



# K-2

## User Manual

K-2 User Manual December 2017,  
Version 3.1



# General description

Collect the data you need to optimize your operations.

Discover the most flexible and powerful supply chain tracker available on the market.

We have built every feature around the specific requirements of logistics applications.

The K-2 is especially designed to help you achieve end-to-end supply chain visibility in a cost-efficient way.

Using its GSM communication unit with its embedded SIM-card, it can be localized based on connectivity information from the GSM networks.

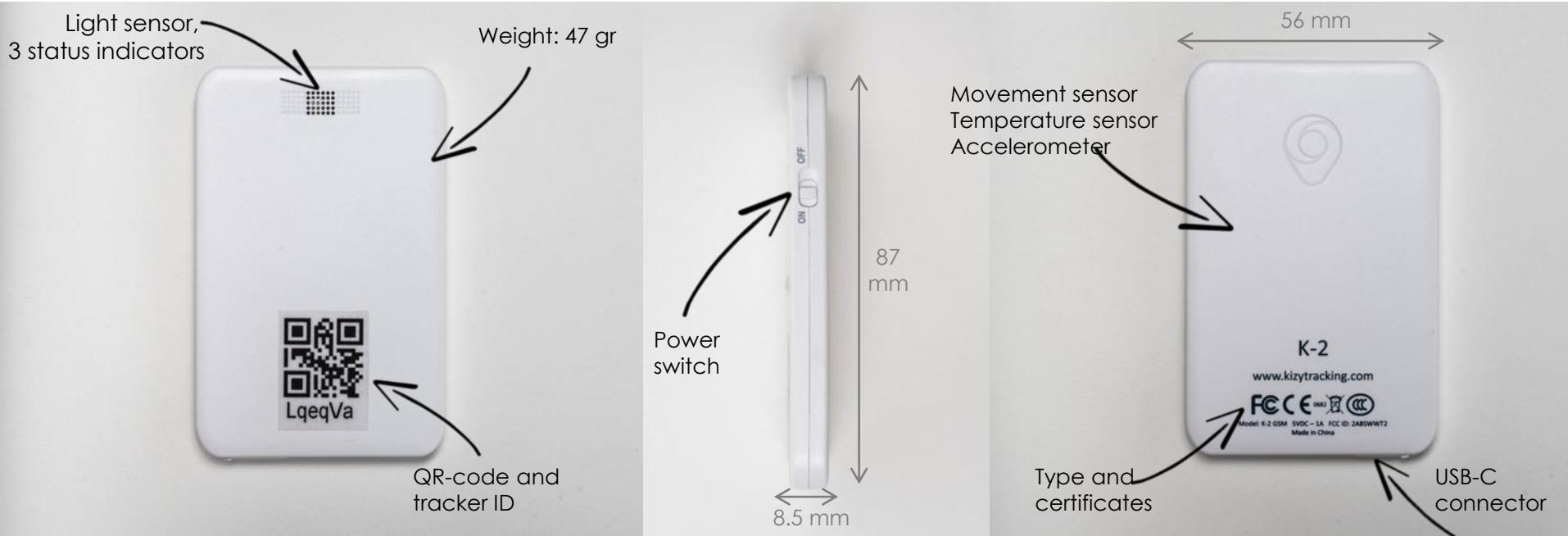
Unlike the GPS technology, the position of the K-2 can thus be determined as long as a 2G/3G GSM reception is available.

The positioning data is made available through the Online Tracking Platform.



# Design

Light, small and robust



# Battery Charging

## Use the official USB to USB-C cable

First remove the USB protection-lid to access the USB-C connector on the tracker, then plug in the connector. The USB-C plug can be plugged into any powered USB-connector on a PC or a USB-charger (not provided).

The lights indicate the charging progress if the power switch is in the position "on" (no indication is given if the power switch is in position "off"):

1. Charging: the green light blinks twice per second.
2. Battery full: the green light stays on all the time.

The device contains integrated control logic, which automatically starts and stops the charging process.

Once charged, remove the charging cable and close the protection lid.

