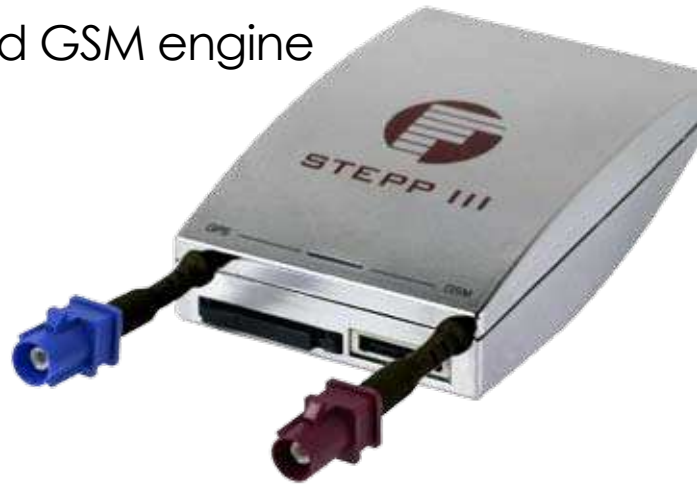


STEPP III-UX

Automotive Vehicle Location solution (AVL)

- High Sensivity 50 channel GPS engine
- AGPS offline / Autonomous
- Communication via Quad Band GSM engine
- SMS, Data, Voice, TCP/IP, SMTP
- Fully customizable behaviour
- 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)
- Additional IO Ports
- Motion sensor
- Options: CAN Interface
- Backup battery



The FALCOM STEPP III-UX

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.

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



Applications

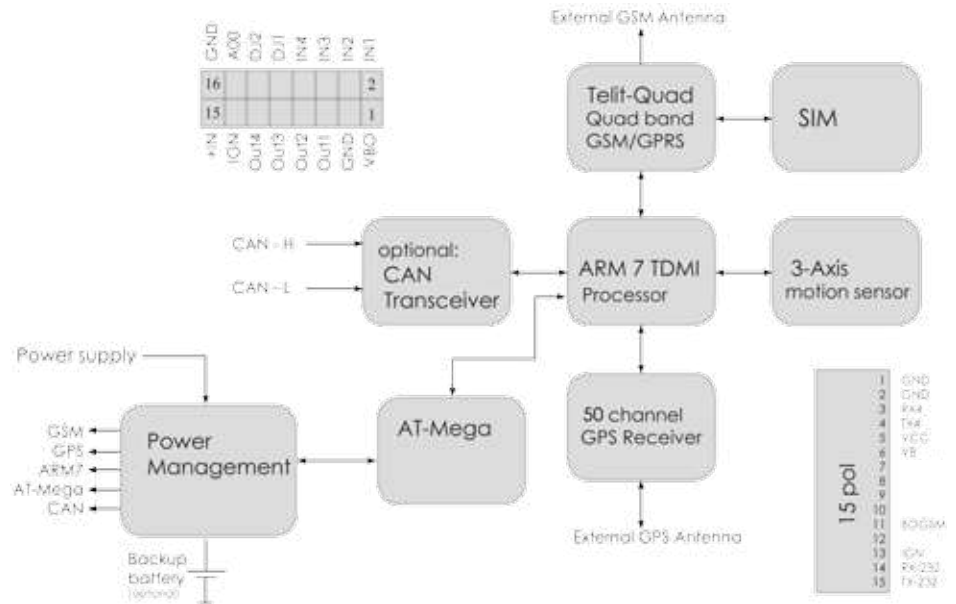
- Real time online tracking
- Fleet management / monitoring
- Security / emergency services
- Real time satellite navigation
- Territory management
- Personalized drivers logbook
- Route verification
- Trip management / distance calculations
- Theft protection
- Toll collection / pay as you drive
- Compatible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

trace4you



Version: 1.0.4

Block diagram



Technical specification

GSM core	Physical characteristics
Quad-Band GSM/GPRS engine	Dimensions (LxWxH): 55 x 88 x 22 mm
GSM frequency bands: 850/900/1800/1900 MHz	Weight: approx. 120 g
GPRS class 10, class B	Temperature range
Internet (TCP/IP/UDP/HTTP/SMTP)	Operating: -40 °C to +85 °C
GPS core	Storage: -40 °C to +85 °C
50 channel GPS engine	GSM**: -40 °C to +85 °C
A-GPS offline / Autonomous	Battery option:
Protocols: NMEA, GGA, GGL, GSA, GSV, RMC, WGS-84	Battery ¹⁾ discharging: -20 °C to +60 °C
Accuracy: Position < 2.5 m	Battery ¹⁾ charging: 0 °C to +45 °C
SBAS < 2 m	Motion sensor
Acquisition: TTFF hot start: < 1 s average	3-axis motion sensor
TTFF warm start: < 29 s average	Interfaces
TTFF cold start: < 29 s average	16pin Molex 43045-1609
Sensitivity: Acquisition: -160 dBm	• 8 inputs
Tracking: -160 dBm (12 dBHz)	- 4 configurable inputs (digital or analogue)
Cold start: -144 dBm	- 2 digital inputs (used for CAN feature)
Limits: Velocity: 500 m/s (972 knots)	- IGN, DiWu, power in/out
Altitude: 50.000 m	• 4 digital outputs (open collector 100 mA)
	15pin CHEE 61022-Z315
Processor core	- RS232 (RX,TX V24 level)
ARM7/TDMI	- RS232 (RX,TX 3,3 V TTL level)
Memory: 8 MB FLASH / 2 MB RAM	SIM card reader for 1,8/3V SIM cards
	GPS RF connector 50 Ohm FAKRA/Radiall
Electrical characteristics	GSM RF connector 50 Ohm FAKRA/Radiall
Power: +10,8 V to + 32 V DC	3 programmable LEDs
Li-Polymer 1000mA rechargeable battery * 1)	CAN Interface*

* Optional available

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

¹⁾ Storage and using conditions of the device with device option are limited to the battery temperature range.

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

For latest product information see www.falcom.de