



K-1 GSM Tracker User Guide

FCC ID:2ABZQWT1

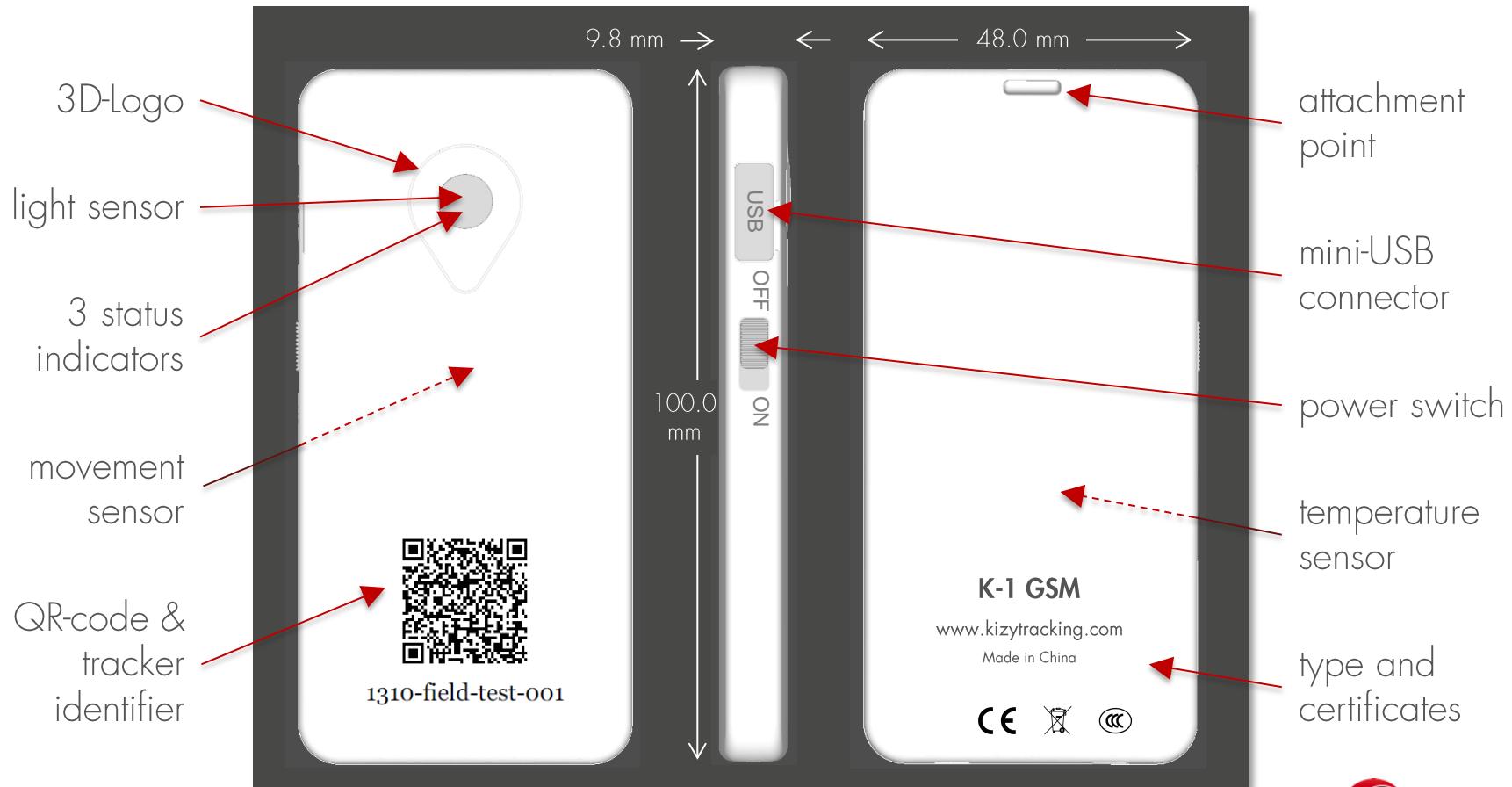
Thank you for choosing a Kizy product.

Please follow the instructions in this
guide for optimal results.



Design

Elegant, light and robust



Battery Charging

Is activated if a USB-cable is attached

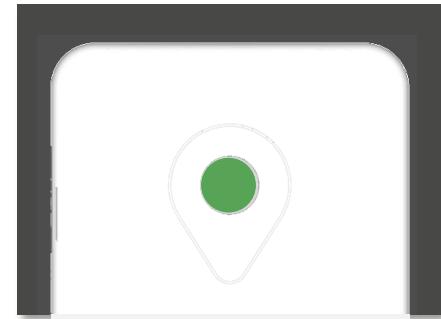
The battery charging operation is started as soon as a compliant charging cable is connected with the mini-USB connector on the device. Two possibilities exist:

1. **Charging**: the green light goes gradually on and off (like a heartbeat).
2. **Battery full**: the green light stays on for 7 seconds, then goes off 1 second during which connectivity status is shown.

The device contains integrated control logic which automatically starts and stops the charging process. There is no need to remove the charging cable when the battery is fully charged.

The charging process takes place independently whether the power switch is "on" or "off".

The tracker will continue its operation during the battery charging process.



Charging



power switch off



power switch on
not connected



power switch on
connected



Battery full



power switch off



power switch on
not connected



power switch on
connected



Tracker Operation

The tracker is running when the power switch is "on"

Assuming the power switch is "off" and that the battery contains enough power to operate, the following will occur when power switch is set to "on":

- The yellow 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. A few seconds later, the speed of the light flashing will be reduced to once every 8 seconds.
- If no network connection can be made, the flashing speed of the yellow light is reduced to once every 8 seconds.
- The tracker will reconnect periodically to (re-)connect to the network and update its current position.



	not connected	
	searching	
	connected	
	synchronizing	

Use of QR-code

Scan the code to access the data management platform

The use of the K1-GSM Tracker 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

- **Do not** use the tracker inside aircrafts.
- **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 yellow light does not start blinking when you power on the tracker.

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

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

Question: The green or yellow 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*

Communication protocol: *Proprietary*

SIM-card: *Embedded*

I/O interface: *Power on-off switch*

3 status lights (green, yellow, red)
mini-USB

Expansion slot: *I2C (inside mini-USB connector)*

Battery type: *Li-Ion*

Localization accuracy: *Typically 300m – 2'000m dependent on antenna density*

Typical battery life: *> 15 days @ 15 minute update interval*

> 40 days @ 1 hour update interval

> 6 months @ 6 hour update interval

Casing: *Non flammable, white*

Size (l x w x h): *100mm x 48mm x 9.8mm*

Weight: *< 45 grams*

IP-class: *IP53*

Certifications: *CE, FCC & CCC (pending)*

Endnotes

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

Declaration of Conformity

Herewith we declare that this wireless transmission device does comply with the essentials requirements of

A copy of the signed and dated Declaration of Conformity is available on request via info@iclosion.com.

This chapter contains the regulatory information for the FCC (USA).

FCC Information

Warning: Changes or modifications to this device not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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 equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element (antenna) shall be installed such that a minimum separation distance of 20cm (8in) is maintained from all persons.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.