FJ110 family of mobile positioning units deliver an economical feature set across GPRS, CDMA, and HSPA cellular networks around the world. The unit comes equipped with a basic set of inputs and outputs to meet mainstream applications and can be configured to send location messages at varying time and distance intervals. The data generated by the unit can be transmitted via TCP, UDP or SMS messages. A serial interface can be setup to send ASCII or other data in pass thru mode. Configurations and firmware updates can be sent Over-The-Air to ensure optimal performance of the unit to meet the user’s specific application needs.
**Key Features**

- **Modem & GPS Tracking:** Wirelessly sends GPS information (location and speed) to a server via SMS or TCP/UDP. Reporting interval and device/server setup can be updated or implemented using Over-The-Air programming commands.

- **Mileage:** Reports distance traveled.

- **3-Axis Accelerometer:** Detects movement and shock.

- **Movement Threshold:** Reports speed and sends alerts when device has reached a movement threshold.

- **Power Saving Mode:** Configurable wake up and sleep activity.

- **Low Voltage Detection:** Can send a message if supply voltage drops below a threshold and switches to deep sleep mode.

- **GPIO and UART:** Has 3 inputs and 2 outputs and UART available.

- **Message Storage:** Stores up to 2,000 messages when out of coverage.

- **Backup Battery (optional):** With a backup battery, sends a tamper message if the main power supply wiring harness is disconnected.

- **Geofence:** Sends an alert when device is entering or exiting a predefined area.

- **OTA (Over-The-Air):** Firmware can be upgraded via TCP.

  *Requires configuration/processing at server.

---

**Specifications**

**CELLULAR TECHNOLOGY**
- Quad-Band GPRS Radio: 850/900/1800/1900 MHz
- Dual-Band CDMA2000® 1X Radio: 800/1900 MHz
- Dual-Band HSDPA (UMTS 3G) Radio w/2G Quadband fallback:
  - 3G: 850/1900 MHz
  - 2G: GPRS/EDGE: 850/900/1800/1900 MHz
- Protocol: FTP/HTTP/HTTPS/SMTP/POP3/TCP/UDP/SMS

**GPS TECHNOLOGY**
- Location Technology: 50 channel GPS (with SBAS)
- Tracking Sensitivity: -157 dBm
- Acquisition Sensitivity: -147 dBm
- Location Accuracy (open sky): 2m (CEP50)

**ANTENNA**
- Internal cellular technology
- Internal GPS patch antenna

**INTERFACES, I/O, AND LED**
- 3 Digital Inputs, 2 Digital Output (latched)
- 1 Serial Interface (UART)
- Micro USB interface
- LED Status Indicators: Cellular, GPS

**POWER**
- Input Power Range: 6-36VDC (12 V or 24 V vehicles)
- Active Mode: 70mA @ 12VDC
- Sleep Mode: 6mA @ 12VDC
- Battery (Optional): 410 mAh rechargeable Lithium-ion

**ENVIRONMENT**
- Operating Temp: -30º C to 80º C (connected to main power)
- -20º C to 60º C (running on battery)
- Storage Temp: -40º C to 85º C
- Relative Humidity: Up to 95% non-condensing

**CASE**
- Dimensions: 83mm x 43.2mm x 17.7 mm
- Weight: 48g
- Mounting Options: adhesive or tie wrap

**CERTIFICATIONS**
- NA: FCC, IC, PTCRB
- ROW: CE, GCF, e-Mark, RoHS2
- Applicable Carriers

**OPTIONAL ACCESSORIES**
- 3-Wire installation cable
- Starter interrupt harness
- OBDII easy install harness
- Advanced Integration cable, with all interfaces populated
- Plug-in accessories: 12 VDC relay with socket — 24 VDC relay with socket — Serial Interface for UART

Specifications are subject to change. Please see your Position Universal contact for more details.