# FJ2500 (8-wire)

4G Tethered, Sealed Mobile Positioning Unit



### **Positioning Universal**



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, and a rechargeable 1-year battery. The FJ2500 creates a leading set of capabilities for even the most advanced applications.

## **Market Applications**

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

## **Key Features**

- 4G wireless connectivity with dual cellular antennas Ultra low-power sleep modes down to 250 µA
- 16G 3-axis accelerometer enabling motion sensing, driver behavior & impact/collision detection
- Comprehensive I/O Configurations
- 4/32MB to support message logs and ECU OTA updates
- OTA (Over-The-Air) device management

## **Specifications**

CELEOLAR TECHNOLOGI				
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 ±4kV direct, ±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	<250µA average @ 12V

#### **REGULATORY APPROVALS/ CERTIFICATION**

FCC, IC, CE, eMark, PTCRB, GCF, SAR, RoHS Compliance Applicable Carriers- AT&T, Verizon, Southern Linc

### **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

#### ACCELEROMETER

16G MEMS 3-axis accelerometer

#### USER INTERFACE

Status LEDs	3 - Cellular (Amber), GPS (Green), Bluetooth (Blue)

#### I/O & CONNECTORS

Digital Inputs	2 - (1 for ignition)
Digital Outputs	1 general purpose open collector (200mA)
Serial Interface(s)	1 RS232 Interface with power control 1-Wire Bus Interface (Dallas Semiconductor)
I/O Connector(s)	8-Wire captured sealed (Limited I/O options)

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