

BOLERO-LT2

The Advanced Vehicle Tracking System

PRODUCT OVERVIEW

BOLERO-LT2 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 it is able to interact using sensors and actors.

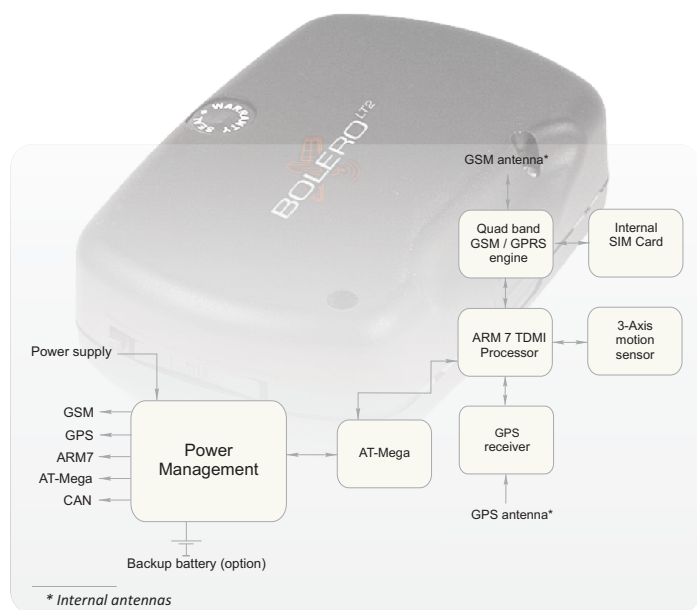
It can be adapted to existing tracking solutions and can be easily configured to gather or exchange relevant information with servers or users directly. An often used example is to send status reports or verbose alert messages directly via SMS to users and/or via TCP to tracking servers. Users benefit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

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.



BOLERO-LT2 BLOCK DIAGRAM



PRODUCT HIGHLIGHTS

- State-of-the-art GSM/GPRS technology for 2-way communication
- Latest GPS technology for positioning
- Compact, low-cost and light-weight unit
- Delivers high performance and very flexible applications
- Customized firmware configuration
- Different communication channels
- 3-axis motion sensor for detecting movements of assets
- Wide variety of events and states for sending reports
- Allows to create customized protocols
- Data-Logger functionality
- Powered from vehicle main battery
- Backup battery to back up the main power supply
- Custom housing and packaging design possible
- Internal GSM/GPS antennas
- E1/CE approved

FIRMWARE FEATURES

- Embedded TCP/IP stack for client-server application
- FALCOM protocols: IOP, GSM, AREA, 3DP, BIN
- Supports SMS, CSD, Voice call
- Locally and remotely firmware update
- Multi power-saving modes and wake up conditions
- 20 programmable Timers, Triggers, Counters
- 100 programmable Geofences and 32 Areas
- 2000 waypoints for accurate route management
- Programmable Geo-fencing and Parking alerts
- Detect changes of digital inputs
- Forward messages from one channel to another
- Customized reports, sending intervals
- Report by distance, time, bearing and on demand
- Drivers Logbook / History / Trip management
- Locally/Remotely accessible via PFAL-Commands
- Device configuration via Serial port, TCP and SMS
- Intelligent and flexible configuration alarms
- Connection with external alarm systems

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 (PAYD)
- Compatible with FALCOM trace4you server application

TECHNICAL SPECIFICATION

General	Physical characteristics
Quad-Band GSM/GPRS engine - Telit GE865	Dimensions (LxWxH): 85 mm x 56 mm x 24 mm
GSM frequency bands: 850/900/1800/1900 MHz	Weight: ca. 90 g
GPRS class 10, Class B	Air humidity
Internet (TCP/IP/UDP/HTTP/SMTP)	5% up to 95% non-condensing
50 channel u-blox 6 engine (UBX-G6010)	Interfaces
A-GPS online/offline support	1 x predefined digital input (Ignition)
Protocols: NMEA, FALCOM (binary)	3 x LED indicators free-programmable
Accuracy: Position: 2.5 m	1 x Button free-programmable
SBAS: 2 m	1 x RS232 port V.24 level (RX, TX and GND)
Acquisition: Cold starts: 26 sec.	Inside SIM card holder for 1,8/3 V SIM cards
Sensitivity: Tracking: -162 dBm	Serial Data Rates
Cold starts: -148 dBm	4800...115200 bps (default=57600 bps)
GPS Operational limits:	GPS/GSM Antennas
Velocity: 500 m/s (972 knots)	Internal GPS antenna
Altitude: 50.000 m	Internal GSM antenna
Update rate: 1 Hz	Motion sensor
Electrical characteristics	3-axis motion sensor* (software-controlled features)
Power supply: +10,8 V to +32 V DC	Processor core
Li-Polymer 500 mAh rechargeable battery	ARM7/TDMI
Average Power Consumption	8 MB Flash (History / Firmware / Configuration)
Normal operation: TBD @ 12 VDC	
Power saving (IGN): TBD @ 12 VDC	
Environmental data	
Operating temp.: -40 °C to +85 °C	
Storage temp.: -40 °C to +90 °C	
GSM operating temp.: -40 °C to +85 °C **	

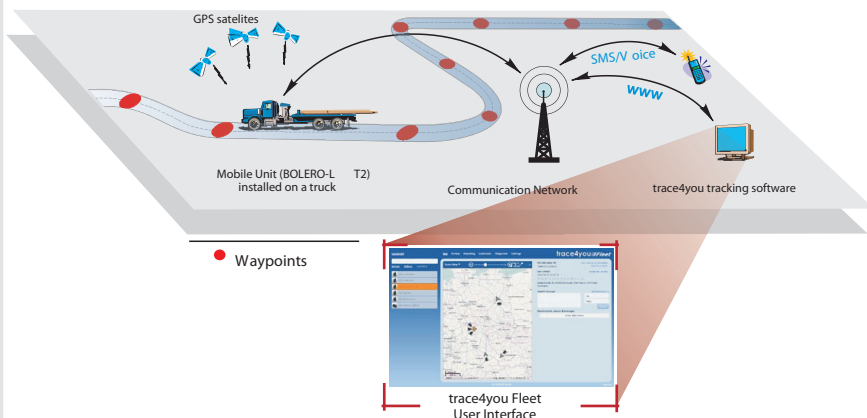
TBD = To be defined

* Optional

** The GSM/GPRS module is fully functional (-20 °C to + 55 °C meets the 3GPP specifications)

trace4you - online tracking server

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