iWSN-1902-TC-IP65 Quick Start

v1.0, March 2021

Packing List

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



iWSN-1902-TC-IP65

Technical Support

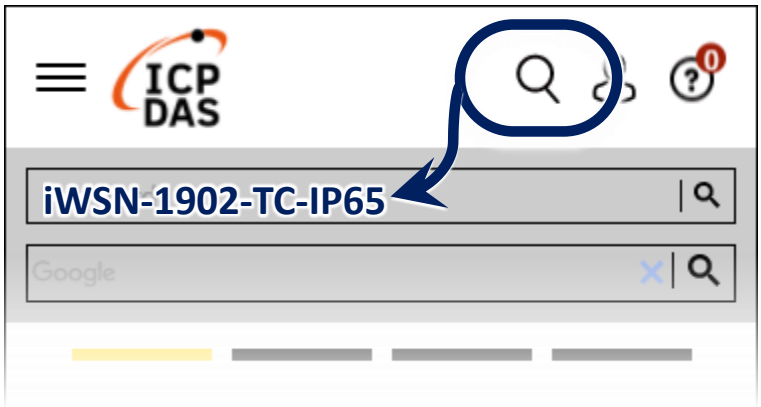
service@icpdas.com

www.icpdas.com

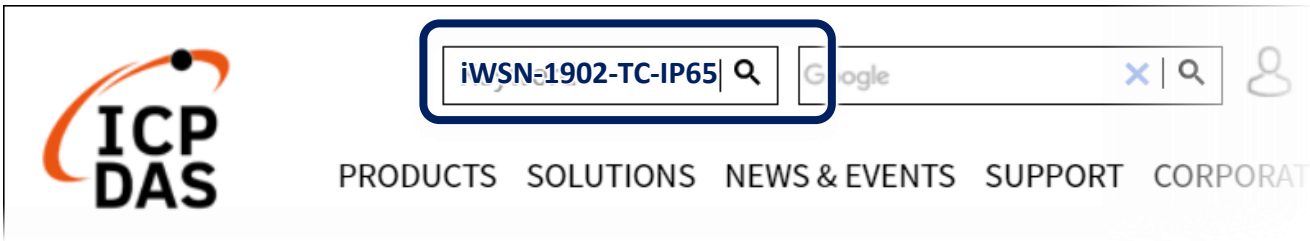
Resources

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

- For Mobile Web



- For Desktop Web



Warning

ICP DAS assumes no liability for any damage resulting from the use of this product. ICP DAS reserves the right to change this manual at any time without notice. The information furnished by ICP DAS is believed to be accurate and reliable. However, no responsibility is assumed by ICP DAS for its use, not for any infringements of patents or other rights of third parties resulting from its use.

Limitation of Warranty

This warranty does not apply to defects resulting from unauthorized modification, misuse, or use for reason other than electrical power monitoring.

Product Warranty & Customer Support

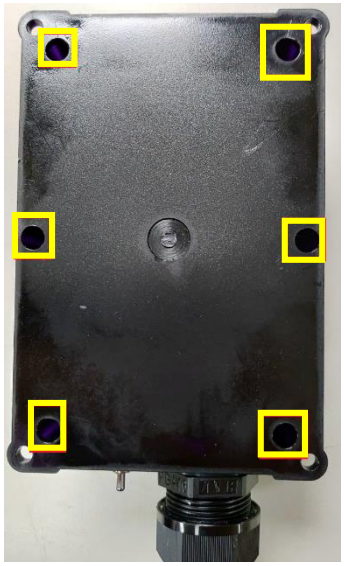
ICP DAS warrants all products free from defects in material and workmanship for a period of one year from the date of shipping. During the warranty period, we will, at our position, either repair or replace any product that proves to be defective. To report any defect, please contact us. Please have the model, serial number and a detailed problem description available when you call. When returning any merchandise to ICP DAS, a return SN. Is required.

