The FJ120 is a CDMA, GPRS and GPS wireless modem with an internal battery in a water resistant (IP-67) case. It reports location information via TCP, UDP or SMS with configurable intervals. The FJ120 has three inputs, to detect sensors and two outputs capable to control relays. The FJ120 has a UART to connect external devices for sending or receiving ASCII characters or other data.

Key Advantages
- Waterproof enclosure
- Small size
- Motion/tilt/shock reporting
- Low voltage reporting
- Power save mode
- Over-The-Air configurability and firmware updates
Key Features

- **IP67 Enclosure**: Sealed waterproof IP67 enclosure

- **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**: 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

Positioning Universal

Specifications

**CELLULAR TECHNOLOGY**
Dual-Band HSDPA (UMTS 3G) Radio w/2G Quadband fallback:
3G: 850/1900 MHz
2G: GPRS/EDGE: 850/900/1800/1900 MHz

**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: 89mm x 47mm x 21 mm
Weight: 58g
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.