# GoTrack
## Track for better life

# GPS TRACKING DEVICE S200

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**55.0 mm**

**94.0 mm**

GoTrack

**50g**

**16.8 mm**

-20÷85oC ±0.5%

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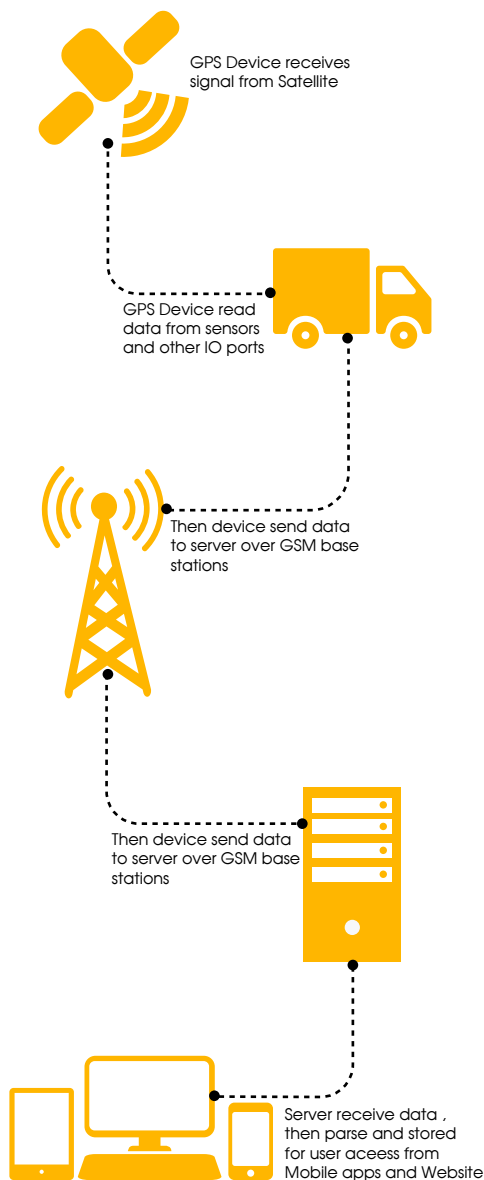## Feature S200
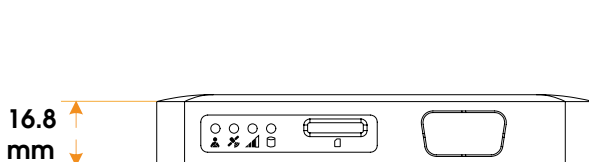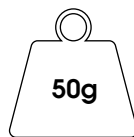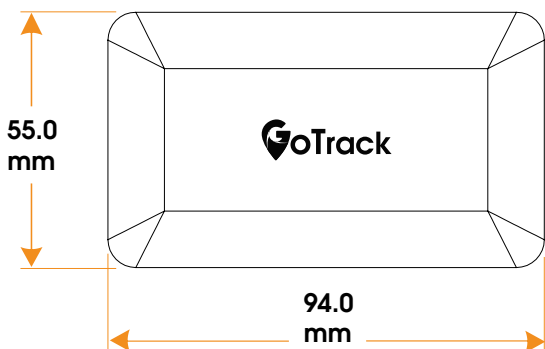
**Basic**

**Real - time online tracking**

- Realtime Location, History backup Locations
- Fuel Sensor
- Capture photos from Cameras
- Temperature Sensor
- Driver Identification with RFID card
- Monitor Vehicle Battery and other IO signal

**Advanced**

- Upgrade firmware with OTA Support
- Run multiple sensors at the same time
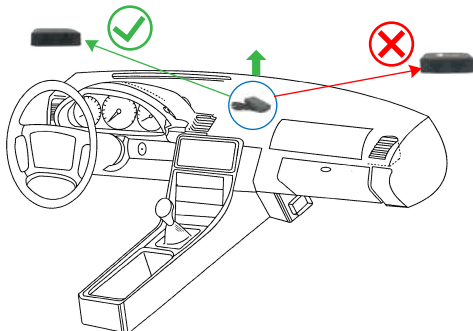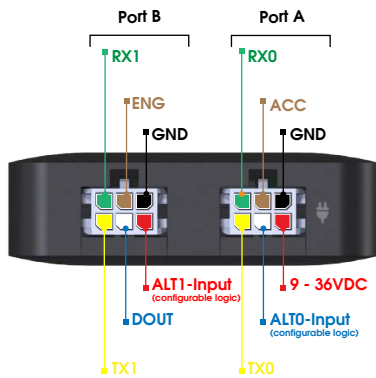- Expanding according to customer requirements

# GoTrack
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GPS Device receives signal from Satellite

GPS Device read data from sensors and other IO ports

Then device send data to server over GSM base stations

Then device send data to server over GSM base stations

Server receive data , then parse and stored for user aceess from Mobile apps and Website

