

# MAMBO2-B6

## NEXT GENERATION PERSONAL TRACKER

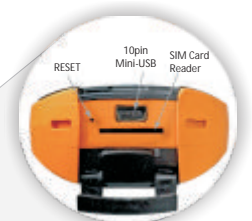
### PRODUCT OVERVIEW

MAMBO2-B6 is an advanced and a free configurable personal tracker with integrated quad-band GSM/GPRS phone for two way communication and 50-channel low-power GPS receiver for positioning. At first glance, MAMBO2-B6 looks like a conventional mobile phone. In the MAMBO2-B6 there are many functions designed specifically for use in logistics providers, cab company, security and fire services, police or technical emergency service.

MAMBO2-B6 can be used as a cell phone with the standard features, voice calls, SMS all through a simple menu-guided operation. This small robust device can be carried along in a pocket or fixed in a vehicle. It is a true mobile all-rounder both for commercial and private uses.

MAMBO2-B6 also supports a series of functions for GPS navigation and tracking via SMS, CSD and GPRS/TCP. The all-rounders true strength lies in the multitude of its configuration options: Rolling GPS display, geo-fencing capability with alarm and an ultra-precise movement detector are just some of the MAMBO2-B6's core functions.

This first-of-its-kind solution with a sophisticated software offers system integrators and developers the possibility to develop their own cost efficient and flexible solution.



### MAMBO2-B6 BLOCK DIAGRAM



### PRODUCT HIGHLIGHTS

- Quad-Band GSM/GPRS technology for 2-way communication
- Latest GPS technology for precise positioning
- Embedded TCP/IP stack for client-server application
- Full colour OLED display with simple menu-guided operation
- Wide variety of events and states for sending reports
- Different GPS tracking modes: on time and distance, heading change
- Built-in Flash memory for storing 400,000+ GPS positions
- Internal rechargeable 1650 mAh Li-Ion battery
- Long battery life thanks to very-efficient power saving modes
- Compact size, lightweight, durable housing and shockproof capability
- Integrated speaker and microphone for handsfree conversation
- Configurable Graphical User Interface
- Customized firmware configuration and protocols
- Different communication channels, SMS, CSD, TCP and USB
- Remote activation, configuration and administration
- Unique geo-fence features
- Built-in 3D motion sensor with advanced man-down detection
- Improved GSM antenna and GPS features compared to prior MAMBO2

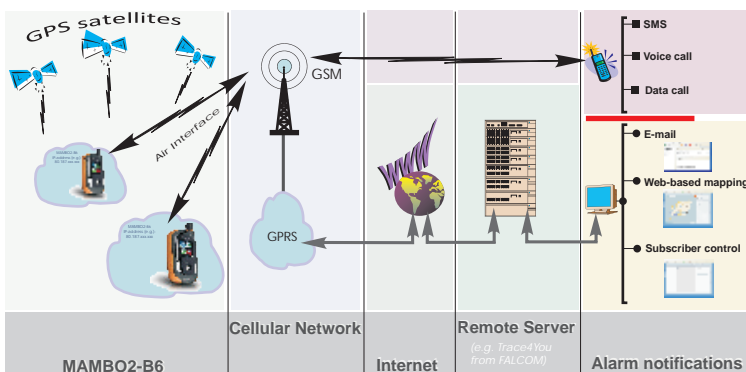
## FIRMWARE FEATURES

- Embedded TCP/IP stack for client-server application
- FALCOM protocols: IOP, GSM, AREA, 3DP, BIN
- Supporting SMS, CSD, Voice call
- Local and over-the-air firmware update
- Multi power-saving modes and wake up conditions
- 20 programmable Timers, Triggers, Counters
- 100 programmable Geofences and 32 Areas
- Wide variety of events and states for sending reports
- Programmable Geo-fencing and Parking alerts
- Follow waypoints forward or backward
- Trace the route of another MAMBO2-B6
- SOS panic button and spy call function
- Handling of fall, tilt and motion events
- Forwarding messages from one channel to another
- Customized reports, sending intervals
- Report by distance, time, bearing and on demand
- Local/Remote access via PFAL commands
- Device configuration USB, TCP and SMS
- Intelligent and flexible configuration alarms

