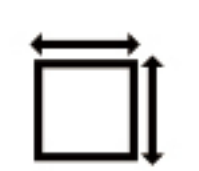


# Long Life Battery Robust GPS Asset Tracker for Outdoor Uses

## SentryX 100 <sup>4G</sup>

Robust and waterproof standalone asset tracker with up to 25+ years battery life



|                                                                                     |                                                                      |                                                                                     |                                                                                                                                           |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
|  | PBN:01 315g(11.12oz)<br>PBN:02 475g(16.76oz)<br>PBN:03 665g(23.46oz) |  | PBN:01 124.7*56*56mm (4.91" *2.20" *2.20" )<br>PBN:02 187.7*56*56mm (7.39" *2.20" *2.20" )<br>PBN:03 250.7*56*56mm (9.87" *2.20" *2.20" ) |
|  | -30~+85°C<br>(-20 ~185°F)                                            |  | Non-rechargeable 19000mAh/3.6V battery<br>(36000mAh/3.6V, 57000mAh/3.6V optional)                                                         |

### Certificates (Planned):



\*Please reach out to us if you need any certificates in particular

-  4G CAT 1 + 2G
-  Compact Size
-  IP67 Waterproof
-  Robust Structure for Outdoor
-  Super Long Life Battery
-  Stolen Recovery Mode
-  Low Battery Alarm
-  MQTT Support
-  Tamper Alert
-  BLE 5.3
-  GPS -> WIFI Scan -> LBS

### Standby Time

(One Report per Day, 19,000mAh/3.6V)

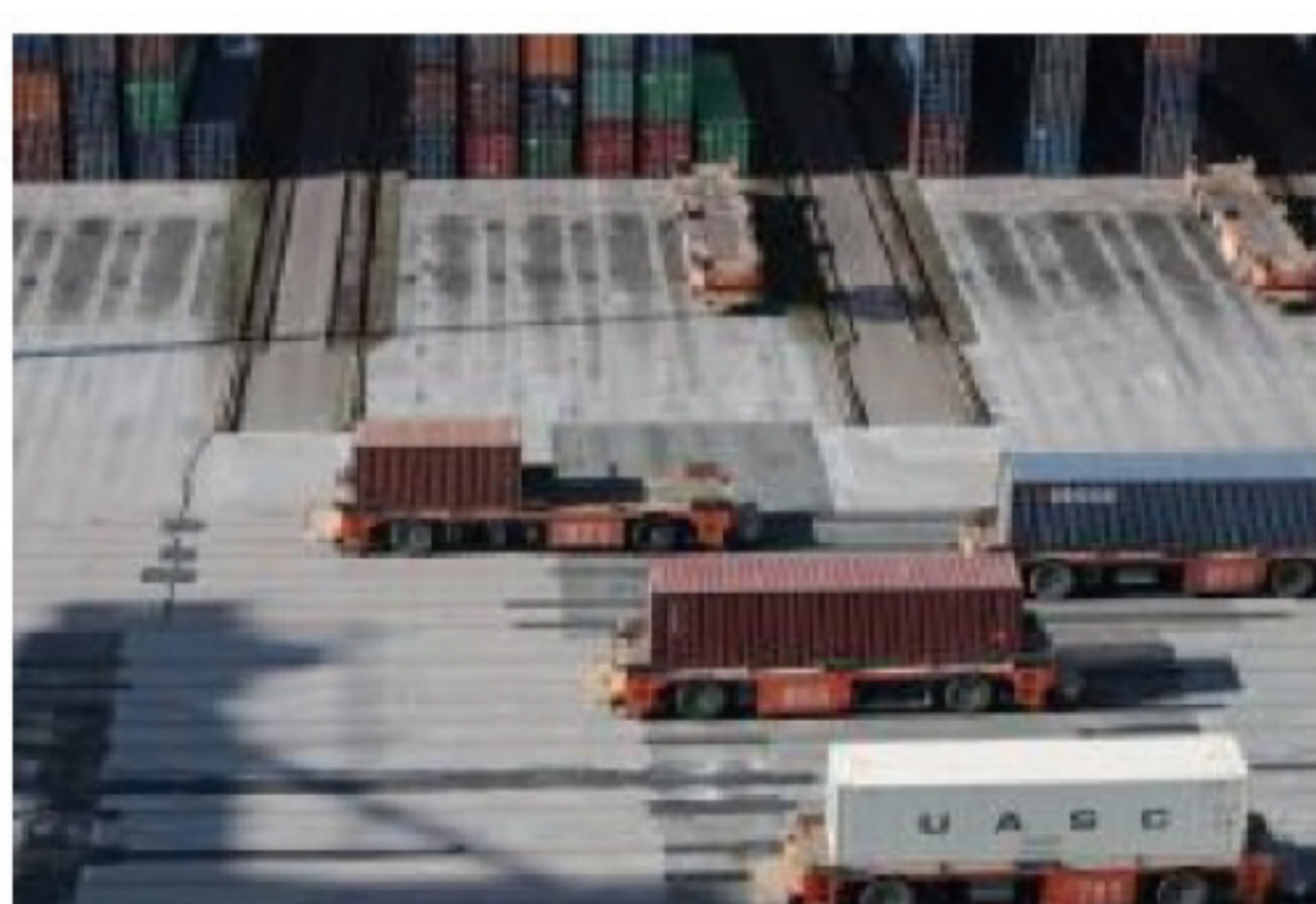
|         |                                                                                       |          |
|---------|---------------------------------------------------------------------------------------|----------|
| GPS off |  | 17 years |
| GPS on  |  | 15 years |

