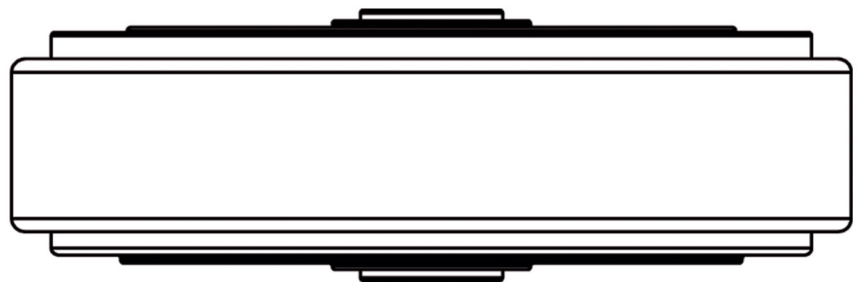
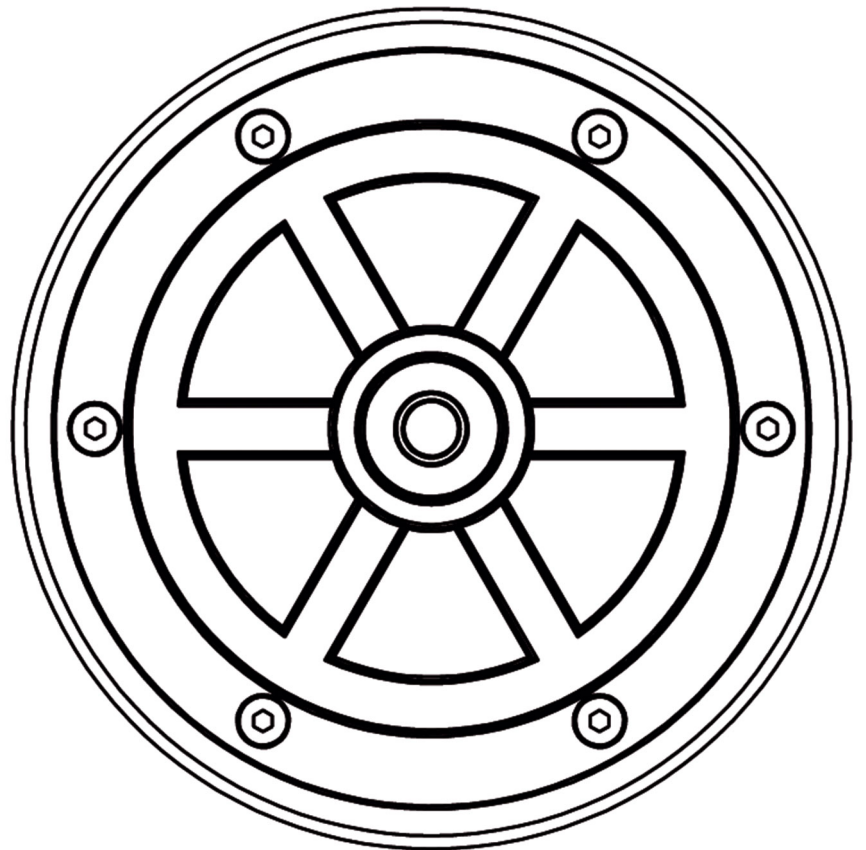


