
PRODUCT SPECIFICATION



WTH300 Temperature and Humidity Sensor Beacon

Product Name	WTH300 Temperature and humidity sensor beacon
Ordering Code	WTH300
Firmware Version	V1.1.0
Hardware Version	V1.0.0
Configuration App	Available (iOS & Android)
SDK Kits	Available
Cloud Platform	Available for testing
Certification	FCC
Launched Time	October-25-2016
Remarks	NULL

1. INTRODUCTION

More than waterproof and portable, WTH300 is one type of high precision digital temperature and humidity indicator (thermo-Hygrometer). It can convert the environmental temperature and humidity into correspondent digital signal. By connecting to wireless network, it can upload temperature and humidity data to the server. Selected high quality integrated digital temperature and humidity sensor module is used for WTH300, which ensures the transmitter 's good long-term stability, low latency and ability to resist chemical contamination, thus possessing excellent repeatability.

2. ADVANTANGES

- IP66 waterproof level
- Over 100 meters broadcasting range
- Over 3 years battery life time
- Ultra-low power consumption chipset nRF52832
- High-accuracy digital temperature and humidity sensor inside
- Very fast start-up and measurement time
- Real-time data converting, storing and uploading
- Excellent security mechanism
- Supporting the customization service such as logo, firmware and other

3. WTH300 PICTURES



Front View



Side View



Inside Structure

4. APPLICATION

It can be used to measure environmental temperature and humidity in fields such as industrial inspection, civil inspection, machine manufacture, environmental protection and metering so on. So its application occasions cover: laboratory, clean workshop, collection place, home, agricultural greenhouse, weather station, national defense and science research, posts and communications, tobacco, chemistry and engineering, environmental protection, archive and library, server room, storage, medical treatment and public health, hotel, food storeroom, and grain reserve.

5. PHYSICAL PROPERTY

Model	WTH300
Waterproof Level	IP66
Case material	ABS
Case color	White
Product size	70.6*38*17.8mm
Unit weight	43g
Battery type	2*FR03 Li-Fe battery
Voltage	3V
Data Indication	N/A, need to access data by app or gateway
Average power consumption	35uA
Transmission Range	Max 100m in open space
Assemble	3M adhesive

6. TECHNICAL PARAMETER

Item		Value	Error range
Temperature Measure	Range	-40℃~70℃	depends on battery working environment
	Measure Accuracy	10℃~50℃	±0.5℃
		≤10℃ 或 ≥50℃	±2℃
	Resolution	0.05℃	---
Humidity Measure	Range	0%RH~100%RH	---
	Measure Accuracy	0%RH~90%RH	±2.5%RH
		≥90%RH	±3.5%RH
Resolution	0.05%RH	---	
Sampling Period	---	Once per second	---

7. ELECTRICAL PROPERTY

Static Current	<3uA (power consumption under power-off status)
Peak Current	<8mA
Average Current	<35uA (not including power consumption on data transmission)
Battery Type	FR03
Battery Capacity	1250mAH
Lifetime	Over 3 years

8. ENVIRONMENTAL PROPERTY

Working temperature	-40°C~+70°C
Storage temperature	10°C~+25°C, ≤65%RH

NOTE:

The version is just for reference. It is subject to any changes without prior notification. MINEW reserves the final right of interpretation.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction