page. Key in Port number, and click "**Submit**" button.



## **7** Self-Test

A. The eSearch Utility in chapter 6 have supply a test software, the user can click "Tools" → "Modbus TCP Master" to open Modbus TCP Master Utility.



- B. Key in the IP address of iWSN-2200-E in Modbus TCP Master, and then click **"Connect"** button to connect iWSN-2200-E.
- C. Key in Modbus command such as: 1 2 0 0 0 6 1 3 0 1 0 1 in command field, and then click **"Send command"** button.
- D. If the response messages such as 01 03 02 08 98 is correct, and the 08 98 is mean as 0x0898 (Hexadecimal) = 2200 (Decimal) that mean test successfully.

B CP Ver. 1.1	.5	X		
ModbusTCP IP 192.168.2 Port 502 Connect	255.123 The protocol Description FC1 Read multiple coils status (0 [Prefixed 6 bytes for Modbus/TC] Byte 0: Transaction identifier - Byte 1: Transaction identifier - Byte 2: Protocol identifier = 0 Byte 3: Protocol identifier = 0 Byte 4: Field Length (upper by	xxxx) for DO  P protocol]  copied by server - usually 0  copied by server - usually 0  te)=0		
C ( [Byte1] [Byte2] [Byte3] [Byte4] [Byte5] [Byte0] [Byte1] [Byte2] [Byte3] [Byte4] [Byte5] [D1 02 00 00 06> 01 03 00 01 00 01 D [D] [D] [Byte1] [Byte2] [Byte3] [Byte4] [Byte5] [D1 02 00 00 00 05> 01 03 02 08 98				
	Clear Lists	EXIT Program		