FLEET HOSTER

FLEETHOSTER
FUELING YOUR FLEET WITH INTELLIGENCE


# FLEET HOSTER ATW01-4 Asset Tracker Wired

## User Manual

Thank you for purchasing this high-quality GPS tracker from Fleet Hoster. Please read this user manual carefully before installation and operation. Information in this manual is the property of Fleet Hoster. Changes to the specifications and features in this manual may be made by Fleet Hoster without prior notice. No part of this manual can be reproduced, copied, translated, transmitted, or published in any form or by any means without Fleet Hoster's prior written permission.


**ATW01-4**

The tracker is using GNSS & LTE technologies that collect device coordinates and transfer them via LTE network to the server. It provides the customer with cost-effective, efficient and safety management. It has been widely used in commercial transportation, company vehicle fleet management, intelligent transportation, logistics, car rental, engineering machinery, marine transportation, and other segments.

# Intelligent Power Management

To extend the battery life, we designed an intelligent power management algorithm. This algorithm allows the tracker working for long period when battery is low and disconnected from external power. Once the battery is charged back, the tracker will report as normal. This function is enabled in default. Customer can disable it by command. The detail working logic is:

- When the battery voltage value is down to 3.5V, then the tracker will report at every 24 hours no matter moving or standstill.
- When the battery is charged back to 3.6V, the device will report as set by the customer.

# FOTA (firmware over the air) Notification

Fleet Hoster is committed to providing clients with the best user experience. We offer automatic firmware update features for devices. This feature allows devices always to always have the latest version firmware. It can save clients the time and effort of updating firmware manually. Please note that this feature is enabled by default. If you want to turn it off, please contact Fleet Hoster. If this feature is disabled, the fw update can only be done by sending the upgrade command manually.

**Product Specifications**

| **Network Specifications** | |
|---|---|
| Operating Band | FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/ B20/B25/B26/B28<br>TDD: B39 (Cat M1 only)<br>EGPRS: 850/900/1800/1900MHz |
| Data Transmission | eMTC: Max. 300Kbps (DL), Max. 375Kbps (UL) |
| | NB1: Max. 32Kbps (DL), Max. 70Kbps (UL)<br>EDGE: Max. 296Kbps (DL), Max. 236.8Kbps (UL)<br>GPRS: Max. 107Kbps (DL), Max. 85.6Kbps (UL) |
| **GNSS Specifications** | |
| GNSS Chipset | Qualcomm Gen 8 GNSS receiver |
| GNSS System | GPS+Glonass+Galileo+Beidou |
| Receiver type: | 33 tracking / 99 acquisitions- channel GNSS receiver |
| Sensitivity | Cold start: -149 dBm<br>Tracking: -163 dBm |
| Position Accuracy in open sky (CEP-50) | < 2m |
| Standalone TTFF | Cold start: < 29s<br>Warm start: < 27s<br>Hot start: < 1s |
| **Interfaces** | |
| Digital Input | 3 |
| Digital Output | 3 |
| Configurable Input | 3 (input range 0-32V, ⩾6V trigger in digital) |
| Voltage Output (DC 5V/12V) | 1 |
| Charging | DC 7-60V or USB cable |
| Data Transmission | USB cable |
| Network, GNSS Antenna | Internal only |
| Indicator LED | Network, GNSS and Battery |
| FOTA | Yes |
| Light Sensor | 1 back light sensor |
| Temperature Sensor | 1 temperature sensor |