1 Disassemble the case

A. Remove the lower cover：Unscrew the screws in the frames as the figure below (four in total)



B. Remove the upper cover：Turn the module over and unscrew the screws in the frames as the figure below (six in total)



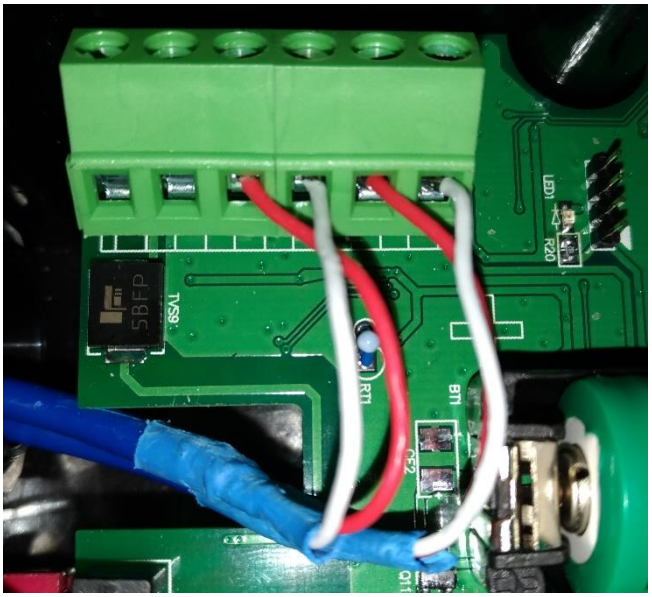
C. After removal, the upper cover can be opened and the subsequent process can be carried out.

2 Install thermocouple

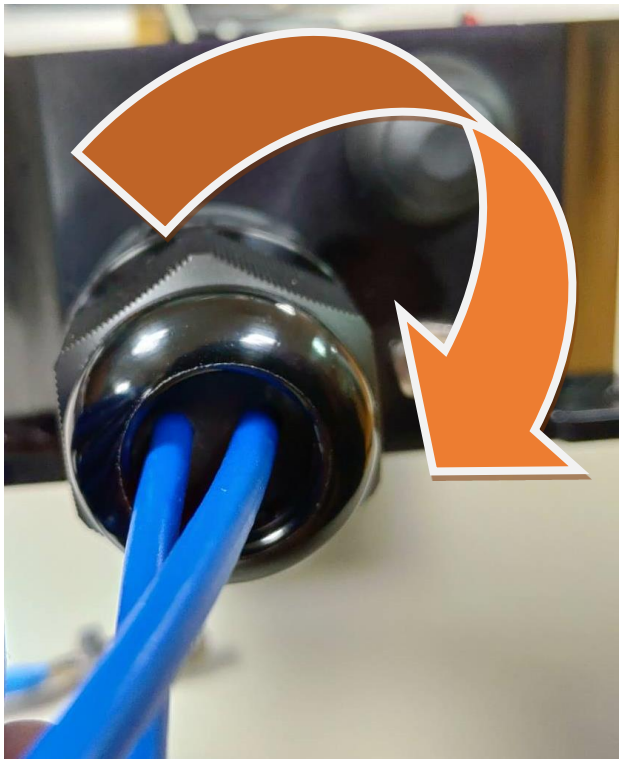
A. Insert into the waterproof connector: insert the thermocouple connector into the hole of waterproof connector
※Note:The allowable wire diameter range of the waterproof connector is 2.5mm ~ 3.5mm



B. Screw into connecter: Screw the thermocouple wiring according to the following figure (error wiring will make the value abnormal)
[Red (colored): connected to AIN0/AIN2, white (colorless): connected to AIN1/AIN3]
※Note: AIN0 needs to be matched with AIN1, AIN2 needs to be matched with AIN3

