TZ-Tag06B

---User manual

1 Description

TZ-Tag06B temperature and humidity transmitter is a new designed high-quality wireless acquisition terminal that we developed. Taking a full consideration of bad environment and applying situation in the field, solved successfully some kind of shortage that existed in similar products. With long data transmission distance (300m), small volume (63mm*38mm*31mm) and long life battery (3 years' battery life if every 60s data collecting), it is already verified in many key projects. Temperature&humidity value collected termly by the transmitter will be sent out through the embedded communication module 433Mhz. The receiver will parse out the ambient temperature&humidity , voltage of the transmitter battery and so on once received the single. Every Tag06 has a one and only ID on factory setting. Combine with our RD05/RD06/AVL11/AV19, it is widely used in the occasion that needs temperature&humidity detecting

2 Applications

1. Cabinet freezer, refrigerator, ect. ；

2. Greenhouse；

3. Assembly line, warehouse, workshop ect ;

4. Cold chain logistics；

5. Biochemical laboratory, medicine warehouse , etc；

3 Features

1. Use the Switzerland SENSIRION temperature and humidity sensor, with strong stability, fast response, and full-scale temperature&humidity compensation

2. 433Mhz adapts the new generated wireless sensor from American Silicon Labs, with strong sending power, long transmission distance, powerful penetrability and low attenuation. Beside, it adopts the frequency hopping and time sharing technology to make sure the reliability of the communication.

3. The data collecting time could be set by our customers from 1 second to 1 hour. Suggest every 60s in most occasion.

4. The transmitter supports 3 working module: Normal working module and low voltage module temperature and humidity overrun module. To better track the ambient temperature and humidity change, the data collecting time is different in each module.

5. 1200mAh/3.6V battery built-in, long time standby and stable performance. The electricity is less than 1uA when the sleep mode.

4 Specifications

Table 4.1 TZ-Tag data sheet

Item	Parameter
Built-in Battery	1200mAh /3.6V (unrechargeable)
Measure medium	Air
Sensor detecting range	Humidity 0%RH ~ 100%RH
	Temperature -40℃ ~ +125℃
Accuracy	Humidity ±3%RH
	Temperature ±0.3℃
Operating Range	-30℃~+60℃ ； 0%RH ~ 85%RH(no condensation)
RF Frequency	433Mhz
Modulation	GFSK
Max. distance in open wild	300 meters
Transmit interval	1 second to 1 hours，adjustable
Low voltage alert	support
Temperature and humidity alert	support
Standby current	<1uA
IP level	IP66
Battery life	3 years (every 60s transmit interval)
N.W	80g
Dimension	63mm*38mm*31mm

5 Operating Model

Operating Model	Operating Condition
Normal Model	Transmitter acquires temperature&humidity according to the settled acquisition interval and then start the module 433 and send out.
Low-voltage Model	Transmitter Voltage lower than 2.2V will acquire and send data per hour. At this point the power supply of transmitter will almost run out and users should change the machine in time
Temperature and humidity alert module	Transmitter can acquire and send the data with a little faster interval to facilitate users to record the change of environmental temperature after environmental temperature&humidity exceeds the range settled by users

Note: Priority: Temperature and humidity alert module ＞ Low-voltage Model ＞ Normal Model

6　Installation Method

Tool：Cable tie or HOOK&LOOP

（1）Cable tie：Fix TAG with an object through the cable tie.

（2）HOOK&LOOP：Fix the TAG with an object through the HOOK&LOOP.

7 Compatible application

TZ-Tag06B as the send-port of data needs to be used with the machine of RD05\RD06\AVL11\AVL19 and so on from our company. Customers can check the user's manual of these machines or contact our staff.

8 Notes

1. Being close to a metal object will interfere with the signal, causing the signal to be weaken；

2. Keep away from water and corrosive items；

3. Keep the transmitter and the receiver visible to ensure the accuracy of data receiving when it is used；

4. Please inform us the operating environment and standby requirements and others before the order. Then we will configure and instruct installation according to your provided information.