For more information on the charging and meaning of the LED status, visit the Support section [support.kizytracking.com](http://support.kizytracking.com)



Light pattern when connecting to the USB-C connector and the power switch in the position "on"

charging



battery full



# Tracker Operation

The tracker is running when the power switch is “on”

Assuming the power switch is “off”, the charging cable is not connected and that the battery contains enough power to operate, the following will occur when power switch is set to “on”:

- The red light will switch on indicating the device is starting up. It will be switched off when the device started normal operation.
- The orange light will start flashing once per second, indicating that the tracker is searching for a GSM network.
- As soon as the tracker can connect to the network, the color of the light is changed to green. After successful connection, the speed of the green light flashing will be reduced to once every 8 seconds.
- If no network connection can be made, the flashing light remains orange and the speed is reduced to once every 8 seconds.
- The tracker will reconnect periodically to (re-)connect to the network and update its current position.
- In case the tracker shows red flashing twice per second followed by six seconds of no light, the battery is low and needs to be charged.

 starting up



 not connected



 searching



 connected



 synchronizing



# Use of QR-Code

Scan the code to access the Online Tracking Platform

The use of K-2 is coupled to an Internet-hosted data management platform. The device-specific URL (Internet-address) of this platform can be obtained by scanning the QR-code on the front of the tracker. You may either use a dedicated scanner or you can use a smartphone application. The URL will check the current status of the tracker and will then display the corresponding information. This may depend on several factors such as:

- If you are logged in as a registered user
- If you have access rights to use the tracker.
- If the tracker is currently "in use".
- The action that has been assigned to the QR-code scanning by the tracker owner.

Please follow the instructions on how to proceed being provided by the platform.



# For your safety

This product is exclusively intended for tracking of objects

- It's the customer's responsibility to use the tracker in compliance with the local air transportation regulation.
- This device complies with part 22H and part 24E of the FCC rules. The radiated output power of the this internal wireless radio is far below the FCC radio frequency exposure limits. Nevertheless, the wireless radio shall be used in such a manner that the radio is 20 cm or further from the human body in order to satisfy to the maximum permissive exposure requirements (MPE).
- Do not use the tracker to track persons.
- Do not use the tracker to track objects without prior consent of its owner.
- Do not open the tracker casing.
- Do not change the product characteristics or accept unauthorized repairs.
- Only use compliant USB-cables for battery charging.
- Keep the tracker and its incorporated battery out of the reach of children.
- Do not use the tracker for medical purpose or for public information.
- Do not dispose the tracker in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment in order to ensure environmentally compliant disposal.
- Do not clean the tracker with solvents to prevent the protective coating from getting damaged.
- Do not place the tracker near extreme temperatures, vibration or shock.
- Do not expose the tracker to weights exceeding 50 kg on its surface.
- Do not expose the tracker to moisture or water.

# Troubleshooting

## What to do if...

Question: The orange light does not start blinking when you power on the tracker.

Answer: *The battery is likely to be empty. Recharge it through the USB-C connector.*

Question: The red light blinks slowly.

Answer: *The battery is almost empty and the tracker cannot connect to the GSM-network anymore. Recharge the tracker through the USB-C connector.*

Question: The red light blinks quickly.

Answer: *The tracker has detected a hardware problem and needs to be replaced.*

Question: The PC reports that no driver could be found for the device after connecting the USB-C.

Answer: *Ignore this message. The USB-C -cable is only used for charging and needs no driver.*

Question: The green or orange light is blinking every second while the battery charging is active.

Answer: *The tracker is trying to connect to the GSM-network. The charging pattern will be shown again when this is finished.*

# Specifications

Communication technology	GSM 2G/3G
SIM card	embedded
I/O interface	on-off switch, push button (configurable action) 3 LEDs (red, yellow, green) USB-C
Expansion slot	I2C
Battery type	Li-ion, 900 mAh tracking operation continues during charging
Accuracy	down to 10m
Typical battery life	from 6 months to 1 year
Casing	non-flammable, white (customizable)
Size (l x w x h)	87mm x 56mm x 8.5mm
Weight	< 47g
IP class	> IP54
Certifications	CE, FCC, RoHS, FSS
Sensors	light, motion, temperature, accelerometer support for external sensors (one-wire, I2C)
Operating system	embedded Linux, over-the-air configuration

# Endnotes



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No part of this User Guide may be reproduced without written consent of Kizy Tracking. The technical data are correct at the time of submission to the certification body and may change without prior notice.

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 device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter and must be installed to provide a separation distance of at least 20cm from all persons.

The Tracker instructions: Put the Tracker in goods box, then the goods be put  
in the car can be track.