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

Avoid False Triggering Button

Install Free

Extended Sensors :
Pair With External probe

Temperature Accuracy :
0.5 °C

Usage Area
Global

IP67 Rugged

Battery types :
2200mAh NIMH

Sensors
Temperture Humidity
Motion Light Pressure

Positioning Technology

GNSS/AGPS/Cell ID

2023 PRODUCT SPEC

Linkedin
Scan QR code

OVERVIEW

GOODS MONITORING ST300air

FEATURES

General Specification

Operating Temperature	- 40°C~+55°C
Dimensions	107mm × 69mm × 12.8mm
Weight	Approx. 163g
Firmware Upgrade	USB C interface, OTA
Data Encryption*	TEA, AES or RSA*(optional)
Supply Voltage	3.6 V Rechargeable
Stand-by Current	≤80uA
Battery Life	1 Years @1 report per day for NIMH

Global Network

Variant for the Global

LTE-FDD	B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B18/B19/B20/B25 /B26/B28/B66
LTE-TDD	B34/B38/B39/B40/B41
GSM	GSM850/ EGSM900 /DCS1800/PCS1900

General Specification

Horizontal Position Accuracy	Autonomous: <2.5m CEP
Velocity Accuracy	Without Aid: <0.1m/s
Acceleration Accuracy	Without Aid: <0.1m/s²
Reacquisition Time	<1s
TTFF @-130dBm with EASY™:	Cold Start: <15s; Warm Start: <5s; Hot Start: <1s
TTFF @-130dBm without EASY™	Cold Start: <35s; Warm Start: <30s; Hot Start: <1s

Buffer Storage:

ST300 air	30000 messages

Hardware Features

USB	USB C
(U)SIM Interface	Nano SIM card
Cellular Antenna	internal
GNSS Antenna	internal, GPS/GLONASS/BeiDou
LED	× 2, Power Light, Status Light

Sensor

Motion Sensor	Gravity Measurement Range: ±2g/±4g/±8g/±16g ODR Bandwidths: 1Hz ~ 400Hz
Light Sensor	Measuring Range: 1~ 100T0 (adjustable levels)
Temperature and Humidity Sensor	Humidity Measurement Accuracy: ±2% RH Temperature Measurement Accuracy: ±0.5°C , - 40°C~+55°C
pressure sensor	Pressure range: 300-1100hPa (+9000m ... -500m relating to sea level); accuracy : < 0.5Pa/K Temperature Range: -40...+85°C; accuracy: ± 0.5°C.
Battery Capacity	2200mAh(Optional)

Air Protocol

LTE (Cat 1)	LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL) LTE TDD: Max 8.96Mbps (DL)/Max 3.1Mbps (UL)
GSM	GPRS: Max 107Kbps (DL)/Max 85.6Kbps (UL) EDGE: Max 296Kbps (DL)/Max 236.8Kbps (UL)
Transmit Protocol	TCP, MQTT
Working Modes	Power saving mode for long standby time Continuous mode for emergency tracking
Scheduled Timing Report	Report position and status at preset time intervals
Geo-fences	Support up to 5 internal geo-fence regions
Low Power Alarm	Alarm when internal battery is low
Wakeup Report	Report when the device wakes up
Motion Detection	Motion detection based on internal 3-axis accelerometer

* Under Development

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.