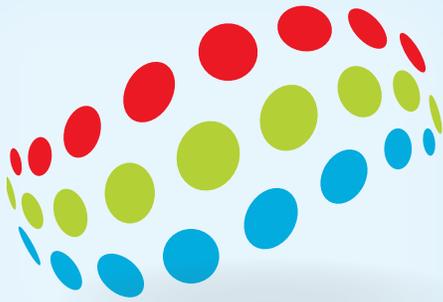


FJ2500 (12-wire)

4G Tethered, Sealed Mobile Positioning Unit



Positioning Universal



Market Applications

- Heavy-duty construction equipment tracking
- Commercial and industrial vehicles
- Semi-Trailer tracking
- Single-purpose trailers
- Outdoor generators
- High-Value Assets

The FJ2500 is an enterprise grade sealed asset monitoring product with an environmentally sealed enclosure able to withstand extreme conditions. The FJ2500 withstands high-pressure sprays, has a wide operating range, ultra-low sleep power currents, hosts robust input and output capabilities, a rechargeable 1-year battery and vehicle Control Area Network (CAN) interfaces. Along with a Bluetooth radio, the FJ2500 creates a leading set of capabilities for even the most advanced applications.

Key Features

- 4G wireless connectivity with dual cellular antennas
- Bluetooth 4.2/5.0 local area wireless networking
- Ultra low-power sleep modes down to 250 μ A
- 16G 3-axis accelerometer enabling motion sensing, driver behavior & impact/collision detection
- Comprehensive I/O Configurations
- Support for standard CAN and J1708/1939 Vehicle Interfaces
- 4/32MB to support message logs and ECU OTA updates
- OTA (Over-The-Air) device management

Specifications

CELLULAR TECHNOLOGY

LTE Cat M1	Bands 2, 4, 12, 13
LTE Cat 1 (3G fallback)	Bands 1, 2, 4, 5, 12, 13, 19, 21, 25, 26 Bands 2, 5 (3G)
3G HSPA Multiband	Bands 800/850/900/1900/2100
GSM-GPRS	Bands 850/900/1800/1900

Throughput: Up to 10 Mbps Downlink/ 5 Mbps Uplink

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

CASE

Dimensions	83.0mm x 122.6mm x 39.0mm Includes top and bottom mounting flanges, Excludes cable and connector
Weight	272g

ENVIRONMENT

Storage Temp	-45°C to 90°C
Operating Temp	-40°C to 85°C while connected to main power -20°C to 80°C on backup battery
Relative Humidity	Up to 90% non-condensing
IP Rating	IP66K/IP67
Vehicle Transient Surges	ISO 7637 - 12/24 VDC
Drop Test	1 meter, 6 sides
ESD	1 second pulses \pm 4kV direct, \pm 8kV indirect
Vehicle Vibration	SAE J1455
Mechanical Shock	EN 60068-2-6, 27, 29
Temperature & Humidity	EN 60068-2-14, 30

POWER

Built-in Battery	5200 mAh Rechargeable Li-Ion battery
Input Power Range	6-90 VDC (12/24/48/72V vehicles)
Tracking Mode	<70mA average @ 12V
Idle Mode	<14mA average @ 12V
Normal Sleep Mode	<250 μ A average @ 12V

REGULATORY APPROVALS/ CERTIFICATION

FCC, IC, CE, eMark, PTCRB, GCF, SAR, RoHS Compliance Applicable Carriers



Positioning Universal

GPS TECHNOLOGY

Location Technology	56 channel GPS (with SBAS)
Tracking Sensitivity	-162 dBm
Location Accuracy (open sky)	+/- 2.5m (CEP)
Cold Start Acquisition	29 seconds
Hot Start Acquisition	1 second

Bluetooth/ WiFi/ NFC

Bluetooth	v4.2/5.0 BLE with internal antenna (optional)
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ACCELEROMETER

16G MEMS 3-axis accelerometer

VEHICLE INTERFACE

ISO-15765 Standard CAN, J1939 CAN Protocol, CANopen option
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USER INTERFACE

Status LEDs	3 - Cellular (Amber), GPS (Green), Bluetooth (Blue)
Alert(s)	Internal Audible Buzzer (optional)

I/O & CONNECTORS

Digital Inputs	3 - 2 fixed bias low, 1 programmable bias
Digital Outputs	2 general purpose open collector (200mA)
Analog Inputs	1 external ADC input (0-60 VDC)
Serial Interface(s)	1 RS232 Interface with power control 1-Wire Bus Interface (Dallas Semiconductor)
I/O Connector(s)	12-Wire captured sealed (incl. Bluetooth)

Optional Features

Bluetooth, RS485 ModBus capable

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