\*Assumes the device operates on LTE Cat1, with CSQ greater than 15, ambient temperature of 25°C and without working with any sensors.

Battery life in different environment varies.  
Refer to Battery Calculator for more details.



#### Container Tracking



#### Rail Container Tracking



#### Trailer Tracking



# PRODUCT SPECIFICATIONS

| Network Specifications                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Band                         | TLTE FDD Cat 1: B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B18/B19/ B20/B25/B26/B28/B66<br>LTE TDD Cat 1: B34/B38/B39/B40/B41<br>GSM:850/900/1800/1900 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Data Transmission                      | LTE-FDD:Max.10Mbps (DL), Max.5Mbps (UL)<br>LTE-TDD:Max.8.96Mbps(DL), Max.3.1Mbps (UL)<br>GPRS: Max. 85.6Kbps (DL), Max. 85.6Kbps (UL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| GNSS Specifications                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| GNSS Chipset                           | All-In-One GNSS Receiver                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| GNSS System                            | GPS + Glonass + Beidou + Galileo +QZSS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Receiver Type                          | 47 tracking / 47 acquisitions- channel GNSS receiver                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Sensitivity                            | Cold Start: < 15s (30s)<br>Warm Start: < 2s (25s)<br>Hot Start: < 2s (2s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Horizontal Position Accuracy           | Autonomous: < 1.5 m CEP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| TTFF @ -130 dBm with (without) EPO     | Cold start: < 29s<br>Warm start: < 27s<br>Hot start: < 1s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Interfaces                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Data Transmission                      | Type-C USB Cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Network, GNSS, WiFi Antenna            | Internal only                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Indicator LED                          | Network, GNSS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| FOTA                                   | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Temperature Sensor                     | Built-in Temperature Sensor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| General Specifications                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Waterproof                             | IP67                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Dimensions                             | 124.7*56*56mm (4.91"*2.20"*2.20") Non-rechargeable 19000mAh/3.6V battery (standard, PBN:01)<br>187.7*56*56mm (7.39"*2.20"*2.20") Non-rechargeable 36000mAh/3.6V battery (optional, PBN:02)<br>250.7*56*56mm (9.87"*2.20"*2.20") Non-rechargeable 57000mAh/3.6V battery (optional, PBN:03)                                                                                                                                                                                                                                                                                                              |
| Weight                                 | 315g (11.12oz) Non-rechargeable 19000mAh/3.6V battery (standard, PBN:01)<br>475g (16.76oz) Non-rechargeable 36000mAh/3.6V battery (optional, PBN:02)<br>665g (23.46oz) Non-rechargeable 57000mAh/3.6V battery (optional, PBN:03)                                                                                                                                                                                                                                                                                                                                                                       |
| Battery                                | Non-rechargeable 19000mAh/3.6V battery (36000mAh/3.6V, 57000mAh/3.6V optional)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Standby Time                           | 2.8 Years @ every 2 hrs reporing & 19000mAh/3.6V battery<br>10 Years @ every 12 hrs reporing & 19000mAh/3.6V battery<br>15 Years @ every 24 hrs reporing & 19000mAh/3.6V battery<br>Notes:<br>1.The battery life result is based on an environment temperature of 25°C(77°F).<br>2.The battery capacity is greatly affected by temperature, lower the temperature, smaller the battery capacity.<br>3.More info please check TOPFLYtech on-line battery life calculator<br><a href="https://www.topflytech.com/en/battery-life-calculator/">https://www.topflytech.com/en/battery-life-calculator/</a> |
| Data Communication                     | Type-C USB Cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating Temperature                  | -30~ +85°C(-20 ~185°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Air Interface Protocol                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Transmit Protocol                      | TCP, UDP, MQTT, SMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Data Security & Encryption Option      | MD5/ AES128                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Scheduled Timing Report                | Report position and status at preset intervals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Geo-fence                              | Support up to 64 internal geo-fence regions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Industry Certificates (planned)        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| FCC, CE, RCM, CITC, TDRA, NBTC, Anatel |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |