

The Personal Locator

- *Starcom PL-500* -

GSM/GPRS

Product Specification

Updated: February, 2008

Total pages: 4

Overview

The **PL500** is a small location device intended to provide a solution to several key needs, such as location of persons including alert in case of distress, personal navigation, warnings about entering dangerous areas and more.

The **PL500** incorporates a GSM transceiver that operates on the 850/900/1800/1900 bands using the SMS and GPRS channels, a built-in GPS, Lithium Polymer battery, a strong processor inlets and outlets for monitoring and accelerometer.



Rating and Operating Conditions

Parameter	Min	Max	Units
Power consumption	4 (sleep)	100 (transmit)	mAh
Operational Temp.	-40	60	°C
Storage Temp.	-40	85	°C
Operating Humidity	50	80	%

General Specification

Measurement		122 x 60 x 22 mm, 85 grams
Cellular Modem	GSM	Motorola g24 – 850/900/1800/1900 MHz
Network	Data	GPRS and SMS
Messages	SMS GPRS	Encrypted Protocol TCP/IP over PPP
GPS	Satellite Tracking Protocol Positioning accuracy Navigation Update Rate Acquisition	In door functionality 16 Parallel channels NMEA, UBX Binary, RTCM Position: 2.5m CEP 1 second <33 sec
CPU Capacity	Random Access Memory Read Only Memory Serial FLASH	32 Kb 512 Kb 2 MB
Backup Battery	Type Capacity	Lithium Polymer 850-1200 mAh.
Serial Port	RS232	

- ❖ OTA (Over the Air) **firmware** and unit parameters programming.
- ❖ "Green product" (RoHS) to comply with the EU standards.

Key Features

- ☒ **Personal Location:** Worldwide tracking of persons (children, military exercises, VIPs, tourists, prisoners) and valuables (objects d'art, railway cars, computers, containers, tankers, generators, beehives, cattle herds, tractors, lawn mowers, etc.)
- ☒ **Emergency Button:** Support for emergency button to invoke an immediate high-priority transmission to the center.
- ☒ **Current Location Query:** The user can query the current location and receive a message stating the exact current position.
- ☒ **Route Record:** The user can start a Record session in which the **PL500** will save the position every X seconds and the user will be able to see the route that was taken over computer software.
- ☒ **Geo Fencing:** The option to receive alert when *the person is entering or leaving the designated zone, didn't leave or didn't enter into the designated zone.*
- ☒ **Speed restrictions:** *the option to receive alert whenever the driver goes above/below a pre-defined speed.*
- ☒ **Low Power Warning:** Warning transmission whenever the main power goes below a predefined threshold.
- ☒ **Last Location Saving:** Saving of the last known position, in case of exiting GPS coverage zone.
- ☒ **Status Requests:** enables requesting the latest status of the device, and receiving complete information about all the inputs, outputs, and location information.
- ☒ **Tracking:** Option to remotely engage periodic transmissions from the unit in the intervals of 10 seconds up to 4.5 hours.
- ☒ **OTA Firmware and Settings Modification:** Over-the-air option to change the device internal software, and its entire setting set, including communication settings such as APN/Username/Password/SMS Center/SMS Destination and target hosts.