



SolarLock Asset Tracker

Unlocks Remotely or On-Site

Model: BSX100

Operating Guide

Quick Start

Btracking's SolarLock BSX100 has been preconfigured. It can be reconfigured over the air (OTA); contact Btracking if changes to the configuration or location reporting schedule are needed.

Fully Charge the Battery

Shipping regulations prohibit us from shipping a fully charged battery. We recommend fully charging the battery prior to use.

Either 1) Connect the USB Charging Cable (provided) as indicated (blue circle):



or, 2) Place the device in sunlight for 4-6 hours (remove the protective plastic sheet on the solar panel first).

Check the Btracking Platform to see the battery level.

Power On the Device (if necessary)

Btracking typically ships the device powered on. However if the device is not reporting locations, it may have been powered off. To power on the device, see Sec 4 and Sec 5 below.

Install Device

The BSX100 has a powerful magnet on the back to hold it in position. ***Position the tracker on the trailer/container/machinery door such that the rope is at the bottom.***

If the door is not magnetic, an optional Mounting Plate (see Sec 10 Optional Accessories below) can be purchased from Btracking.

1. Safety Information

To ensure safe operation of the device, please read carefully before use:

- Do not disassemble the device. If the device case is damaged or the insulation of the wires is compromised, disconnect the power cables from the power supply first.
- All wireless data transmission devices generate interference that can affect other nearby devices.
- Installation or dismantling of the device should only be carried out by qualified personnel.
- The device must be securely fixed as described in the installation instructions.
- Ensure that the device is installed in a location protected from adverse environmental conditions for long periods.
- Dispose of used batteries in accordance with environmental regulations.
- Install the device in a restricted-access location that is not visible or easily accessible to the driver.
- Waste from the equipment must not be disposed of with household waste. Send the product to specific collection points at the end of its useful life.

WARNING — USB-C Charging Cables

DO NOT, under any circumstance, use multi-headed USB-C cables to charge or configure the device. It is NOT compatible with the PD protocol and can only withstand 5V DC.

Multi-output chargers with individual cables to each device are acceptable.



 *Multi-headed USB-C cable — NOT permitted*



 *Multi-port charger with individual cables — acceptable*

2. About the SolarLock BSX100

Btracking's SolarLock BSX100 is a compact GNSS-enabled electronic lock designed for a wide range of fleet management, tracking, security, and safety functions.

The BSX100 incorporates GNSS, LTE 4G/3G/2G, and BLE technologies, enabling precise

location collection and efficient transfer of data via mobile network to the tracking platform. Its rugged IP67-rated enclosure makes it a popular choice for commercial transportation, fleet management, logistics, heavy machinery, shipping, and more.

The BSX100 is compatible with BLE sensors for monitoring temperature, humidity, and door status, and can connect with a BLE relay to control other electrical devices.

SolarLock ships with a 16-inch rope. Other rope lengths, including custom lengths, are available — see the Accessories section.

Solar Power

- Normal power consumption is approximately 40 mAh when the device is in working mode.
- The typical solar panel charging rate under direct sunlight at noon (summer) is approximately 330 mAh.

3. In the Box



5VDC Charge Cable



Elock Rope



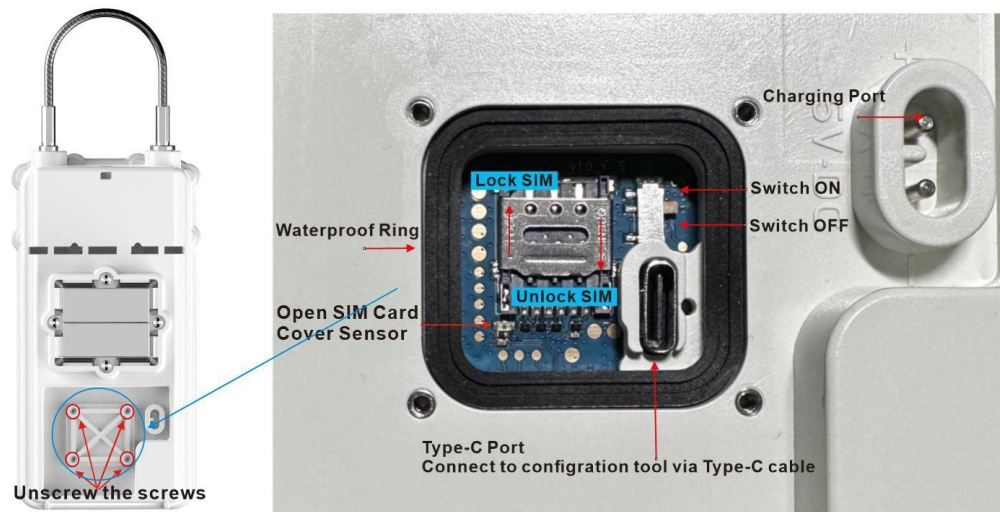
RFID Wake Card

RFID Key Card

RFID Key Card

4. Accessing the Device

The on/off switch and SIM card tray are accessible by removing the cover on the back of the device. The SolarLock BSX100 uses a Nano SIM, which is pre-installed by Btracking. **DO NOT REMOVE THE SIM CARD!**



Rear panel: on/off switch, Type-C config port, charging port, and waterproof ring

5. Powering On / Off

- Remove the 4 rear screws carefully and lift off the cover. It may be tight due to the waterproof ring seal.
- Move the switch to the desired position: ON or OFF.
- The Type-C port is used by Btracking to configure the device — do not connect other devices.
- Replace the cover and tighten all 4 screws securely.
- Use the Charging Port with the included USB charging cable to recharge the battery as needed.

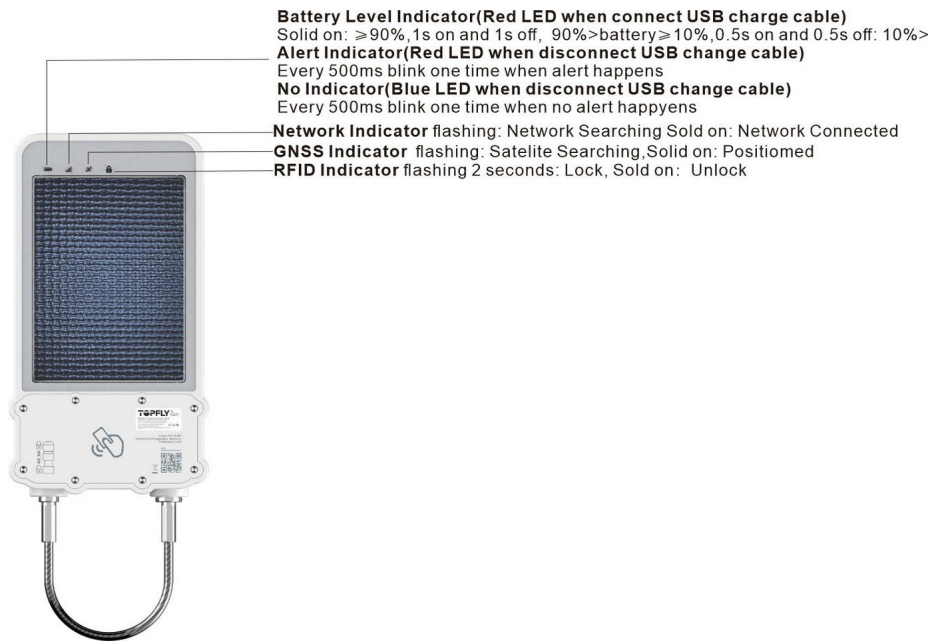
IMPORTANT — Rear Cover Screws

It is VERY IMPORTANT to properly tighten the rear cover screws to prevent water from entering and causing damage. Screws should be snugly tightened to 3.5 kgf·cm.

The IP67 waterproof rating is only valid when the cover is correctly fitted and all screws are fully tightened.

6. LED Indicators

Indicator lights will turn off automatically 70 seconds after the tracker is powered on, unless configured as 'always on' or connected to a USB charging cable.



LED indicator positions and behaviour diagram

LED Status Definitions

LED State	Definition
Solid on	LED indicator on continuously, no flashing
Fast flashing	0.25 second on / 0.25 second off
Slow flashing	1 second on / 1 second off

LED Indicator Reference

Indicator	Behaviour
Battery (Red — USB charging connected)	
≥ 90% charge	Solid on
10–90% charge	1 s on / 1 s off
< 10% charge	0.5 s on / 0.5 s off
Alert (Red — USB disconnected)	
Alert condition	Blinks once every 500 ms
Network (Blue — USB disconnected)	
No alert	Blinks once every 500 ms
GNSS Indicator	
Searching	Flashing
Positioned	Solid on
RFID Indicator	
Locked	Flashing every 2 seconds
Unlocked	Solid on

7. Unlocking the Device

Method 1 — RFID Card (Proximate)

Hold the RFID card against the card icon on the device (highlighted in the red square below) for a few seconds. The RFID LED indicator will stay on until you pull out the lock rope.

Remove the rope. If you do not remove the rope within 60 seconds, the device will lock itself again and the LED indicator will turn off.



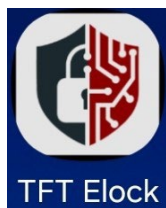
Hold RFID card to the icon marked with the red square

Method 2 — BLE Phone App (Proximate)

Install the free TFT Elock app from the Apple App Store (iOS) or Google Play Store (Android):



Apple App Store (iOS)

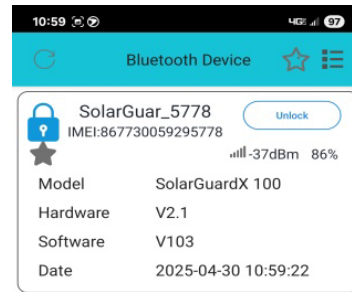
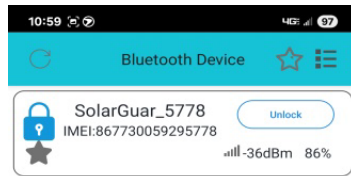


TFT Elock App



Google Play (Android)

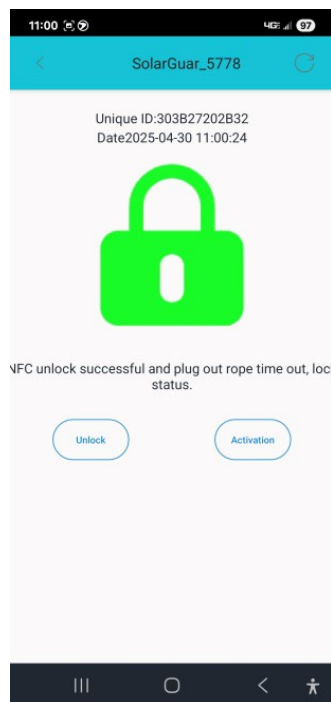
If the device does not appear in the app, wake it using the supplied RFID Wake Card.



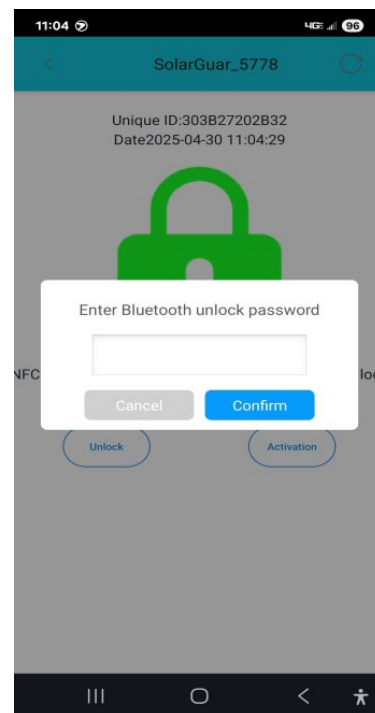
Open the app. If proximate to the device, it will appear in the list.



Tapping the lock at left opens more detail. Tap Open to start the unlocking process.



A new screen opens. You may need to tap activate to wake the device, or use the wake up RFID card. If the BLE connection is broken, an icon will appear at top right; tap to reconnect BLE.



Enter the Unlock pin for the device (6 digits) and tap Confirm to open the lock.

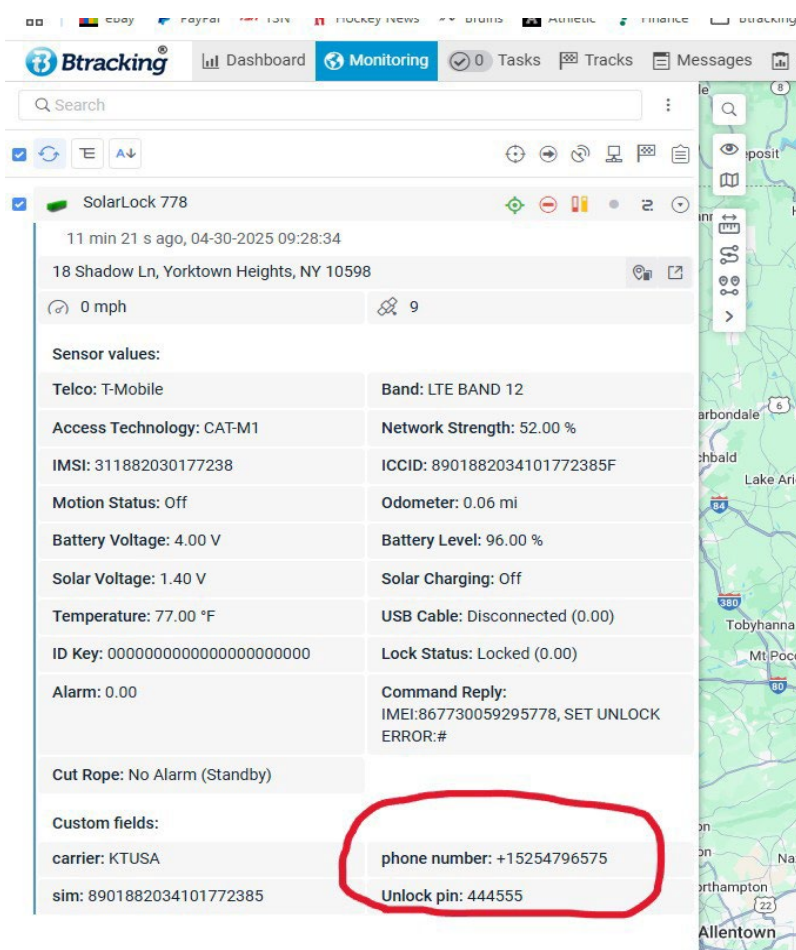
Method 3 — SMS (Remote)

Send an SMS to the phone number of your device in the following format (not case-sensitive):

`unlock,<unlock pin>#`

Example: `unlock,444555#`

The phone number and Unlock PIN are provided with the device and can also be found on the platform Monitoring tab. Click the device icon — the phone number and 6-digit Unlock PIN appear in the Custom Fields section as shown below:



