MOKO LoRaWAN Tracker
LW001-BG PRO

MOKO SMART

Product Introduction

LW001-BG PRO is a wireless smart, ultra-low power consumption, indoor&outdoor LoRaWAN Tracker. It integrates GPS positioning, Bluetooth positioning and WiFi positioning, supports a variety of working modes, suitable for most tracking applications.

Ideal to optimize logistic process, asset management, warehouse and inventory scenarios, outdoor tracking, theft protection, livestock tracking and much more.

Features

1. Support multiple working modes

LW001-BG PRO supports standby mode, periodic mode, timing mode and motion mode. Users can choose the corresponding mode according to the actual application scenario, and the mode can be switched between.

2. Multiple positioning strategies available

LW001-BG PRO supports GPS positioning, WIFI positioning and Bluetooth positioning.

There are seven positioning strategies for LW001-BG PRO:
- Only WIFI
- Only Bluetooth
- Only GPS
- WIFI+GPS
- BLE+GPS
- WIFI+BLE
- WIFI+BLE+GPS

Users can choose different combinations of positioning technologies for actual application scenarios.

3. Support anti-tamper alarm

The product is designed with tamper button. When the device is intentionally dismantled, it will send a timely notification.

Features

4. Downlink request for location

User can send location request to the device actively through LoRaWAN server, the device will start to locate immediately after receiving the request and upload the location information to the server when the locating is finished. This allows us to get location information in time when there is an emergency.

5. Man Down detection

If the LW001-BG is not moved for a long time, and beyond the set idle timeout, the device will send idle payload to remind the user of the current idle status to prevent the tracked device or livestock from abnormal conditions.

6. Magnetic Switch

No button design on the surface of the device, the device can be turned on or off by a magnet to prevent the device from being accidentally shut down to ensure the continuity of the device's work.

7. Local data back up

The reported data will be stored in the Flash chip of the device, and when encountering problems such as network problems or packet loss, users can get the data through MKLoRa APP or LoRaWAN downlink command to ensure the integrity of the tracking data.
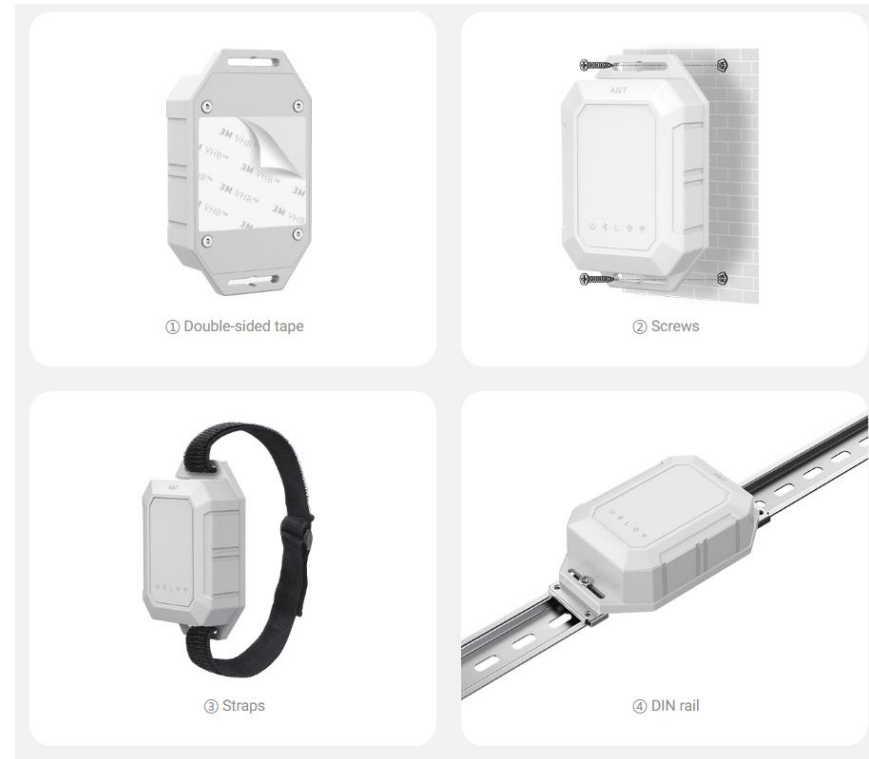
8. IP67 waterproof