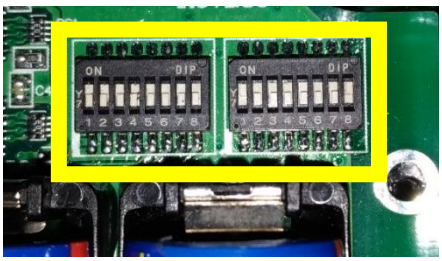


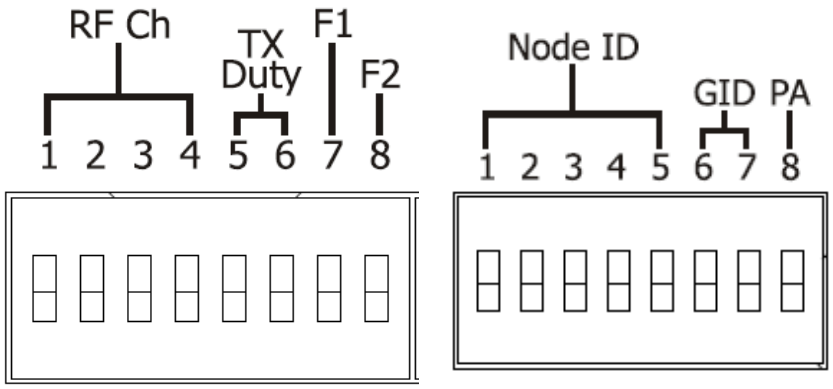
C. Screw the waterproof connector: Screw the connector clockwise to avoid seeping water.



3 Setting parameters

A. Adjust DIP Switch according to the parameter table: Please refer to the parameter table below.





Left switch	
Pin/Name	**Instructions**
Pin 8	Reserved
Pin 7	
Pin 5~6 TX Duty (RF transmit duty) ■ : ON □ : OFF	
Pin 1~4 RF Ch (RF Channel) ■ : ON □ : OFF	

Period	Pin	
	5	6
1sec	□	□
10 sec	■	□
30 sec	□	■
60 sec	■	■

Ch	Pin				Ch	Pin			
	1	2	3	4		1	2	3	4
0	□	□	□	□	8	□	□	□	■
1	■	□	□	□	9	■	□	□	■
2	□	■	□	□	A	□	■	□	■
3	■	■	□	□	B	■	■	□	■
4	□	□	■	□	C	□	□	■	■
5	■	□	■	□	D	■	□	■	■
6	□	■	■	□	E	□	■	■	■
7	■	■	■	□	F	■	■	■	■

<table>
<tr><th colspan="2">Right switch</th></tr>
<tr><th>Pin/Name</th><th>Instructions</th></tr>
<tr><td>Pin 8</td><td>Factory only</td></tr>
<tr><td>Pin 6~7

GID
(Group ID)

■ : ON
□ : OFF</td><td>
<table>
<tr><th rowspan="2">Group</th><th colspan="2">Pin</th></tr>
<tr><th>6</th><th>7</th></tr>
<tr><td>0</td><td>□</td><td>□</td></tr>
<tr><td>1</td><td>■</td><td>□</td></tr>
<tr><td>2</td><td>□</td><td>■</td></tr>
<tr><td>3</td><td>■</td><td>■</td></tr>
</table>
</td></tr>
<tr><td>Pin 1~5