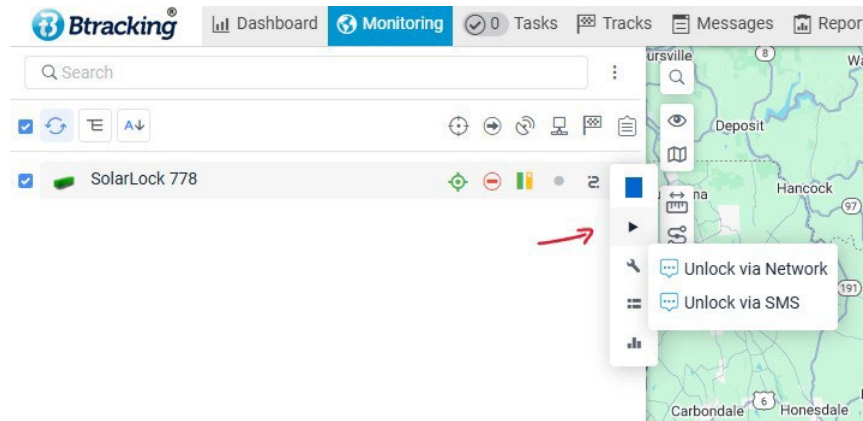
The screenshot shows the Btracking Monitoring interface for a device named 'SolarLock 778'. The 'Custom fields' section is highlighted with a red circle, displaying the following information:

Custom fields:	
carrier: KTUSA	phone number: +15254796575
sim: 8901882034101772385	Unlock pin: 444555

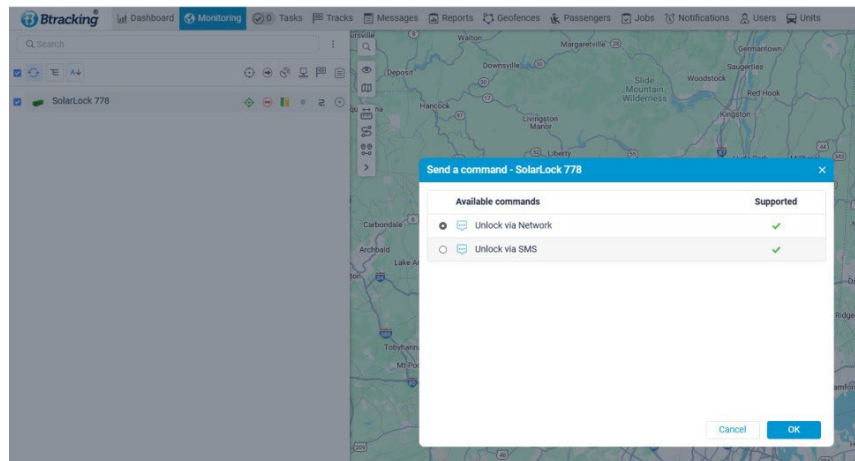
Custom Fields section showing the device phone number and Unlock PIN

Method 4 — Platform Command (Remote)

If configured (please check with Btracking), from the Monitoring tab, click the command icon next to the device (use the dropdown under the clipboard icon to reveal additional icons). You can send an unlock command via SMS (immediate) or Network (queued).



Click the command icon to reveal unlock options



Select Unlock via Network or Unlock via SMS, then click OK

8. Locking the Device

Insert the rope — note that the two rope ends are different shapes and must be inserted into the correct openings. After a successful lock, you will hear a mechanical click confirming rope engagement. Pull the rope to verify it is securely locked.

9. Storing the Device

If you anticipate leaving the tracker unused for an extended period, connect it to an external power source and recharge the internal battery for a continuous period of 10 hours every 3 months. This proactive measure will significantly contribute to preserving the lifespan of the internal battery.

10. Optional Accessories

Contact Btracking to order. All accessories are available at btracking.com or by calling 866-233-0953.

Lock Rope Options

The E-Lock rope is available in multiple lengths — contact Btracking to order the length that suits your application: 16 in (1.4 ft), 3 ft, 16 ft, 33 ft, 66 ft and custom lengths (contact us to order)



E-Lock rope (multiple lengths available)



Temperature + Humidity Sensor



Combo Temperature & Door Sensor



Mounting Plate



BLE 5.0 Wireless Relay



Unlock NFC Card



Wake-Up NFC Card



Charging Cable



Replacement Magnet Clip

Support & Contact

For technical support, product sheet, accessories, or account assistance, contact Btracking:

- Web: btracking.com
- Phone: 866-233-0953
- Email: support@btracking.com
- Address: 340 Route 202, Somers NY 10589-3237