ATO
User Manual

AW5145
Temperature And Humidity Transmitter

Precautions for Use

To ensure the accuracy and stability of this product, please do not install this product in the following environment:
- Close to heat source, cold source or direct sunlight
- In the neat, water mist, and other condensing devices for a long time

Installation

1. The transmitter shall be installed at a location that is typical of the temperature and humidity to be measured in the environment.
2. Make sure there is enough space around the transmitter to allow air to circulate.
3, do not install directly on the heating and cooling equipment, and steam.
4. Keep away from power lines during installation.

Error sources

1. Place for too short a time/change the position frequently.
2, Too close to the cold source/heat source.
3. It is directly exposed to dust or other environmental pollution without maintenance.

Disclaimer

Do not use this product in a protective device or emergency stop device, or in any application that may result in personal injury due to the failure of the modified product, unless there is a special purpose or authorization for use.Please follow the instructions of the product before using and installing. In case of any personal injury accident or property loss caused by non-compliance with this recommendation, the Company will not be liable for any liability and claim, and will not be liable for any claim arising from such accident to the company's managers, employees, agents and distributors.

Quality assurance

We guarantee the quality of our products to direct buyers for 12 months (from the date of delivery).The company shall publish the technical specifications of the data manual of the product.If the product is proved to be defective within the warranty period, the company will provide free repair and replacement.The user shall satisfy the following conditions:

1. Notify the company in writing within 14 days after finding the defect.
2. Send it back to the company at the buyer's own expense
3. Product is within the warranty period
The company is only responsible for the defects caused by the application of the products in accordance with the technical conditions of the products.No guarantees are made for specific application scenarios.

License Agreement

1. Without the written permission of the Company, the contents in the Instructions shall not be copied and disseminated in any form, nor shall the contents be disclosed to any third party.
2. The ownership of the Company and the third party Yonyou software can only be used by users after signing a contract or obtaining a software license.
3. The contents of the manual are subject to change without prior notice.

Product overview

The AW5145 is a new type of temperature and humidity transmitter, using high quality digital capacitive sensor of the company's exclusive research and development. The AW 5145W has the special feature of high measurement precision, strong anti-jamming capability, as well as the characteristics of strong stability, which guarantees excellent performance measurement of the products. The 145W can satisfy all the general application requirements.

Technical data

Temperature range:	-20~60℃
Humidity range:	0~99.9%RH
Accuracy:	±0.5℃; ±3%RH
Sensitivity attenuation value:	<0.1℃/Years; <0.5%RH/rs

Resolution:	0.1
Sampling period:	2s
Power supply:	9~36V (DC) / USB 5V
Output:	Modbus TCP
Record:	12800 Set

System instructions

1. System lock
2. WiFi connect
3. Communication icon
4. Time   5. Temperature
6. MENU 7. Confirm button
8. Up   9. Down
10. SSID address 11. Humidity
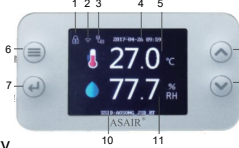
The display will be automatically locked if the device does not make any key settings within 30 seconds. To unlock the screen, press the "OK" button to unlock, then you can setup the menu.

Transmitter can connect to the router when successfully obtained the SSID and password of the router by "Cloud platform APP". Then the transmitter can connect to the Internet. There are two ways to configure the router, "get IP address automatically" and "set IP address manually". Normally, only "get IP address automatically" is used, and "set IP address manually" is used only when the IP address of the device need to be static.

Router Configure

(1) The steps to connect to the router by "get IP address automatically "mode are shown as follows:
1) Long press the "OK" key to unlock the screen.
2) Press "MENU" key to enter the setup menu, select "Net Setting", press "OK" key to enter the submenu and select "Router Config", press "OK" key to enter the submenu and select "Auto IP".

3) Press the "OK" button, then the screen prompt "Press OK To Start". The mobile phone which install the "AOSONG cloud platform APP" and device should connect to the same router. Open the "Cloud platform APP" after the mobile phone connect to the router successfully. "SSID" indicates the name of the router that the mobile phone is currently connected to. Enter the router password in the "Password input box", select the number of transmitters to be configured in the "Device

number", and then click "OK" to start configuring. The configuration interface are shown as below:
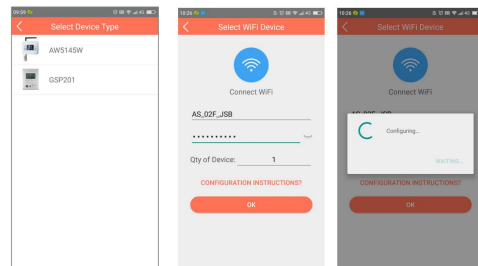
4) After the configuration is successful, the transmitter prompts "Config Success". If the configuration is not successful in 5 minutes, the transmitter will prompt "Config timeout, press OK restart". Press "MENU" to return to the previous menu when configuration is successful. After returning to the main interface, "SSID" shows the name of the router, WIFI symbol shows the signal strength.

