

一、 General information

1.1 Model and purpose

BLOOM-RING-1 is a horse shoe shape lock ODM by Topology.

1.2 Use environment

- a. use temperature: $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$;
- b. storage temperature: $-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$;
- c. humidity: less than 90%;
- d. Use area should be far away from the strong magnetic, strong radiation facilities

1.3 function feature

This equipment has the following main function characteristics:

1. When bike stopped, disconnect the Bluetooth. If the bike is unlocked, the lock will start to alarm. Alarm last 1 minutes each time, totally alarm 5 times, interval of each alarm is 30 seconds. Alarm stopped after this.
2. Bluetooth broadcasting below information: MAC address, lease time of last rent, lock status, voltage of the lock. (for example: FFXXXXXXMMMMOVVV)
3. Low consumption Bluetooth 4.0 wireless connection. Last for 2 years standby time and more than 1000 times rent and return operation with 5000mAH lithium battery.

4. Lock with monocrystalline silicon solar panels, lithium battery charging with slip flow ways, which most extend the life of lithium batteries, without external energy or maintenance.

5. High anti jamming capability under electromagnetic effects like electromagnetic pulse, static, radiation field, RF magnetic field and surge.

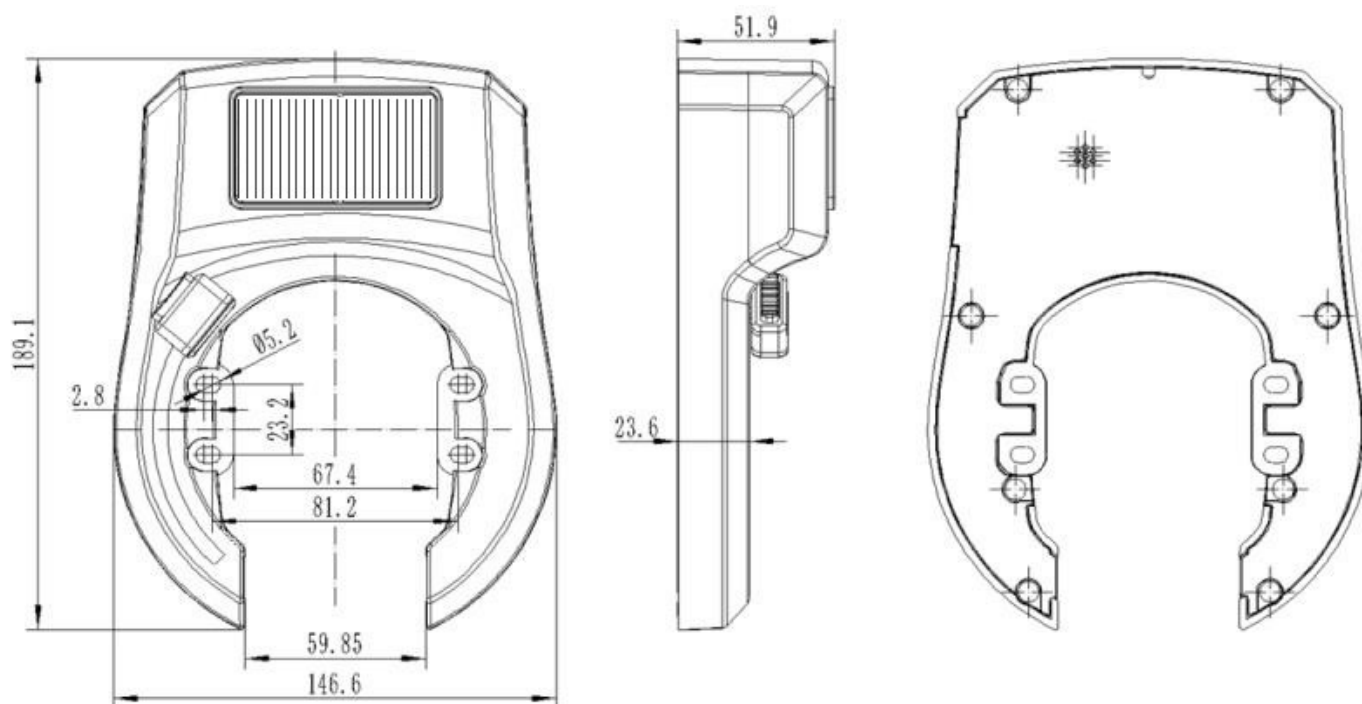
二、 Technical parameters

2.1 work power supply

a. Rated supply voltage: 3.7V, tolerance: DC -5 %~+5 %

b. DC power supply ripple coefficient: no more than 5%;

2.2 size and appearance



2.3 parameters

Standby consumption: 45UA

Battery capability: 5000mAH

Unlock method: APP and Bluetooth of mobile phone

Lock method: Mechanical

Communication method: Bluetooth BLE4.0

Location get method: APP of mobile phone

Location precision: based on mobile phone location $\geq 10\text{m}$

Stand by time: 48 months stand by time under no light circumstance

Charge method: 6V 30mA build-in solar panels

FCC Warning

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

Note 1: 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.

The distance between user and device should be no less than 5cm.