Node ID

■ : ON
□ : OFF</td><td>
<table>
<tr><th rowspan="2">Node</th><th colspan="5">Pin</th><th rowspan="2">Node</th><th colspan="5">Pin</th></tr>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th></tr>
<tr><td>0</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>16</td><td>□</td><td>□</td><td>□</td><td>□</td><td>■</td></tr>
<tr><td>1</td><td>■</td><td>□</td><td>□</td><td>□</td><td>□</td><td>17</td><td>■</td><td>□</td><td>□</td><td>□</td><td>■</td></tr>
<tr><td>2</td><td>□</td><td>■</td><td>□</td><td>□</td><td>□</td><td>18</td><td>□</td><td>■</td><td>□</td><td>□</td><td>■</td></tr>
<tr><td>3</td><td>■</td><td>■</td><td>□</td><td>□</td><td>□</td><td>19</td><td>■</td><td>■</td><td>□</td><td>□</td><td>■</td></tr>
<tr><td>4</td><td>□</td><td>□</td><td>■</td><td>□</td><td>□</td><td>20</td><td>□</td><td>□</td><td>■</td><td>□</td><td>■</td></tr>
<tr><td>5</td><td>■</td><td>□</td><td>■</td><td>□</td><td>□</td><td>21</td><td>■</td><td>□</td><td>■</td><td>□</td><td>■</td></tr>
<tr><td>6</td><td>□</td><td>■</td><td>■</td><td>□</td><td>□</td><td>22</td><td>□</td><td>■</td><td>■</td><td>□</td><td>■</td></tr>
<tr><td>7</td><td>■</td><td>■</td><td>■</td><td>□</td><td>□</td><td>23</td><td>■</td><td>■</td><td>■</td><td>□</td><td>■</td></tr>
<tr><td>8</td><td>□</td><td>□</td><td>□</td><td>■</td><td>□</td><td>24</td><td>□</td><td>□</td><td>□</td><td>■</td><td>■</td></tr>
<tr><td>9</td><td>■</td><td>□</td><td>□</td><td>■</td><td>□</td><td>25</td><td>■</td><td>□</td><td>□</td><td>■</td><td>■</td></tr>
<tr><td>10</td><td>□</td><td>■</td><td>□</td><td>■</td><td>□</td><td>26</td><td>□</td><td>■</td><td>□</td><td>■</td><td>■</td></tr>
<tr><td>11</td><td>■</td><td>■</td><td>□</td><td>■</td><td>□</td><td>27</td><td>■</td><td>■</td><td>□</td><td>■</td><td>■</td></tr>
<tr><td>12</td><td>□</td><td>□</td><td>■</td><td>■</td><td>□</td><td>28</td><td>□</td><td>□</td><td>■</td><td>■</td><td>■</td></tr>
<tr><td>13</td><td>■</td><td>□</td><td>■</td><td>■</td><td>□</td><td>29</td><td>■</td><td>□</td><td>■</td><td>■</td><td>■</td></tr>
<tr><td>14</td><td>□</td><td>■</td><td>■</td><td>■</td><td>□</td><td>30</td><td>□</td><td>■</td><td>■</td><td>■</td><td>■</td></tr>
<tr><td>15</td><td>■</td><td>■</td><td>■</td><td>■</td><td>□</td><td>31</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td></tr>
</table>
</td></tr>
</table>

B. Turn on the module: Push the switch up as the figure right (close to the button)



C. Confirm the power-on status of the module: the LED will light up for about 1 second and then go out.

※Note: After the boot is successful, press the button above the switch in the picture of step B, and the LED will light.

4 Assemble back the case

A. Trun off the power: Push the Switch down as the figure below (away from the button)



B. Screw back the upper cover: After putting the module upper cover on the body, turn it over and screw the screws of the upper cover and the body (six in total)



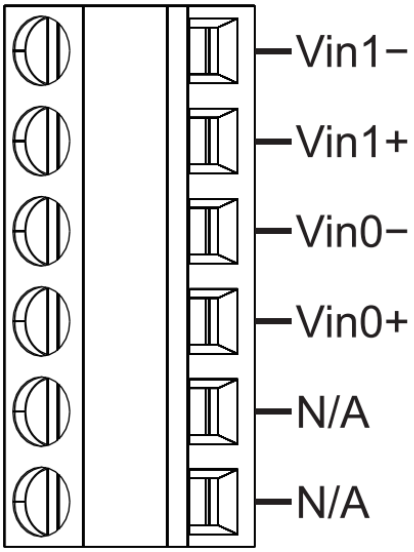
C. Screw back the lower cover: Screw back the screws in the frames of the bottom cover (four in total)



5 Appearance



6 Pin



Pin	Name	Instructions
4	Vin1-	Thermocouple input channel 1
3	Vin1+	
2	Vin0-	Thermocouple input channel 0
1	Vin0+	

7 LED indicators

Indicators	Status	Instructions
STA	500ms Blink continuous	Illegal Node ID, please set the Node ID to 1~31, and then power on.
	Blink twice	Component status is abnormal. 1. Please power off the module and press “Wake” buttons for 5 seconds then power on again. 2. If have any questions, please contact technology support.

8 Application example

The module will measure the temperature data and transmit automatically to iWSN-2200 by wireless. The user can use computer to read the data in iWSN-2200 by Modbus RTU protocol.