The rugged housing design and IP67 protection class enable the device to maintain stable operation even in harsh working environments.
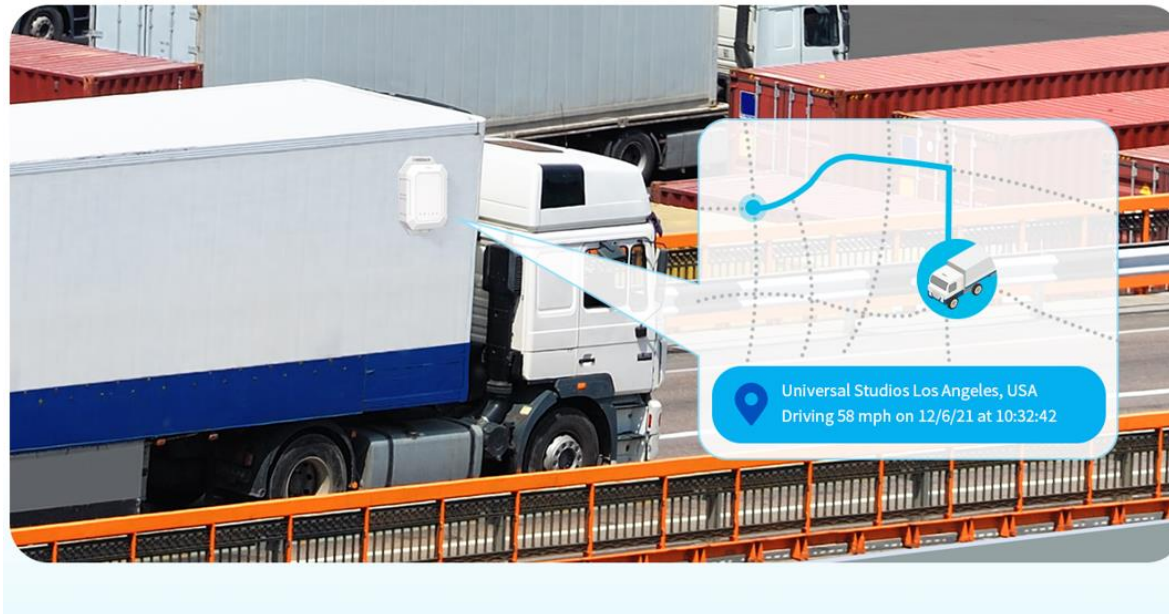
Features

9. Multiple installation Ways

The product can be mounted by screws, straps, double-sided tape, DIN rail, etc., and is suitable for most applications.

① Double-sided tape

② Screws

③ Straps

④ DIN rail

10. Large Capacity Battery

LW001-BG PRO is equipped with a 7800mAH capacity battery pack with a lifetime of approximately five years under typical use scenarios. (Twice WIFI positioning one day, five seconds per positioning; twice Bluetooth positioning one day, five seconds per positioning; twice GPS positioning one day, 3 minutes each positioning)

Applications

Universal Studios Los Angeles, USA
Driving 58 mph on 12/6/21 at 10:32:42

Scenario 1:Logistics Tracking

The device can be used to track the location of heavy equipment (vehicles, machines, and other outdoor facilities) in real time and on a regular basis, or it can be used for location tracking and equipment management based on the movement status of heavy equipment.

Applicable function:

Periodic mode or motion detection;
GPS Positioning;
Rugged and IP67 waterproof;

Applications

Scenario 2: Container Tracking

LW001-BG PRO can be used to track the location and movement of the container on the way to the port, so that the user can confirm the corresponding location of the container as soon as possible when needed, and the tamper alarm function can ensure the safety of the cargo to a certain extent.

Applicable function:

Motion mode;
GPS positioning;
Tamper alarm;

Applications

Scenario 3: Industrial asset tracking

LW001-BG PRO can be used for industrial asset tracking.

In outdoor environment, GPS technology can be used for location tracking;
 in indoor environment, WIFI or Bluetooth technology can be used for location tracking.

Using the timing mode, the location information can be obtained at a fixed point in time every day, thus forming an intelligent management of assets and devices.

Applicable function:

Timing mode;
Multiple positioning strategies;
Tamper alarm;

Applications

Scenario 4: Smart Grazing/Livestock Tracking

Users can use the strap to put LW001-BG PRO around the neck of livestock, and get the location information of livestock regularly or periodically through GPS positioning technology to achieve intelligent grazing management.

At the same time, when the livestock encounter abnormal conditions and stop their activities, the Man Down detection function will trigger a notification to the server. After being notified, user can quickly get the location of the livestock through LoRaWAN downlink command and go to deal with the abnormal conditions.

Applicable function:

Timing mode or periodic mode;
GPS positioning;
Tamper alarm;
Downlink request for location;

Main Specification

LoRaWAN

LoRaWAN V1.03

7 km communication distance
(in urban open space)

Battery

3*AA ER18505 12000mAh
Replaceable battery

Material

ASA + PC

Dimensions

122.6mm x 72.9mm x 33.8mm

IP Rating

IP67

Operating Environment

Temperature: -40℃~80℃

Humidity: 5%--95%

Color

Gray

Certification (pending)

USA: FCC
Europe: CE, UKCA
RoHS

Customized Service

Based on MOKO standard product

- ➢ You can develop your own mobile APP, MOKO provides Android and iOS APP SDK for you to reduce your development time
- ➢ Provides white label service, support customized label and package, also can print your company logo on the products

Based on MOKO standard hardware

- ➢ Support firmware and APP modification according to customer's requirements
- ➢ Support light customization on MOKO standard hardware

New product design

If MOKO standard products don't meet your requirements, MOKO supports the design of new products for you, including:
- ➢ Hardware design
- ➢ Software development
- ➢ Mechanical design

More details about the customized services, please contact our sales team: Sales@mokosmart.com

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