# Specifications

| Operating environment | | |
|---|---|---|
| Temperature | Working range | 20÷85°±0.5% |
| | Storage | 0÷60°C |
| Humidity | | 5÷90%±2.5% |

| Electrical characteristics | | | |
|---|---|---|---|
| Operating voltage rangeg | | 9÷36VDC | |
| Rated supply voltage | | 12/24VDC | |
| Consumption Current | Active | 48÷60mA | @12VDC |
| | Idle | 22÷24mA | |
| | GPS sleep | 10/12mA | |
| Protection function | | Protect from short-circuit and over-current events | |
| | | Protect from over-voltage | |
| | | Reverse polarity | |
| Backup battery | | Pin Li-Poly | Optional |
| | | Supercapacitors : 0.1F 3v6 | Integrated |
| | | | |
| Digital output | | Maximum load current: 50mA Maximum voltage: 24VDC | |
| Digital input | | 0 - 36 VDC Logic level: 4V | |

| Wireless Connectivity and satellite | | | |
|---|---|---|---|
| 2G/GPRS | Modem | SIMCOM SIM868 | |
| | Antena | Internal | |
| | Frequency | Quad-band: GSM 850 MHz, EGSM 900MHz, DCS 1800MHz and PCS 1900MHz | |
| | Data transfer | GPRS: Uplink/Downlink up to 85.6kps | |
| | SMS | Yes | |
| | Protocols | TCP/IP | |
| GNSS | Module | Inside Sim868 | |
| | Chipset | MT 2503D | |
| | Systems | GPS+Glonass | |
| | Performance | Tracking:-165 dBm Reacquisition:-160 dBm Cold starts:-148 dBm Cold starts:28 s Warm start:26 s Hot starts:<1s | |
| | Antenna | Built-in patch antenna ceramic with A high gain LNA | |
| | Accuracy | < 10m | |
| RFID reader | Chipset | CR95HF | Please choose international version( in vietnam is obligatory) |
| | Frequency | 13,553     13,567 MHz | |
| | Standard | ISO/IEC 14443 Type A and B ISO/IEC 15693 (single or double subcarrier) ISO/IEC 18092 | |
| | Reflex (main) | ≤ 4,5 mW ERP | |
| | Emissivity (fake) | Operation mode: 0.67 µA / m (-3.5 dB µA / m) Standby: 0.06 µA / m (-24.5 dB µA / m) | |
| | Reading distance | Tối đa 3cm | |
| | Compatible card | I.CODE SLI, TAG_IT | |
| | QCVN | QCVN96:2014/BTTTT QCVN55:2010/BTTTT | |

## Connect and install



Protection stamp whenthe device is Online

Nano SIM Card

**Port B**  **Port A**

RX1  RX0
ENG  ACC
GND  GND
ALT1-Input (configurable logic)  9 - 36VDC
DOUT  ALT0-Input (configurable logic)
TX1  TX0



# User manual

## 1. Signal port và Led status

### 1.1 Led status

| Led | Status | Description |
|---|---|---|
| **Driver** | Stable light not blinking | The driver has logged in |
| | No light | No driver logged in |
| | Slow Blinking(**) | No Driver detected / registered when vehicle moving |
| | Fast blinking(**) | RFID reader not work properly |
| **GNSS** | Stable light not blinking | Initialzing and reading Satellite signal |
| | No light | GNSS module have issues |
| | Slow Blinking (**) | Sleep mode |
| | Fast blinking(**) | Good signal, can update real-time location |
| **NETWORK** | Stable light not blinking | Detecting Network |
| | No light | Not registered on network No SIM Card Installed/ Unusual incident |
| | Slow Blinking(**) | Registered to the network and connecting to the server |
| | Fast blinking(**) | Connected successfully to the server |
| **MEMORY** | Stable light not blinking | Normal memory |
| | No light | Error / malfunction memory |
| | Fast blinking | Accessing memory |

### 1.2  Indicator buzzer horn

| No | Status | Description |
|---|---|---|
| 1 | One beep | The device is powered on |
| 2 | One beep, 1 time/min | Vehicle is moving, no driver logged in |
| 3 | Two beep | Driver logged in |
| 4 | Three beep | Driver logged out |
| 5 | Fast and continuous beep | Overspeed |
| 6 | Slow and continuous beep (1time/s) | Overtime driving |
| 7 | Continuous (500ms/time) | Overtime driving, Overspeed |

## 2. Signal port

| Port | Pin | Color | Description |
|---|---|---|---|
| **Port A** | RS232_TX0 | Yellow | Connect to RX and TX (cross connection) of the sensor RS232 communication standard |
| | RS232_RX0 | Green | |
| | ALT0 | White | Digital input (active level configurable) |
| | Ignition (ACC) | Oranges | Connect the signal wire of the vehicle ignition key, High-Level Active |
| | **VDC_in** | **Red** | **Connect with positive voltage 12/24 VDC** |
| | **GND** | **Black** | **Connect with Mass** |
| **Port B** | RS232_TX1 | Yellow | Connect to RX and TX (cross connection) of the sensor RS232 communication standard |
| | RS232_RX1 | Green | |
| | DOUT | White | Control Output with Low-Level Active |
| | ENGINE | Oranges | Connected to the vehicle's engine signal, High-Level Active |
| | ALT1 | Red | Digital Input ( active level configurable) |
| | GND | Black | Connect with Mass |

# GoTrack
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## Peripheral connection diagram



Engine

PIR Sensor

Ignition

87
87a
86
30  85
Relay

Alarm

Pulse/
Trigger

Camera
or sensor

Door sensor

Battery

Temperature
sensor

SOS
Emergency
button

RS232
Peripherals

Air
conditioner

Digital Input