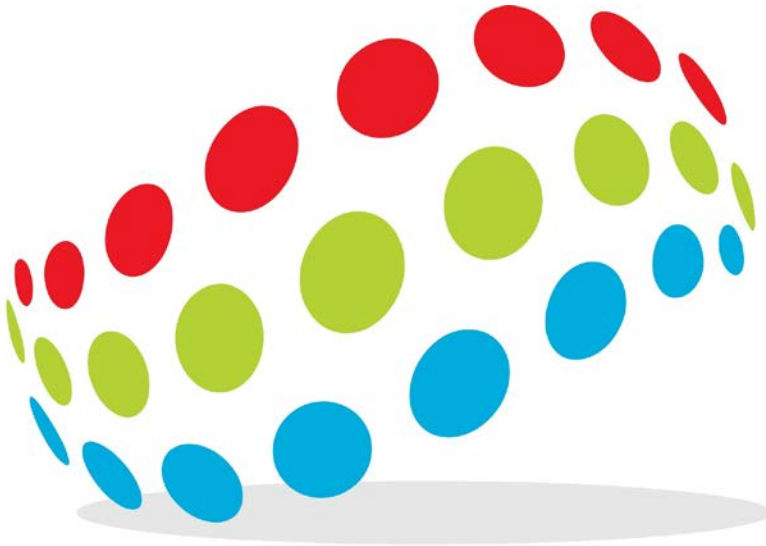


FJ1000L_User Manual



Positioning Universal Inc.

1.1 Physical and Electrical Specifications

Dimensions: 103mm *53mm *18.65mm

Weight: 54.5 g (with optional battery)

Input Voltage: 8-30VDC

Power consumption:

- Active mode: 200mA @ 12VDC

- Sleep mode: <8mA @ 12VDC

Operating temperature: -30°C to 80°C

Storage temperature: -40°C to 85°C

1.2 Input/Output

Digital Inputs: 1

Relay driver Outputs: 1

Function LEDs: 2

- GPS Status GREEN

- Cellular Status AMBER

1.3 Cellular Communication

Operation Mode: FDD_LTE (Cat1)

Operation Band: Lte_B4, Lte_B13

Modulation : Uplink: QPSK
Downlink: QPSK/16QAM

1.4 Harnesses

There are 1 harnesses that may be used with the FJ1000L:

1. 4 wire power and I/O harness

The picture above shows the 4 wire power and I/O harness. The wiring details are:

Power and I/O Harness 4 wires

1. Black or Red **V+** is connected to Positive , +12VDC or +24VDC

2. GreyV- is connected to Negative or Ground
3. GreenInput 0 is an input biased high, negative trigger.
4. BlueOutput 0 is an output, open collector, may be used for Starter Disable.

1.5 Event Codes

The table below relates the Event codes in the message to the reason the message was generated:

Message #	Message Type	Description
0	Interval	Auto Report (auto report when moving)
1	Vibration	Vibration alarm(report when GPS is OFF and vibration detected)
2	Power Disconnect	Power cut alarm (report when external power is cut off)
3	Power Connect	Power connected alarm (external power has been connected)
4	Ignition ON	Hardwired or Virtual Ignition ON detected
5	Ignition OFF	Hardwired or Virtual Ignition OFF detected
6	Input 2 High	Input2 high alarm
7	Input 2 Low	Input2 low alarm
8	Stop	Device has stopped moving
9	Heartbeat	Heartbeat periodic report
13	Input 1 High	Input1 high alarm
14	Input 1 Low	Input 1 Low alarm
19	Crash Alarm	Crash Detected
24	Heading Change	Heading change detected
25	Tow Alert	Device is moving but being pulled
35	Starter Disabled	An output has been set by SMS command
36	Starter Enabled	An output has been cleared by SMS command
41	Harsh Accel	Harsh acceleration has been detected
42	Harsh Brake	Harsh Braking has been detected
43	Swerve Left	A left swerve has been detected
44	Swerve Right	A right swerve has been detected

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Warning Statements:

The 20 cm distance between device and users must be maintained during the normal operations.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.