

DT310 _Air_ Humidity_Temperature _Sensor_NB-IoT_Datasheet



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Cautions

- The battery is non-rechargeable. Please do not charge it.
- If the battery is out of power, please replace it with a battery of the same specification obtained from CNDingtek
- The battery can not work when temperatures is above 85 ° C.



1 Overview

DT310 is an integrated air temperature and humidity sensor. Compact structure, small size, easy to install. Suitable for home, industrial room, greenhouse, cabinets and other occasions. Using the NB-IoT wireless module, data is sent to the server via the NB-IoT network. Users can monitor the status remotely. Support multiple frequency bands such as B3, B5, B8, B20.

Due to the low power consumption algorithm, the internal battery working time exceeds 2.5 years @data upload twice a day.

2 Features

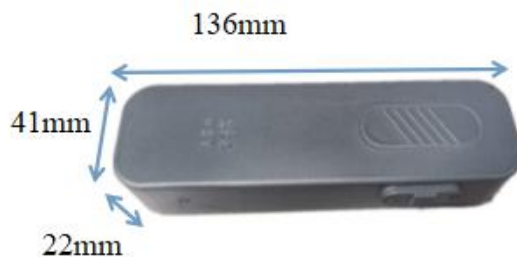
- Easy to install and small in size, the product can be installed by 3M adhesive method, no wiring, installation within second
- Accurate and timely , real-time monitoring.
- Low power consumption.
- Multiple application environments.

3 Specification

Overview	Dimension	136*41*22mm
	Net weight	40g
	Color	White/Gray/Black, Optional
	Shell material	ABS
Measuring range	Temperature	-30~+85°C
	Humidity	0~90%

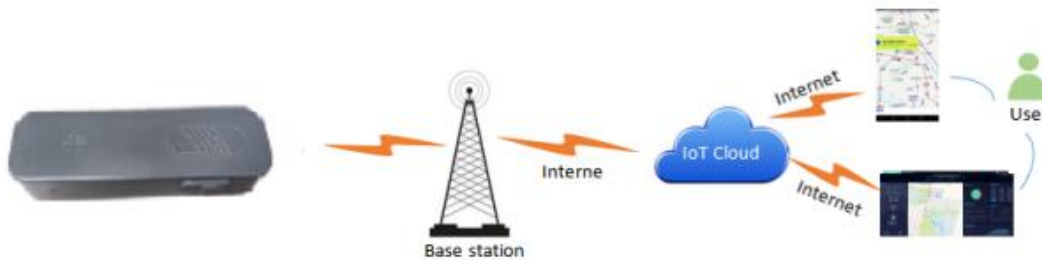
Accuracy	Temperature	±0.3°C
	Humidity	±2%RH
Wireless	Wireless	NB-IoT
	Communication module	Quectel,BC35
	Frequency	B1, B3, B5, B8, B20, B28 etc
Protocol	Protocol	NB-IoT,TCP
Power	Inner Battery	2500mAh(2 AA battery)
	Battery Life	2.5 year, twice times report per day
Environment	Working Temperature	-20 ~ +85°C
	Storage Temperature	-40 ~ +85°C

4 Mechanical Dimensions



(Note: For reference only, actual product updates are frequent without notice)

5 System network diagram



Through the built-in NB-IoT wireless module, it transmits data to the base station through the NB-IoT network, Then the Internet transmits the data to the web server and application server. Finally, the user can monitor the status of the door magnetic switch in real time according to the Web or APP, and online monitoring and management.

6 Protocol and API interface

The terminal communication protocol and API interface files are confidential documents and are only available to customers who purchased the device and signed NDA (non-disclosure agreement) documents with CNDingtek and his own company. If you want to integrate with your own system by using a protocol / API interface, please contact our sales team at service@dingtek.com.

7 Installation and Test

7.1 Start up device

The device is not connected to the power supply and the NB card is not installed by default, Before use, please refer to the instruction manual to open the case and install the card. Connect the power supply and start the device. Then start testing

according to the instructions.

7.2 Installation

With 3M glue, the device can be fixed on the wall or other location you want to install.

8 Package

Accessories name	Specification	Quantity	Note
Device	Air Humidity Temperature Sensor	1	
TTL	Serial tools	1	Serial tools (at least one per batch of equipment)
3M paste		1	
Manual		1	

Note: This door magnetic detector does not include NB-IoT communication SIM card by default.