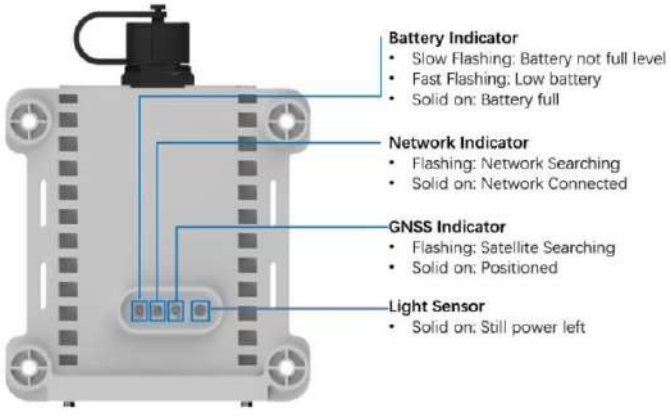
| | |
|---|---|
| BLE 5.0 | Yes |
| **General Specifications** | |
| Waterproof | IP67 |
| Dimensions | 132mm*100mm*34mm (5.2" *3.93" *1.34" ) |
| Weight | 320g (11.3oz) |
| Battery | Rechargeable Li 9600 mAh/ 3.6V |
| Standby Time<br>(2 hours active tracking per day without accessories and charging) | 10 minutes reporting: 320 Days<br>5 minutes reporting: 170 Days<br>1 minute reporting: 68 Days |
| Operating Temperature | -25C° ~ +70C° (-13°F ~ 158°F) |
| Mounting | Magnet/Screw |
| **Air Interface Protocol** | |
| Transmit Protocol | TCP, UDP, MQTT, SMS |
| Protocol Check & Encryption Support | MD5/ AES256 |
| BLE Accessory Support | Yes |
| Scheduled Timing/angle/distance Report | Report position and status at preset intervals |

**Standard Accessories Introduction**

USB cable

Extension cable

**LED indicator**




Note: Indicator lights will go out automatically after the tracker turns on for 8 mins.

**Power extension cable**

- Untighten the cap of the tracker.

- Plug the extension cable to make it solid attached.
- Tighten the cap on the extension cable until it cannot be turned any more.
- With a big capacity internal battery, the device can be used without an extension cable. Please make sure the tracker cap is tightened firmly to protect the pins.
- Install away from emission source such as all kinds of sensors, burglar alarm and other communication devices.

**Tracker Shows Offline**

- Check the external power voltage to see whether the tracker is disconnected from external power.
- Check whether the vehicle entered a network blind or low coverage area.
- If connection loss happens on the last several days of the month, check whether the network service is offline by carrier because of exceeding the max data usage volume.

**Unable to locate**

- Is the top side (with TOP SIDE logo on) facing upwards without shielded by metallic things during the installation?
- Does the vehicle enter an area with no satellite coverage?

**Location Drift**

- In an area with poor GNSS signal (like areas with lots of high buildings), location drift may happen. Location drift will no longer exist when moved to an open area.

## FCC Caution:

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

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.

## IF BOUGHT WITH WIRELESS SENSOR (SEN01-BTH) OR DOOR & TEMPERATURE SENSOR (SEN01-DST), PLEASE SEE BELOW:

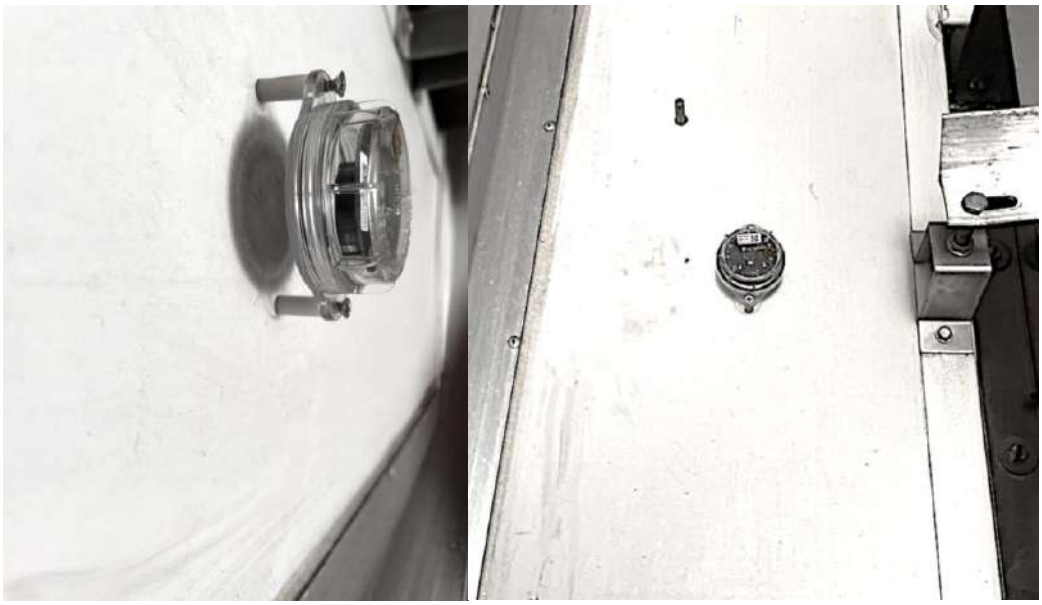
### SEN01-BTH WIRELESS SENSOR :

