# GPS Tracker


## FJ1600LW

The FJ1600 tracker is a real-time vehicle tracking system designed for vehicle recovery, fleet management, and more..

### .IT'S RELIABLE

The ultra-thin yet durable FJ1600 is a high-performance cellular tracking device designed for vehicle financing, vehicle tracking, lot management, theft recovery, or other fleet applications. With an integrated GNSS receiver, the Wildcat includes an LTE Cat-M modem for wireless data communication. The built in high performance antennas for both cellular radio and GNSS receivers make installation easy.

### IT'S SIMPLE

No programming skills required; the FJ1600 comes with easy-to- configure application software and an extended AT command set. Reports can be triggered periodically or in response to events such as motion, speeding, harsh acceleration and braking, geo-fence violations, and battery status. Notifications can be sent for vehicle towing, battery removal, and more.

### IT'S FUNCTIONAL

The FJ1600 interface supports serial communication with external terminals and devices, as well as IO options dedicated to ignition, starter inhibit, and buzzer.

A built in 3-axis accelerometer enables motion detection and monitoring of driver behavior. An internal Lithium-Ion back up battery allows for continuous operation more than 2 days @ 1 report per day when the device is disconnected from the main power. An optional buzzer alert system for driver warnings is available inside the unit.

### HIGHLIGHTS

- LTE-CAT M1
- Integrated cellular and GPS antenna
- LED status indicators for GPS and network registration
- Low power consumption
- Integrated accelerometer
- I/O options to support ignition, buzzer, and relay.
- Communication via SMS, UDP, Ack UDP
- Configurable reporting schedules
- Over-the-air configuration and firmware upgrade
- Extended AT Command set for flexible and easy configuration

# Specifications

## CELLULAR

- CAT M1 LTE: 699/787/1710/1850/2155 B2@20±1dBm/ B4@20±1dBm / B12@18±1dBm /B13@18±1dBm /B25@20±1dBm
- Integrated high sensitivity antenna
- Auto register to packet network

## GPS

- Channels: 55
- Tracking Sensitivity: -161 dBm
- Acquisition Sensitivity: -146 dBm
- Location Accuracy: <2.5 CEP

## BATTERY INFORMATION

- Battery Type: 1 * KP401422 Li-ion/80mA
- Battery Life: > 2 days @ 1 report per day

## ENVIRONMENTAL

- Operation Temperature: -30°C to +75°C
- Storage Temperature: -40°C to +80°C
- Operation Humidity: 20% to 90% (non-condensing)
- Storage Humidity: 10% to 95% RH (non-condensing)
- Designed to meet SAE J1455, SAE 113, and J121

## ELECTRICAL

- Operating Voltage: 6V-32VDC
- On-battery
  - Hibernate: <400uA
  - Tracking 40mA Typical

On-12V

- Hibernate: <400A
- Sleep: <0.90mA
- Tracking: 40mA Typical
- Reporting: 130mA Typical
- Power Dissipation： 3.6W Typical

## PHYSICAL

- Dimensions: 100.0mm x 72.0mm x 20.0mm
- Weight: 120g
- Internal Cellular and GPS Antenna

## INTERFACE CONNECTOR

- I/O Connector: 30-pin connector
- UART_TTL (3.3V) (RX/TX)
- Buzzer output signal
- Ignition signal for car start
- Relay switch signal
- GPIO configuration signal

## APPROVALS

- FCC

## FCC Regulations:

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.

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.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

## FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with FCC RF Exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for the transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

## IC STATEMENT

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

In order to avoid the possibility of exceeding the IC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Afin d'éviter la possibilité de dépasser les limites d'exposition aux fréquences radio de la IC CNR102, la proximité humaine à l'antenne ne doit pas être inférieure à 20 cm (8 pouces) pendant le fonctionnement normal.