

GTAG-9960 Series Multi-function Positioning Card Manual

Thank you for choosing GTAG-9960 series multi-function smart positioning card.

This positioning card is a card-form positioning TAG, which comes with a programmable button. This product also adopts the latest technology including low-power IoT, positioning and motion sensor.

Some extra features that this product have includes:

- **SOS: Panic button**
- **Indoor and outdoor location positioning**
- **Geo-fence**
- **History path playback and query**

These data will be upload constantly to the platform and customer's device in a fix period.

Product Overview:

1. GTAG-9960 series positioning tag is a low-power Internet of Things + ultra-low power main control processor to achieve ultra-long standby. The tag is light and thin, suitable for elderly care, campus, construction site and other suitable scenarios.
2. GTAG-9960N has a built-in NB-IoT full Netcom module to implement data transmission
3. GTAG-9960C has a built-in 4G CAT1 full Netcom module to implement voice call function. (The 4G CAT1 card is provided by third-party telecoms).
4. Large programmable button, easy to operate.
(can be programmed to panic button, one-key call, patrol, and other functions)
5. Built-in GPS/Beidou, Wi-Fi and motion sensors enable seamless indoor and outdoor positioning. The motion sensor realizes step counting and detection of movement. If no movements were detected, it would enter the ultra-long standby mode.
6. Built-in low-power Bluetooth BLE to achieve more accurate indoor positioning (Bluetooth scanning and broadcasting, Bluetooth connection to mobile devices, Bluetooth on-the-go, patrol and other functions)
7. Support breakpoint resemble transmission (in the event where there is no signal, the positioning and step counting data will be saved and stored in the device until signal reappears.)
8. Optional 13.56MHz RFID (M1 card or CPU card). Allowing access control, payment and other functions

Product Configuration:

(Note: ● indicates that the configuration is yes; ○ means that the configuration is none).

The appearance of GTAG-9960N and GTAG-9960C are identical.

	Communication standard	Phone	GPS Beidou	Wi-Fi	BLE	125K	RFID	Features and application
GTAG-9960N	NB-IoT	○	●	●	●	○	Optional	- Low-power locator, - Most cost-effective - Widely used
GTAG-9960C	CAT1	○	●	●	●	○	Optional	4G Cat.1 low-power locator



Front view



Back View



Packing List

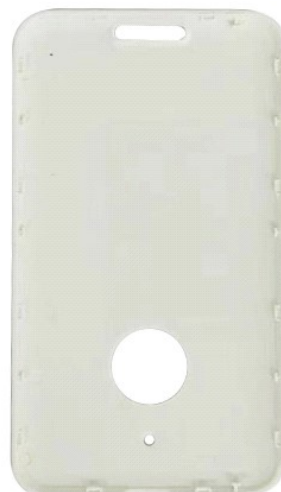


LED Indicator

Button (SOS,ON/OFF)



Speaker(Optional)



RFID Tag(Default :none) IMEI Number



CAT1

NB-IoT SIM



860377051127554

Product Description:

1. SIM card: The TAG has a built-in IoT card, and the IoT card is bound to the TAG device, please do not replace it without authorization.
2. Charging the TAG: Before using it for the first time, please use the matching USB cable to fully charge it.
3. Flashing red light indicates the device is charging and constant green indicates it's fully charged.
4. The TAG will be turned off while charging. Unplug the charging cable, and the TAG will automatically switch on.
5. Power ON the TAG: Press and hold the SOS button for more than 5 seconds to power on the positioning card.
High contrasting colors: Flashing RED/Green light indicates the device is switched on.
Flashing lights:
Three green flashing light indicates the device is connected to the internet.
Three Red flashing light indicates the device has failed to connect to the internet.
6. Power OFF the TAG: Press and hold the SOS button for more than 15 seconds, and the light will turn off, which indicates the device has been successfully switched off.
7. By default, the TAG performs GPS/Beidou + Wifi positioning every 10s, and reports to the platform through NB-IoT or CAT1 Internet of Things.
8. Standby mode: The TAG is in standby mode at the interval between positioning and uploading periods.
9. Short press the SOS button:
Red light: Indicates there are **NO** network signals.
Green light: Indicates there are network signals.
10. If the device is stationary for more than 20 minutes, the TAG will enter a low-power sleep mode.
11. SOS mode: Press and hold button for 5S, the light will flash first and then flashes red, stop and hold (if you continue to press and hold for 15s, the device will be turn off). The flashing event will automatically cease.

Product Specifications:

classify	name	description
Form factor	Size/weight	99 x 60 x 9mm / 50 grams
	Product color	white
	Material	PC+ABS
	Wearing style	Lanyard
Platform solutions	Main control chip	Bluetooth Low Energy BLE5.0 (support online upgrade, Bluetooth broadcast, scan Beacon, connect Bluetooth host and peripherals)
	memory	64Kbits SRAM + 1Mbits Flash (support resemble storage).
Network Schemes	Network standard	NB IoT (Model: GTAG-9960N)
	Network Frequency Bands	B3/B5/B8/B20/B28
	SIM card	Standard: (Provided by the manufacturer)
Network Schemes	Network standard	4G CAT1(Model: GTAG-9960C)
	Network Frequency Bands	LTE-FDD : B1/B3/B5/B8 LET-TDD : B34/B38/B39/B40/B41
	SIM card	Nano SIM card (provided by the manufacturer).
Positioning performance	Targeting method	GPS Beidou + Wifi + LBS + low power consumption blue bud BLE
	Satellite positioning accuracy	5-20 meters in open environment (satellite positioning equipment can correspond to 1/4 of the unshielded sky)
	Wi-Fi Accuracy	Depending on the density of the surrounding WiFi, it is generally 10-50 meters
	Bluetooth location accuracy	The deployment density of Rhodion Bluetooth Beacon can realize point, surface and stereo positioning (If the Beacon deployment density is 6-8 meters, the accuracy is 1-3 meters; if it is used with AOA Bluetooth gateway, it can reach 1 meter level)
	Motion detection	Built-in high-precision accelerometer, enter ultra-low power mode without moving (no positioning, no data reporting)
Interactive	LED indicator	Red + Blue LED (Charging Indicator; Working Status Indicator)
	keystroke	1 large button (SOS, power on/off).
	Voice calls	It can be equipped with built-in speakers and MICs, and support voice calls (optional).
Electrical characteristics	Built-in battery	1000mAh Li-ion rechargeable battery / Operating voltage 3.7V / Charging: 2 hours
	Charging port	Micro USB charging cable (standard, included in the shipment).
	charger	5V/1A (optional, not included in standard version).
	Working hours	Standby for more than 20 days, normal use: 7-10 days (in the case of location and reporting every 10 minutes).
Environmental characteristics	Operating temperature	-10°C ~ 60°C
	Storage temperature	-30°C ~ 80°C
	Operating humidity	-10%~85% HR
	Waterproof and dustproof rating	Not waterproof (shipped with waterproof sleeve as standard)

Business functions	Geo-Fence	The platform supports circular, custom area, and administrative area, and the mobile client supports circular fence
	Historical Pathway	Support up to more than 100 days of historical data query
	Alarm function	SOS alarm, fence alarm, fence outside alarm, out of fence alarm, low power alarm, shutdown alarm, etc.
	Platform features	The platform supports users to change the logo and name, hierarchical management and other functions
	Voice calls	Yes (optional)
	125K	Yes (optional)
Other features:	Breakpoint resumption	Yes (in locations where there is no signal, positioning and health data will be saved, waiting for a signal to be transmitted centrally).
	accelerometer	Band, (support pedometer, motion detection)
	Payment features	It can be equipped with an NFC tag (RFID M1 card, or CPU card) as an option
Shipment configuration	Standard configuration	Positioner X1, charging cable X1, sticker X1, waterproof case X1
	Optional	Bluetooth Beacon, RFID tag, 3M tape, charger

The format in which the card is reported

The data reported by the TAG is sent to the server in the JSON format of UDP reporting. Details:

Please refer to the attached UDP Protocol_20231115.docx

Modify the server address and port number reported by the card

The card sends data to the server and the IP address and port number of the server reported by the TAG can be changed to the required address.

Check out the attachment "Modify the IP and Port Number of the Server .docx" and the response "Set IP and PORT.mp4" video

Use of PC servers

Please refer to the attached "PC Server Usage Help .docx". It simulates the data reporting, positioning, history path of the device, and saves the data to Excel.