



FJ120H 3G HSPA GSM & GPS TRACKER

The **FJ120H** is a 3G HSPA, GSM and GPS Wireless Modem with an internal battery and is in a water resistant (IP-65) case. It reports location information via TCP, UDP or SMS with configurable intervals. It has three inputs, which can be used to detect sensors and two outputs. The FJ120H also has a UART to connect an external device for sending or receiving ASCII characters or other data.

KEY FEATURES

- **Modem & GPS Tracking:** Periodically sends GPS information (location, speed) to a server. Reporting interval and device/server setup can be updated or implemented using OTA programming commands over SMS or TCP/UDP.
- **Geofence*:** Sends an alarm message to the server when device is entering or exiting a predefined area.
- **Internal Battery:** With a backup battery, the device sends a tamper message if the main power supply wiring harness is disconnected.
- **Movement Threshold:** Reports Speed and sends Message Alert when device has reached a movement threshold.
- **Mileage:** Reports distance that unit has moved.
- **3-Axis Accelerometer:** With a built-in 3-axis Accelerometer, detects movement or impact. The g-profile is sent to server for analysis.

*Requires configuration/processing at server.



- **Message Storage:** Stores up to 1,000 messages if out of coverage and sends the messages once the device regains coverage.
- **Low Voltage Detection*:** Switches to deep sleep mode and can send a message if supply voltage drops below a threshold.
- **Power Saving Mode:** Periodically wakes up and then returns to sleep when inactive.
- **GPIO and UART:** Has 3 inputs and 2 outputs and/or UART configuration. The UART can be used to communicate with various kinds of sensors or signage.
- **OTA (Over-The-Air):** Firmware can be upgraded via TCP.



SPECIFICATIONS**

Physical and Electrical

Dimensions: 89mm *47mm *21mm

Weight: 58 grams

Input voltage range: 6-36VDC

Battery 450mAh

Power Consumption:

Active mode 70mA @12VDC

Sleep mode < 6mA @12VDC

Operation temperature: -30°C to 80°C

Storage temperature: -40°C to 85°C

Comprehensive IOs

3 inputs and 2 outputs

1 A/D input and 1 UART

2 LEDs for GPS and Cellular status

USB2.0

Built-in Cellular and GPS antennae

Cellular Communication

Dual Band: UMTS/HSDPA 850/1900MHz

Quad Band: GSM/GPRS/EDGE

GPRS, EDGE multi-slot class 12

Output Power:

UMTS : 0.25W

GSM850/900: 2W

DCS1800/PCS1900: 1W

Protocol:

FTP/HTTP/HTTPS/SMTP/POP3/TCP/UDP/SMS

GPS Specification

-157 dBm Tracking Sensitivity

Accuracy (Open Sky) < 2m (CEP50)

**Specifications are estimates only - please verify the specifications using your local network conditions