

# 4G HARDWIRED GNSS TRACKER

Hidden installation for all objects with power

# PioneerX 100

4G

LTE Cat 1 + 2G wired tracker for wide ranging applications.



- Multiple I/Os
- Driving Behavior Monitoring
- Crash Detection
- Firmware Over the Air
- Geo-fences
- Motion Detection
- BLE 4.2
- 3 Axis Accelerometer
- Panic Button

- 55g (1.94oz)
- 105.7mm\*57.6mm\*16.8mm (4.16" \*2.26" \*0.66" )
- 5V to 32V DC
- 30°C ~ +80°C (-22°F ~ 176°F)

## Certificates(planned):



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



# Product Specifications

| Network/Operating Band                 |   |
|--|---|
| Operating Band                         | LTE 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  |
| Parallel GNSS                          | GPS+Beidou+Galileo+QZSS ( SBAS )  |
| Receiver type                          | 24 tracking / 64 acquisitions- channel GNSS receiver  |
| Sensitivity                            | Acquisition: -148 dBm<br>Tracking: -162 dBm<br>Reacquisition: -159 dBm  |
| Horizontal Position Accuracy           | Autonomous: < 1.5 m CEP   |
| TTFF @ -130 dBm with (without) EASY™   | Cold Start: < 20s (30s)<br>Warm Start: < 2 (2s)<br>Hot Start: < 2s (2s)   |
| Interfaces                             |   |
| Digital Input (ACC)                    | For ignition detection<br>(input range 0-32V, 5≤: ignition on, ≤2V ignition off, from 2V to 5V: unstable status)                                |
| Digital Input (SOS)                    | Panic (SOS) button (connect to ground trigger alert)  |
| Digital Output                         | 2 digital outputs for relay control   |
| Network, GNSS, BLE, WiFi Antenna       | Internal only   |
| Indicator LED                          | Network and GNSS  |
| FOTA                                   | Yes   |
| Temperature Sensor                     | 1 temperature sensor  |
| BLE 4.2                                | Yes   |
| SIM Card                               | Nano SIM  |
| WiFi                                   | 2.4 GHz 802.11b (Rx)  |
| Tracker Configuring                    | Type C Connector  |
| General Specifications                 |   |
| Ingress Protection Rating              | IP41  |
| Dimensions                             | 105.7mm*57.6mm*16.8mm(4.16" *2.26" *0.66")  |
| Weight                                 | 55g (1.94oz)  |
| Battery                                | Li-Polymer 200 mAh/ 3.7V  |
| Operating Voltage                      | 5V to 32V DC  |
| Operating Temperature                  | -30°C ~ +80°C (-22°F ~ 176°F)   |
| Storage Temperature                    | -40°C ~ +85°C (-40°F ~ 185°F)   |
| 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  |
| External Power Status Alarm            | Report when external power is disconnected  |
| Speeding Alarm                         | Report when speed exceed the pre-set value  |
| Towing Alarm                           | From internal 3-axis acceleration   |

# Product Specifications

## Air Interface Protocol

|                                  |  |
|----------------------------------|--|
| Remote Control                   | Remote output control                                    |
| Network Signal Jamming Detection | Report network jamming                                   |
| Data Roaming Control             | Avoid additional data consumption                        |
| Driving Behavior Monitoring      | Harsh braking, acceleration and turning events           |
| Crash Detection                  | Accident data collection for reconstruction and analysis |

## Industry Certifications

|  |  |
|--|--|
| FCC/CE/RCM/NBTC/TDRA/CITC/Emark/Anatel |  |
|--|--|

# Optional Accessories List

| Product Sku | Description                                      | Photo for Reference   |
|-------------|--|---|
| TSTH1-B     | BLE 5.0 Wireless Temperature and Humidity Sensor |    |
| TSDT1-B     | BLE 5.0 Wireless Door and Temperature Sensor     |    |
| TSR1-B      | BLE 5.0 Wireless Relay                           |    |
| T-button    | BLE 5.1 Key Fob & Panic button                   |  |
| T-sense     | BLE 5.1 IP67 temp&movement&door sensor           |  |
| T-hub       | BLE 5.1 IO extension hub                         |  |
| T-one       | BLE 5.1 Probe temp or temp&humi sensor extender  |  |