SenseCAP Card Tracker

Datasheet



SenseCAP Card Tracker T1000-A/B

Specifically Designed for the LoRaWAN

The T1000-A/B is a credit card-sized tracker, which is designed for asset and personal tracking. By utilizing GNSS/Wi-Fi/Bluetooth, it covers both outdoor and indoor positioning scenarios with high accuracy.

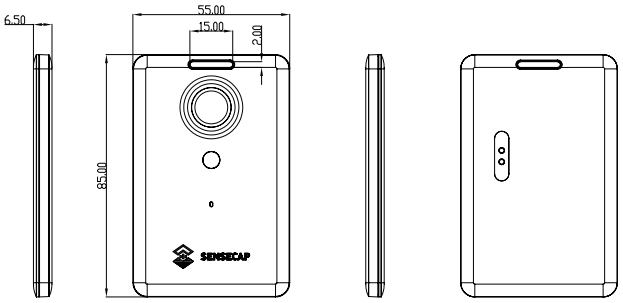


Specifications

General Parameters	
Product Model	T1000-A/T1000-B
Backhaul	LoRaWAN® (v1.0.4 Class A)
Bluetooth	Bluetooth v5.1, setting via App
LoRaWAN Channel Plan	IN865/EU868/US915/AU915/AS923/ KR920/RU864
Temperature	Range: -20 to 60℃ ; Accuracy: ± 1℃ Resolution: 0.1℃
Light	0 to 100% (0 is dark, 100% is brightest)
3-Axis Accelerometer	3-Axis Accelerometer to detect movement
LED and Buzzer	1xLED and 1x buzzer to indicate status
Button	1xButton to operate and trigger events(SOS)
Antenna	Internal (GNSS/LoRa/Wi-Fi/BLE)
Communication Distance	2 to 10km (depending on gateway antenna, installation, and environments)
IP Rating	IP65
Dimensions	85 x 55 x 6.5 mm
Device Weight	32g
Operating Temperature	-20℃ to +60℃
Operating Humidity	5% - 95% (No condensation)
Certification	CE /FCC /TELEC /RoHS /REACH
Location	
GNSS Constellation	GPS/GLONASS/Galileo/ BeiDou/QZSS
GNSS Sensitivity	-145dBm cold start / -160 dBm Tracking
GNSS Location Accuracy*	2.5m CEP 50%, GPS, -130dBm
Wi-Fi Positioning	Passive scanning, uploads the scanned 4 MAC addresses
Bluetooth Positioning	uploads the scanned 3 best signal MAC addresses of Beacon
Battery	
Battey Capacity	Rechargeable lithium battery, 700mAh
**Battery Life Estimates	4 months on a single charge(uplink every 1 hour, only GNSS data)
Battery Life Monitoring	Periodic uplink battery level
Charge Cable (Adapter not included)	Magnetic USB Type-A to 2P Charging Cable, 1 meter
Power Input Voltage	4.7 to 5.5V DC
Charging Temperature	0 to 45℃

* The laboratory test data when the equipment is stationary in an open place and with long-term power supply. There are errors in different applications.
** Battery life depends on temperature, installation, location interval, network coverage and sensor settings.

Dimension



Software	
App	SenseCraft, or other LoRaWAN Plantform
Work Mode	**Standby:** only heartbeat uplink; **Periodic:** upload location in intervals; **Event:** modify the interval by temperature, light and motion(start, end, shock, motionless timeout);
Data Storage	Over 1000 location data records store on the device when there is no LoRaWAN® coverage

Order Model

Model	GNSS	Temperature	Light	Accelerometer
T1000-A	√	√	√	√
T1000-B	√	×	×	×
T1000-E	√	√	√	√

Note:
*via GNSS Cloud: Semetech's LR1110 LoRa Edge solution is utilized to acquire location data, and the location is encrypted and sent to Semetech LoRa Cloud for decryption.

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SenseCAP Card Tracker T1000-E

The T1000-E integrates Semtech's LR1110, Nordic's nRF52840, and MediaTek's AG3335 GNSS module, providing a high-precision, low-power positioning and communication solution.

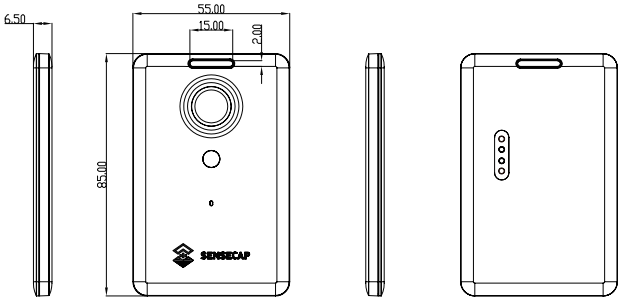


Specifications

General Parameters	
Product Model	T1000-E
Bluetooth	Bluetooth v5.1
LoRa	Supports 863-928 MHz range
Temperature	Range: -20 to 60°C ; Accuracy: ± 1°C Resolution: 0.1°C
Light	0 to 100% (0 is dark, 100% is brightest)
3-Axis Accelerometer	In development
LED and Buzzer	1xLED and 1x buzzer to indicate status
Button	1xButton to operate:1 press: Dismiss notification 2 press: Send position 3 press: Toggle GPS on / off Long press: shutdown
Antenna	Internal (GNSS/LoRa/Wi-Fi/BLE)
Communication Distance	2 to 8km (depending on antenna, installation, environments and LoRa mesh)
IP Rating	IP65
Dimensions	85 x 55 x 6.5 mm
Device Weight	32g
Operating Temperature	-20°C to +60°C
Operating Humidity	5% - 95% (No condensation)
Certification	CE / FCC / TELEC / RoHS
Location	
GNSS model	Mediatek's AG3335 GNSS module
GNSS Sensitivity	-145dBm cold start / -160 dBm Tracking
GNSS Location Accuracy	~10m CEP
Battery	
Battey Capacity	Rechargeable lithium battery, 700mAh
Charge Cable (Adapter not included)	Magnetic USB Type-A to 4P Charging & Data Cable, 1 meter
Power Input Voltage	4.7 to 5.5V DC
Charging Temperature	0 to 45°C

Note:
*via GNSS Cloud: Semetech's LR1110 LoRa Edge solution is utilized to acquire location data, and the location is encrypted and sent to Semetech LoRa Cloud for decryption.

Dimension



Firmware Support	
Compatibility	Supports open-source firmware
Examples	Meshtastic and MeshCore
Customization	Custom firmware development supported

Order Model

Model	GNSS	Temperature	Light	Accelerometer
T1000-A	√	√	√	√
T1000-B	√	×	×	×
T1000-E	√	√	√	√

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