# INSTRUCTION MANUAL



**PW-5**  
TRACKER WHEEL

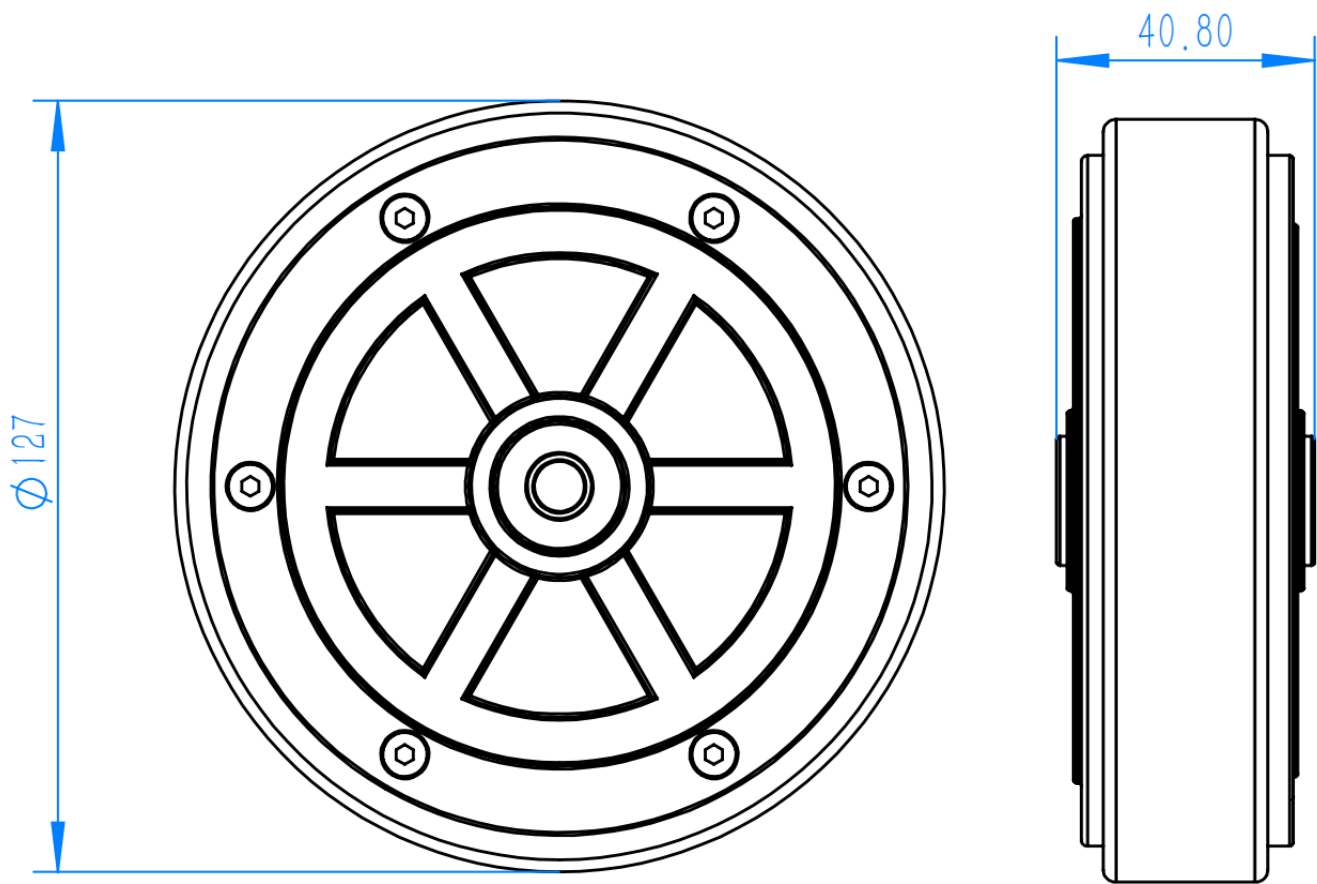
# 1.Product Definition

PW-5 tracker wheel is a wireless asset monitoring sensor developed based on standard LoRaWAN protocol. The product utilizes high-precision GNSS positioning technology and low-power Bluetooth scanning positioning, enabling rapid and accurate capture of device location information in both indoor and outdoor environments. When the monitored device is used indoors, the locator automatically starts scanning Bluetooth beacons, and when the device is moved outdoors, it automatically activates GPS+BeiDou joint positioning to quickly obtain accurate positioning data, to achieve full-scenario positioning coverage. The tracker is with small size, low power consumption, and easy installation.

## 2.Functions and Features

- Using standard LoRaWAN protocol
- Full-scenario coverage, intelligent switching between GPS+Bluetooth dual positioning engines
- Supports scheduled or periodic reporting modes to meet various application scenario positioning needs
- Supports Bluetooth wireless configuration of device parameters
- Built-in high-capacity lithium-thionyl chloride battery

## 3.Product Dimensions



#### 4. 技术参数

|                                 |                                |                                                                                         |
|---------------------------------|--------------------------------|-----------------------------------------------------------------------------------------|
| Hardware Parameters             | GNSSSensor                     | The positioning accuracy is 5m, and it supports dual-mode positioning of GPS and Beidou |
|                                 | Power on/off                   | Support physical buttons for power on/off control                                       |
|                                 | GPS Antenna                    | 1575.42MHZ , Bandwidth $\pm 2$ MHZ , Impedance: 50 ohms , Gain2dbi, RHCP                |
|                                 | LoRa Antenna                   | Built-in LoRa Antenna                                                                   |
| Wireless performance parameters | working frequency              | CN470\AS923\AU915\EU868\KR920\US915Multiple frequency bands are selectable              |
|                                 | Network Access Mode            | OTAA or ABP optional                                                                    |
|                                 | Working Mode                   | CLASS A                                                                                 |
|                                 | Wireless configuration         | Support Bluetooth wireless configuration                                                |
|                                 | LoRaMaximum transmission power | 19dbm                                                                                   |
|                                 | LoRa receive sensitivity       | -141dBm                                                                                 |

|                            |                                 |                                    |
|----------------------------|---------------------------------|------------------------------------|
|                            | Bluetooth transmission power    | 0dBm                               |
|                            | Bluetooth receiving sensitivity | -96dBm                             |
| Electrical characteristics | battery capacity                | 4000mAh                            |
|                            | operating temperature           | -20°C ~ 60°C                       |
|                            | operating humidity              | 10% ~ 90%                          |
| DC characteristics         | power supply mode               | Built-in lithium-ion battery       |
|                            | supply voltage                  | DC3.6V                             |
|                            | dormant state                   | ≤40uA                              |
|                            | Sending Status                  | 150mA                              |
| physical parameter         | level of protection             |                                    |
|                            | Size                            | Diameter:127mm thickness : 40.80mm |

FCC Caution.

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.

Any Changes or modifications 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 equipment should be installed and operated with minimum distance 20cm between the radiator & your body.



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All pictures, parameters and sizes in this book are for reference only,the actual ones must be subject to the final products.  
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