



**PUI**  
Positioning Universal

# FJ2500

4G TETHERED, SEALED  
MOBILE POSITIONING UNIT

The **FJ2500** can be mounted anywhere on your vehicle or asset, thanks to its sealed, rugged construction. Whether you have light or heavy-duty vehicles and assets, the **FJ2500**'s wide input power range and integrated vehicle bus interface make it the right solution for extreme conditions.

## KEY FEATURES

- Environmentally sealed (IP67)
- Rechargeable battery can power unit up to one year
- 3-axis accelerometer for motion detection and driver behavior monitoring
- Integrated LTE CAT M or LTE CAT 1 cellular with 3G fallback
- Optional BlueTooth and Vehicle Bus (Light Duty and Heavy Duty) and 1-Wire interfaces
- Configuration and firmware fully updateable over the air
- Input power range 6 - 90 VDC

## MARKET APPLICATIONS

- **Heavy-Duty Construction Equipment Tracking**
- **Commercial and Industrial Vehicles**
- **Semi-Trailer Tracking**
- **Single-Purpose Trailers**
- **Outdoor Generators**
- **High-Value Assets**



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## SPECIFICATIONS

### CELLULAR TECHNOLOGY

LTE CAT M1 (2G fallback)	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)

### CASE

DIMENSIONS	83mm x 122.6mm x 39mm 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
DROP TEST	1 meter, 6 sides
VEHICLE VIBRATION	SAE J1455
VEHICLE TRANSIENT SURGES	ISO 7637 - 12/24 VDC
ESD	1-second pulses ±4kV direct, ±8kV indirect
MECHANICAL SHOCK	EN 60068-2-6, 27, 29
TEMPERATURE & HUMIDITY	EN60068-2-14, 30

### ACCELEROMETER

16G MEMS 3-axis accelerometer

### BLUETOOTH/WIFI/NFC

BLUETOOTH	v4.2/5.0 BLE with internal antenna (optional)
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### OPTIONAL FEATURES

Bluetooth, RS485, ModBus capable

### GPS TECHNOLOGY

LOCATION TECHNOLOGY	56 Channel GPS (with SBAS)
TRACKING SENSITIVITY	-162 dBm
LOCATION ACCURACY (OPEN SKY)	+/- 2.5m (CEP)
COLD/HOT START ACQUISITION	29 seconds/1 second

### 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)	8-wire captured sealed (limited I/O options) 12-wire captured sealed (inc. Bluetooth)

### 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

### VEHICLE INTERFACE

ISO-15765 standard CAN, J1939 CAN protocol, CAN open option

### REGULATORY APPROVALS/CERTIFICATION

FCC, IC, CE, eMark, PTCRB, GCF, SAR, RoHS compliance applicable carriers

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