5) When press the "MENU" key during the configuration process, the transmitter will prompt "cancel configuration?", press the "UP" key or "DOWN" key to select "Yes" or "No", select "YES" and press "OK" key to cancel the configuration; select "NO" and press "OK" key to continue configuration.

(2) The steps of obtaining SSID and password of router in "set IP address Manually " way to connect to the router are shown as follows:

1) Long press the "OK" key to unlock the screen.

2) Press the "MENU" key to enter the setup menu, select "Net Setting", then press "OK" key to enter the submenu and select "Router Config", then press "OK" key to enter the submenu, press the "UP" key or "DOWN" key to select "manual IP". Press "OK" key and select "Net Address" to set network address, the default network address is "192.168.001.010". The value"192" is displayed in highlight state. Press "OK" key, then the value "192" will be twinkling and now you can press the "UP" key or "DOWN" key to change its value. Press the "OK" key to finish setting .Then press the "UP" key or "DOWN"

key to change the other three values. Note: The network address manually set can not be the same as the network address of other network nodes in the LAN. Otherwise, it will cause communication failure.

3) Set the "Subnet Mask" (default 255.255.255.0) and "Default Gateway" (default 192.168.1.1) options as described above. After setting, enter the "Start configuration" option, prompting "Press OK to start configuration".

4) Refer to the "get IP address automatically" mode Step 3) 4) 5) to configure.

Communication Mode setting

(1) Long press the "OK" key to unlock the screen.
(2) Press "MENU" key to enter the setting menu, select "Net Setting", press "OK" key to enter the submenu and select "Server Type", press the "UP" key or "DOWN" key to select TCP or UDP, press "MENU" key to finish.

Alarm Settings

The transmitter supports temperature and humidity alarm function, you can set the temperature and humidity alarm value for alarm.

High Temperature Alarm Settings

(1) Press "MENU" key to enter the setting menu, select "Alarm Setting", press "OK" key to enter the submenu and select "Temperature HAR", then press "OK" key to enter "Temperature HAR" interface.
(2) Press the "UP" key or "DOWN" key to set the high temperature alarm value and alarm switch.

Low Temperature Alarm Settings

(1) Enter the setting menu, select "Alarm Setting", press "OK" key to enter the submenu and select " Temperature LAR", then press "OK" key to enter "Temperature LAR" interface.
(2) Press the "UP" key or "DOWN" key to set the low temperature alarm value and alarm switch.

High Humidity Alarm Settings

(1) Enter the setting menu, select "Alarm Setting", press "OK" key to enter the submenu and select " Humidity HAR", then press "OK" key to enter "Humidity HAR" interface.
(2) Press the "UP" key or "DOWN" key to set the high humidity alarm value and alarm switch.

Low humidity alarm settings

(1) Enter the setting menu, select "Alarm Setting", press "OK" key to enter the submenu and select " Humidity LAR", then press "OK" key to enter "Humidity LAR" interface.
(2) Press the "UP" key or "DOWN" key to set the low Humidity alarm value and alarm switch.

Record Setting

(1)Record mode setting
Enter the "Record Mode" submenu, press "UP" key or "DOWN" key to select between "AUTO", "OPEN", and "CLOSE". By default, "OPEN" is selected and the record is always on. When "AUTO" is selected, the device will not record if connect to the network and start to record when the network is abnormal.

(2)Record frequency setting
Enter the "Record Interval" submenu, press "OK" key to select the option to set and press the "UP" key or "DOWN" key to change the value. The units is minute.

(3)Record cycle setting
Enter the "Record Cycle" submenu and press the "UP" key or "DOWN" key to change the cycle switch. When "Record Cycle" is closed, the device will stop recording when the record point reach 12800 point. When the "Record Cycle" is open, the first record is overwritten when the record is full.

(4)Record clear setting
Enter the "Record Clear" submenu, press the "UP" key or "DOWN" key to select "Yes" option and then press "OK" key to clear the record, then record is empty and start recording from point 1 again.

Language Setting

(1) Enter the "System Setting" menu and press "OK" to enter the submenu. Select "Language" and press "OK" to enter the "Language" interface.
(2) Press the "UP" key or "DOWN" key to switch system language between Chinese and English.

Temperature Units Setting
(1) Enter the "System Settings" menu, select "Temperature Units" and press "OK" to enter.
(2) Press the "UP" key or "DOWN" key to switch temperature units between ℃ and ℉ .

Recover Setting
(1) Enter the "System Setting" menu and select "Recover", press "OK" to enter "Recover" interface.
(2) Press the "UP" key or "DOWN" key to select "Yes" option and then press "OK" key to start recover process. The recover process will take several seconds.

System Information
(1) Long press the "OK" key to unlock the screen.
(2) Press "MENU" key to enter setting menu, enter the "System Setting" menu, select "System Information", press "OK" key to enter and view the system information parameters.