

STEPP III

Automotive Vehicle Location solution (AVL)

High Sensivity Satellite Navigation (20 channel SirfStar III GPS)

Communication via Quad Band GSM

SMS, Voice, 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

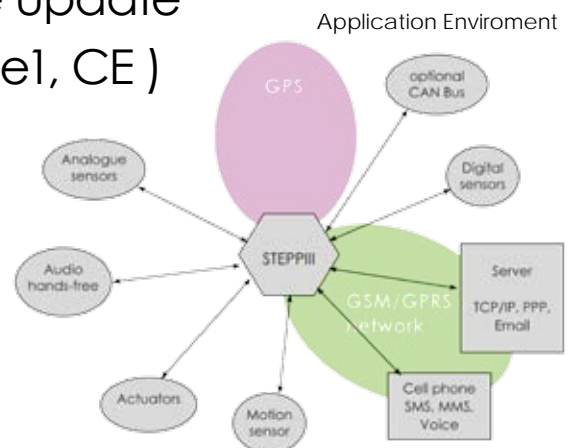
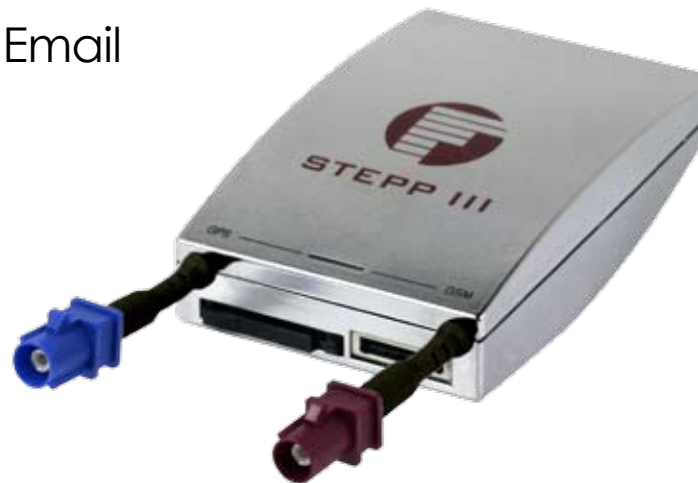
Fully approved (FTA, FCC, PTCRB, e1, CE)

Additional IO Ports

Motion sensor

Options: CAN Interface

Backup battery



The FALCOM STEPP III

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 autonomously and is able to interact using sensors and actuators.

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



Applications

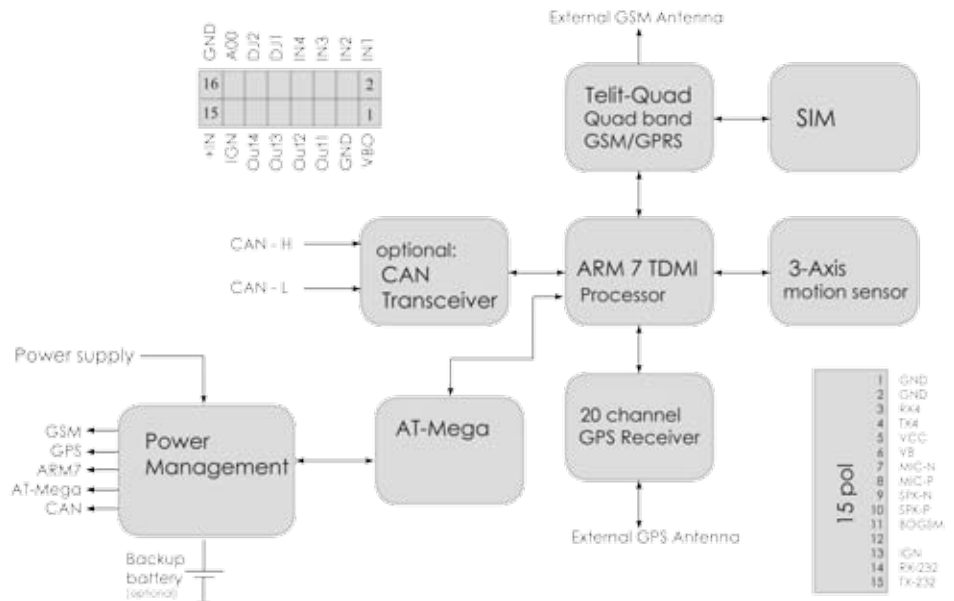
- Real time online tracking
- Fleet management / monitoring
- Security / emergency services
- Real time satellite navigation
- Territory management
- Personalized drivers logbook
- Route verification
- Trip management / distance calculations
- Theft protection
- Toll collection / pay as you drive
- Compatible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

trace4you



Version: 1.0.2 preliminary

Block diagram



Technical specification

GSM core	Temperature range**
TELIT GE864-Quad module	Storage: -40 °C to +90 °C
850/900/1800/1900 MHz	Operating: -40 °C to +85 °C
GPRS class 10, class B	GSM: -30 °C to +80 °C
TCP/IP (accessible via PFAL commands)	Battery option: -20 °C to +60 °C
	Charging: 0 °C to +45 °C
	Discharging: -20 ° to +60 °C
GPS core	Motion sensor
FALCOM 20 channel GPS receiver	3-axis motion sensor
High sensivity SiRFStarIII chipset	
Protocols: NMEA, GGA, GGL, GSA, GSV, RMC, WGS-84	
Position accuracy: < 10 m CEP without SA	Interfaces
TTF hot start: < 1 s average	16 pin Molex 43045-1609
TTF cold start: < 42 s average	• 8 inputs
Tracking sensitivity: -159 dBm (13dBHz)	- 4 configurable inputs (digital or analogue)
	- 2 digital inputs (used for CAN feature)
Processor core	- IGN
ARM7/TDMI	- DiWu
Memory: 2 MB / 512 kB	- power in/out
	• 4 digital outputs
Electrical characteristics	15 pin AMP 5-558556-1
Power: +10,8 V to + 35 V DC	- RS232 (RX,TX V24 level)
Backup battery*	- RS232 (RX,TX TTL level)
	- Speaker, Microphone
Physical characteristics	SIM card reader for 1,8/3V SIM cards
Dimensions (LxWxH): 55 x 88 x 22 mm	GPS RF connector 50 Ohm FAKRA/Radiall
Weight: approx. 120 g	GSM RF connector 50 Ohm FAKRA/Radiall
	3 programmable LEDs
	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