

Global connectivity  
**Global 4G Cat.1  
With 2G Fallback**

Install Free



**Usage Area**  
Global

**IP54  
Rugged**

**Battery types :**  
3\*AA Alkaline 2500mAh

2025 **PRODUCT SPEC**

Temperature  
Accuracy :  
**± 0.5 °C**

Sensors  
**Temperture  
Light Pressure**

**Positioning Technology**

Cell ID



**Dimensions:**  
**114mm ×69mm ×22.3mm**

## OVERVIEW



## FEATURES

### General Specification

Operating Temperature	0°C~+60°C
Dimensions	114mm x 69mm x 22.3mm
Weight	Approx.
Firmware Upgrade	USB interface, OTA
Data Encryption*	TEA, AES or RSA*(optional)
Stand-by Current	≤80uA
Waterproof Grade	IP54

### Global Network

#### Variant for the Global

LTE-FDD	B2/4
GSM	B2/5

### Hardware Features

USB	× 1, Type-c
(U)SIM Interface	× 1, 1.8V,Nano SIM card eSIM (Optional)
Cellular Antenna	internal
LED	× 4, Power Light, Status Light
Battery Capacity	2500mAh(Optional)

### Air Protocol

LTE (Cat 1)	LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL)
GSM	Max 85.6Kbps (DL)/Max 85.6Kbps (UL)
Transmit Protocol	TOP, UDP, MQTT, SMS

### FCC part

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. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body

## **Device Operation modes:**

### **1. Stop Mode**

The device should not record any sensor data when it is in Stop Mode, and if there is any recorded data does not send to server, the device should upload the unuploaded data to the cloud.

The device should sleep and wait for another button activation after all unuploaded data all uploaded.

### **2. Start Delay Mode**

The device should not recording any sensor data when the device is at Start Mode, and it should turn to recording Mode after delay start time out.

Also the customer can configure the Delay start time out by using the 'AT+SYSDELAYCFG' command.

### **3. Recording Mode**

The device should record sensors data per recording interval and report recorded data per upload interval.

Logging interval and Reporting interval can be set by using the 'AT+TIMEGP' command. (see AT command manual for more details)

### **4. Flight Mode**

The device only can record sensors data periodically, All wireless functions are suspended including upload any data to the cloud in the Flight Mode, and the device should resume all wireless activities when the device exits the Flight Mode.

### **5. Power-Off Mode**

Customer can use the 'AT+Poweroff' command to turn off the device, and the device will not work at the turn-off state.

### **6. Reset mode:**

Press and hold the 'Flight' and 'Start' button more than 5 seconds at any modes(except the turn-off mode),all the LEDs should be flash for once and then the device will reset.

User is allowed to change probe in this mode within 5 minutes (> 5min auto exist).

Press start button to exist this mode and all the LEDs flash 5 times then resume to the original operating mode.

### **7. Changing operation modes**

1, At Stop Mode: press and hold the Start button 5 seconds to enter Recording Mode after 5 flash of green LED.

2, At Recording Mode: press and hold the Flight button 5 seconds to enter Flight Mode after 5 flash of blue LED.

3, At Flight mode: press and hold the flight button for more 5 seconds to exit the Flight Mode after 5sec of blue LED solid on to return to Recording Mode

4, At recording mode: press and hold start button for 5 seconds to enter Stop Mode after 5sec of green solid ON.

5, At stop mode: set delay start time and press and hold the start button 5 seconds to enter Start Delay Mode.

After start delay time out, the device enter Recording Mode after 5 times of green flash.

**LED indications:**

Work mode	Action	Response			
		Flight(blue)	Battery(red)	T/H(red)	Cell(green)
	Battery power normal, single click the 'start'	Toggle with the T/H LED 2 times	OFF	Toggle with the Flight LED 2 times	OFF
	Battery power is low, single click the 'start'	Toggle with the T/H LED 2 times	ON (3s)	Toggle with the Flight LED 2 times	OFF
	Press and hold 'Flight' 5 seconds	OFF	OFF	OFF	OFF
Stop mode	Press and hold "Start" 5 seconds , from Stop mode change to recording mode	OFF	Battery low ON 3sec; battery normal OFF	OFF	flash 5 times to enter recording mode ,and it will flash once every 10 second for the 30 mins after activation
	Press "Start" 5 seconds , it will from Stop mode to Start delay mode then to Recording mode	OFF	Battery low ON 3sec; battery normal OFF	OFF	flash 5 times to enter start delay mode, and it will flash 2 times every 10 s for 30 mins
Recording mode	Battery power normal, single click the 'start'	ON for 0.2s	OFF	ON for 0.2s in alarm	Flash once for successfully communicate with cloud in the last communication, otherwise flash twice to show fail communication.
	Battery power is low, single click the 'start'	ON for 0.2s	ON for 0.2s	ON for 0.2s in alarm	Flash once for successfully communicate with cloud in last time, otherwise flash twice

					to show fail communication.
	Single click "Flight"	OFF	OFF	OFF	OFF
	press "start" 5 seconds ,from Recording mode change to Stop mode	OFF	Battery low ON for 0.2sec.	ON for 0.2sec in alarm	ON for 5sec
	Press and hold "Flight" 5s at Recording mode	Flash 5 times	Battery low ON for 5sec	ON for 5sec in alarm	OFF
Flight Mode	Single click the "Flight"	ON for 0.2s	Battery low ON for 0.2sec.	ON for 0.2sec in alarm	OFF
	Press and hold the "flight" 5 seconds	ON for 5s	Battery low ON 5s	ON for 5s in alarm	OFF
Charging		OFF	Flashing for charging, Steady on for fully charged	OFF	OFF
Change probe mode	In the any of the modes in the 4 above, press the both the 'Flight' and 'Start' 5 seconds	ON for 5s	ON for 5s	ON for 5s	ON for 5s
	Single click the "Start"	Flash 5 times	Flash 5 times	Flash 5 times	Flash 5 times
Turn-off mode	Send the 'AT+POWEROFF' command to the device	OFF	OFF	OFF	OFF
	Press and hold "start" 6 seconds , enter Stop mode		All the lights flash 3 times at the same time		

**Deployment methods:** The device needs to be deployed on the container with screws or bindings, for example, it can be installed on a container, which is more than 20cm away from the human body

