

STEPP III-UX

Automotive Vehicle Location solution (AVL)

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

AGPS capable

Communication via Quad Band GSM

SMS, Data, GPRS, TCP/IP, Email

Fully customizable behaviour

Car Security and Recovery

Thief Alert / Motion Detection

Online Tracking

Drivers Logbook/History

Territory Management / Geofencing

Remote administration & firmware update

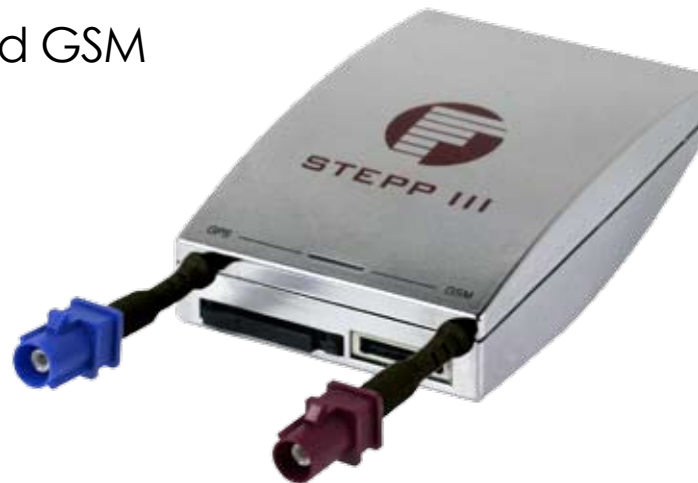
Fully approved (FCC, PTCRB, e1, CE)

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

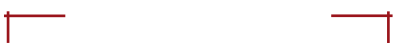
- PFAL commands for full control
- Intelligent and flexible alarm system, suitable for most applications
- Customizable device messages
- Easy to combine with most digital and analogue sensors
- Drivers Logbook / History
- Geofencing, distance calculation
- Trip management
- Local and remote communication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



Applications

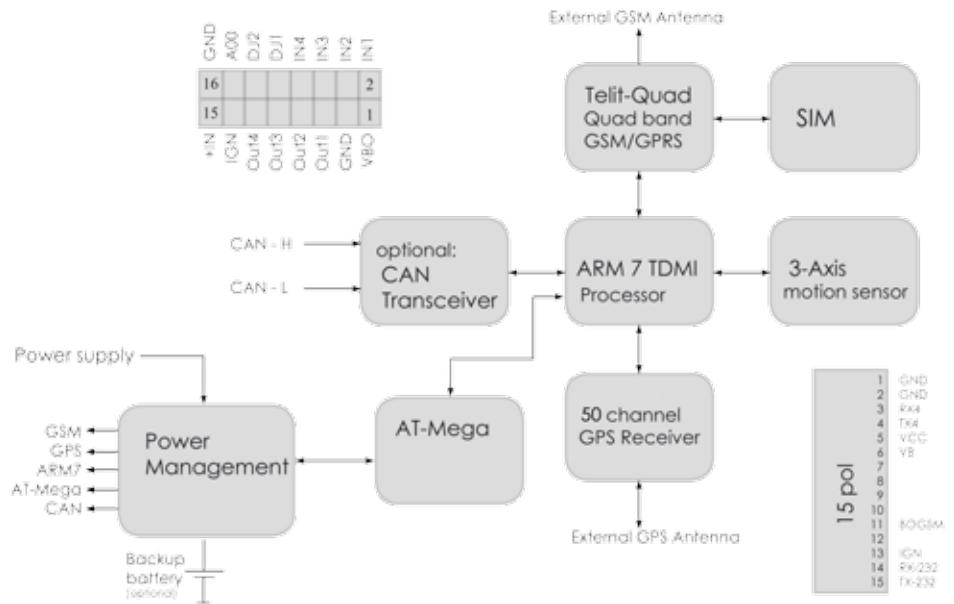
- Real time online tracking
- Fleet management / monitoring
- Security / emergency services
- Real time satellite navigation
- Territory management
- Personalized drivers logbook
- Route verification
- Trip management / distance calculations
- Theft protection
- Toll collection / pay as you drive
- Compatible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

trace4you



Version: 1.0.1 preliminary

Block diagram



Technical specification

GSM core	Physical characteristics
TELIT GE864-Quad module	Dimensions (LxWxH): 55 x 88 x 22 mm
850/900/1800/1900 MHz	Weight: approx. 120 g
GPRS class 10, class B	Temperature range**
TCP/IP (accessible via PFAL commands)	Storage: -40 °C to +90 °C
GPS core	Operating: -40 °C to +85 °C
50 channel u-blox 5 engine	GSM: -30 °C to +80 °C
A-GPS online/offline support	Battery option: -20 °C to +60 °C
Protocols: NMEA, GGA, GGL, GSA, GSV, RMC, WGS-84	Charging: 0 °C to +45 °C
Accuracy: Position < 2.5 m	Discharging: -20 °C to +60 °C
SBAS < 2 m	Motion sensor
Acquisition: TTF hot start: < 1 s average	3-axis motion sensor
TTF warm start: < 29 s average	Interfaces
TTF cold start: < 29 s average	16 pin 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)
	15 pin AMP 5-558556-1
Processor core	- RS232 (RX,TX V24 level)
ARM7/TDMI	- RS232 (RX,TX TTL level)
Memory: 2 MB / 512 kB	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
Backup battery*	CAN Interface*

* optional available

** extreme temperatures can affect device performance.

Note: Specifications and information given in this document are subject to change by FALCOM without notice. For latest product information see www.falcom.de