

BOLERO-LT

Automotive Vehicle Location solution (AVL)

High Sensivity Satellite Navigation (50 channel u-blox 5 engine)

Communication via Quad Band GSM

SMS, Data, GPRS, TCP/IP, Email

Fully customizable behaviour

Autonomous operation

Car Security and Recovery

Thief Alert / Motion Detection

Online Tracking

Drivers Logbook/History

Territory Management / Geofencing

Remote administration & firmware update

Fully approved (FCC, PTCRB, e1, CE)

Internal antennas

Options: IEEE 802.15.4 module

Backup battery

Motion sensor

Waterproof bag IP68



Waterproof bag IP68 option



The FALCOM BOLERO-LT

is a free configurable smart tracking device, which can be fully adapted to user requirements. Its main purpose is to act as a mobile client for various system solutions like AVL, fleet management, vehicle security and recovery.

The device can operate fully autonomous and is able to interact using sensors and actors.

It can be adapted to existing tracking solutions and can be easily configured to gather or exchange relevant information with servers or users directly. An often used example is to send status reports or verbose alert messages directly via SMS to users and/or via TCP to tracking servers.

Users benefit most from combining comfort and security aspects – for example having regular voice calls as well as spy calls in emergency cases. Drivers logbook and data logging functionalities are combined in the Falcom history feature.

Geofencing can be used to report violations of predefined routes or areas (for example if a car enters or leaves a specific area/ no-go-zones).

All of these features are perfectly integrated in a device concept, which significantly reduces time-to-market and provides low cost tracking and security solutions.

Software features

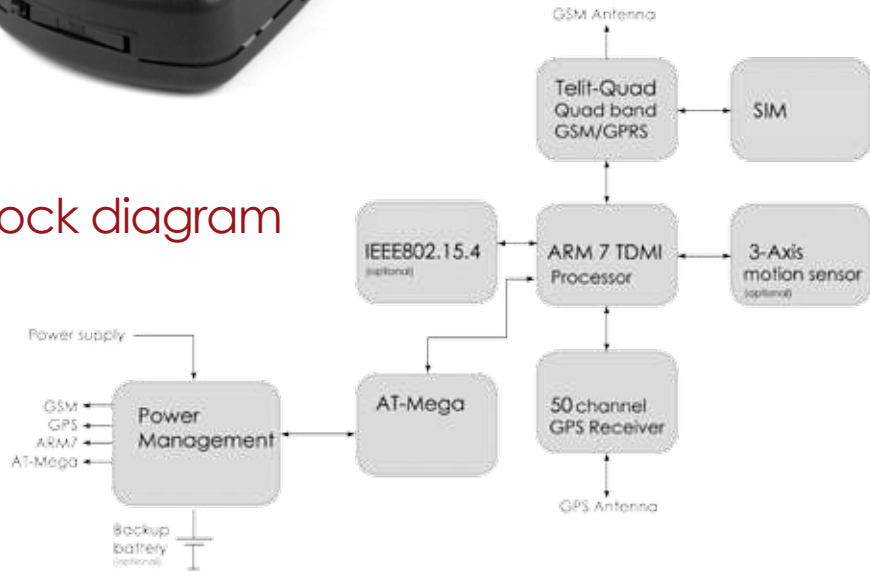
- PFAL commands for full control
- Intelligent and flexible alarm system, suitable for most applications
- Customizable device messages
- Easy to combine with most digital and analogue sensors
- Drivers Logbook / History
- GeoFencing, distance calculation
- Trip management
- Local and remote communication
- Optional
 - Encrypted communication
 - Security authentication
- Remote access
 - Status reports / tracking
 - Commands
 - Configuration
 - Firmware update



Keyfob extension
IEEE 802.15.4 option required



Block diagram



Applications

- Real time online tracking
- Fleet management / monitoring
- Security / emergency services
- Real time satellite navigation
- Territory management
- Personalized drivers logbook
- Route verification
- Trip management / distance calculations
- Theft protection
- Toll collection / pay as you drive
- Compatible with FALCOM Trace4you Server solution

trace4you



Technical specification

GSM core	Electrical characteristics
TELIT GE864-Quad module	Power: +10,8 V to +32 V DC
850/900/1800/1900 MHz	Backup battery*
GPRS class 10, class B	Physical characteristics
TCP/IP (accessible via PFAL commands)	Dimensions (LxWxH): 85 x 56 x 20 mm
GPS core	Weight: 90 g
50 channel u-blox 5 engine	Temperature range**
A-GPS online/offline support	Storage: -40 °C to +90 °C
Protocols: NMEA, GGA, GGL, GSA, GSV, RMC, WGS-84	Operating: -40 °C to +85 °C
Accuracy: Position < 2.5 m	GSM: -30 °C to +80 °C
SBAS < 2 m	Battery option: -20 °C to +60 °C
Acquisition: TTF hot start: < 1 s average	Charging: 0 °C to +45 °C
TTF warm start: < 29 s average	Discharging: -20 ° to +60 °C
TTF cold start: < 29 s average	Motion sensor*
Sensitivity: Acquisition: -160 dBm	3-axis motion sensor
Tracking: -160 dBm (12 dBHz)	Interfaces
Cold start: -144 dBm	2 IOs: • 1 configurable digital/analogue input with open collector output (100 mA)
Limits: Velocity: 500 m/s (972 knots)	• 1 digital input (IGN)
Altitude: 50.000 m	RS232 (RX,TX, V24 level)
Processor core	SIM card reader for 1,8/3 V SIM cards
ARM7/TDMI	3 programmable LEDs
8 MB Flash / 2 MB RAM	IEEE 802.15.4 module* for Keyfob extension

* optional available

** extreme temperatures can affect device performance.

Note: Specifications and information given in this document are subject to change by FALCOM without notice.
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