The SEN01-BTH is a professional sensor, especially for temperature and humidity monitoring for wide ranging applications. It is designed for the demands of the environmental monitoring industry to resolve losses caused by unexpected and unfriendly temperature and humidity changes. These sensors pair with the ATW01-4.

### BEST PRACTICES FOR COLD-CHAIN INSTALLATIONS

This guide promotes optimal performance of the cold chain solution considering the SEN01-BTH communicates via BLE protocol and are subject to RF limitations*. It is highly recommended to test the solution with both trailer doors open as well as closed to monitor signal strength in those 2 scenarios.

Included with the sensors are spacers and screws. Spacers are included so they are able to read a more accurate temperature and not receive any interference that the metal or truck may permit if directly installed. Ideally both sensors will be located and installed near the front and middle to rear of the trailer.



## KEY HARDWARE FEATURES:

- BLE 5.0 can be used for data broadcasting and wireless configuration.
- Wide range of operating temperature.
- Operating distance up to 300m (open field).
- Can store up to 15,000 temperature and humidity data in sensors.
- 10 seconds reporting intervals it can last up to 5 years.
- Fully integrated into Geotab.

## PRODUCT SPECIFICATIONS:

**Dimensions**

69.75mm * 52.6mm * 19.8mm (0.23 "* 0.17" * 0.06 ")

**Operating Temperature**

-40 ℃~ + 85 ℃(-40 F ~ 185 F)

**Weight**

35g (1.23oz, battery included)

**Battery**

replaceable CR2477 battery (1000mAh)

**Battery life**

8 years every 60 minutes 5 years every 10 seconds

**IP/Ingress Rating**

IP-65

BLE 5.0

**Transmission Range**

up to 300m (open field)

## SEN01-DST DOOR AND TEMPERATURE SENSOR :

The SEN01-DST monitors the door status andtemperature of the environment. The SEN01-DST is designed in response to industry demands for environment monitoring to resolve losses caused by unexpected changes of temperature and truck door status. This door and temperature sensor is compatible with the ATW01-4.

## KEY HARDWARE FEATURES:

- BLE 5.0 can be used for data broadcasting and wireless configuration.
- Frequent data broadcasting via tracker and by phone.
- Replaceable long-life battery.
- Wide transmission range.
- Wide range of operating temperature.
- Firmware upgrade over-the-air.
- Fully integrated into Geotab.

## PRODUCT SPECIFICATIONS:

**Dimensions**

91.2mm*30.5*39.1mm

**Operating Temperature**

-40℃~ +85℃(-40 F ~ 185 F)

**Battery**

Rechargeable CR2 1000mAh

**Battery Life**

6 Years @ every 10s

BLE 5.0

**Transmission Range**

Up to 300m (open field)

**Wide Transmission Range**

Operating distance up to 300m (open field)

**IP/Ingress Rating**

IP-67

**FOTA**

Firmware upgrade over-the-air

## IMPORTANT NOTE:

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.

## FCC Radiation Exposure Statement:

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.