# **T1000-E Tracker Introduction**



It is a high-performance tracker designed for Meshtastic, as small as a credit card, effortlessly fitting in your pocket or attaching to your assets. It embeds Semtech's LR1110, Nordic's nRF52840, and Mediatek's AG3335 GPS module, providing Meshtastic users with a highprecision, low-power positioning and communication solution.

Get One Now



#### SenseCAP Card Tracker **Product Model** T1000-A/B T1000-E MCU Goodix SoC Nordic nRF52840 LoRa Chip Semtech LR1110 Semtech LR1110 Backhaul **LoRaWAN® Meshtastic®** SenseCraft APP, **APP** Meshtastic APP or other LoRaWAN Plantform Charge Cable USB Type-A to 2Pin USB Type-A to 4Pin Certification CE /FCC /TELEC /REACH /RoHS CE /FCC /RoHS

#### **Features**

- **Multi-Protocol Support**: Featuring nRF52840 and LR1110, it supports Bluetooth 5.0, Thread, Zigbee, and LoRa, ensuring compatibility with a wide range of devices and networks.
- **Powerful Positioning Capabilities**: Integrated with the Mediatek's AG3335 GPS chip, it provides high-precision positioning services.
- **Expandable Interfaces**: Designed with four pogo pins, it supports USB interface for DFU (Device Firmware Upgrade), serial logging, and API interface, simplifying device management and debugging.
- **Open Source Support**: Compatible with the Meshtastic open-source mesh networking protocol, suitable for long-range and low-power communication needs.

#### **Specification**

**General** 

Network protocol	LoRa, Bluetooth v5.1
	Range: -20 to 60°C;
Temperature	Accuracy: ± 1°C (min ±0.5°C, max ±1°C)
	Resolution: 0.1°C
Light	0 to 100% (0% is dark, 100% is brightest)
LED and Buzzer	1*LED and 1* buzzer to indicate status
Button	1* Button to operate
Antenna	Internal (GNSS/LoRa/Wi-Fi/BLE)
Communication Distance	2 to 5km (depending on antenna, installation, and environments)
IP Rating	IP65
Dimensions	85 * 55 * 6.5 mm
Device Weight	32g
Operating Temperature	-20°C to +60°C
Operating Humidity	5% - 95% (No condensation)
Certification	CE /FCC

#### **Battery**

Battey Capacity	Rechargeable lithium battery, 700mAh
Battery Life Monitoring	Periodic uplink battery level
Charge Cable	USB magnetic charging cable, 1 meter

Battey Capacity	Rechargeable lithium battery, 700mAh
(Adapter not included)	
Power Input Voltage	4.7 to 5.5V DC
Charging Temperature Limit	0 to +45°C

## **Hardware overview**



## **Pin List**

Power to Sensor	P0.4	GPIO
Temperature	P0.31	NTC (analog)
Light	P0.29	LUX(analog)

3-Axis Accelerometer (Not currently used in the Meshtastic firmware)	SDA: P0.26 SCL: P0.27	Via IIC
Power to Accelerometer	P1.7	GPIO
LED	P0.24	GPIO
Buzzer	P0.25	GPIO
Enable Buzzer	P1.05	GPIO
Button	P0.6	GPIO
Power to sensor	P1.6	GPIO
LR1110	P1.08: SPI MISO P1.09: SPI MOSI P0.11: SPI Clock P0.12: SPI NSS P1.10: LoRa Reset P1.01: LoRa DIO1 P0.07: LoRa DIO2 LR11X0_DIO3_TCXO_VOLT AGE 1.6V	SPI
GPS	RX: P0.14 TX: P0.13	Serial1 BAUDRATE:115200

## **Button**

Button action	Description	Buzzer
Press once	Power on	Rising melody
Press twice	Update node/location info	-

Button action	Description	Buzzer
Press three times	Switch on/off the GPS	-
Press and hold for 5s	Power off	Falling melody

#### **LED**

Device action	Description
Power on	Lights up and then flashes quickly
DFU mode	Solid on
Working	Random flashing

#### Edit this page

Last updated on **Jul 1, 2024** by **Jessie** 

Loading comments...