## APPLICATIONS

- Personal security and recovery/emergency services
- Fleet tracking management
- Real-time positioning
- Theft protection
- Territory monitoring
- GPS Data Collection
- Distance calculations
- Point-to-Point navigation
- Outdoor sports and activities
- Trip management and many others
- Compatible with FALCOM trace4you server application (also configurable for most of TCP/IP server-based tracking applications)

## Applications - Graphical overview



## TECHNICAL SPECIFICATION

<b>General</b>		<b>Average Power Consumption</b>
Quad-Band GSM/GPRS engine		Normal operation: ca.132 mA @ 4 VDC**
GSM frequency bands: 850/900/1800/1900 MHz		Power saving (IGN): ca. 1mA @ 4 VDC
GPRS class 10, Class B		<b>Physical characteristics</b>
Internet (TCP/IP/UDP/SMTP)		Dimensions (HxWxL): 86/103mm x 54mm x 26mm
50 channel GPS receiver		Weight: ca. 108 g
GPS frequency: L1 1575.42 MHz		<b>Air humidity</b>
Protocols: NMEA, FALCOM (binary)		5% up to 95% non-condensing
<b>AGPS Offline / Autonomous</b>		<b>Interfaces</b>
Accuracy: Position: 2.5 m		OLED display, 128 x 128 Px, Full colour
SBAS: 2 m		10pin Mini-USB (battery charging, data transfer)
Acquisition: Cold starts: 26 sec.		Integrated Speaker/Microphone/Handsfree
Sensitivity: Tracking: -162 dBm		1 x Navigation key (software-controlled features)
Cold starts: -148 dBm		2 x Soft keys (software-controlled features)
<b>GPS Operational limits:</b>		1 x LED free programmable
Velocity: 500 m/s (972 knots)		Inside SIM card holder for 1,8/3 V SIM cards
Altitude: 50.000 m		<b>Housing</b>
Update rate: 1 Hz		Plastic housing in different colours available
<b>Environmental data</b>		<b>Serial Data Rates</b>
Operating temp.: -20 °C to +60 °C		4800...115200 bps (default=115200 bps)
Storage temp.: -20 °C to +60 °C		<b>GSM and GPS Antennas</b>
Charging temp.: 0 °C to +45 °C		Internal
<b>Electrical characteristics</b>		<b>Motion sensor</b>
Charging Voltage 5V DC ±10%/500mA(Mini USB port)		3-axis motion sensor (software-controlled)
Alternative quick charge max. +12 VDC Mini USB port		<b>Processor core</b>
Rechargeable Li-Ion battery (1650 mAh)		ARM7/TDMI
		8 MB Flash (History / Firmware / Configuration)

\* Optional

\*\* Depending on the screensaver mode

## MAMBO2-B6 EVALKIT CONTENTS

EVALKIT offered by FALCOM provides all the necessary hardware, software, and documentation to effectively operate and evaluate the performance and suitability of the MAMBO2-B6. The EVALKIT is shipped pre-configured allowing system integrators and developers to test the device and see how it works. The KIT contains:

- 1 - MAMBO2-B6
- 2 - Leather belt pouch
- 3 - AC/DC Power adapter 12V-1A
- 4 - UK/US Plug travel adaptor
- 5 - USB Car Charger DC5V 1A

- 6 - USB-A-to-Mini-USB-1M USB2.0
- 7 - Docking station
- 8 - Info-sheet
- 9 - Pre-paid SIM card
- 10 - Documentation

## CONTACT

Falcom Wireless Communications GmbH  
Gewerbering 6  
98704 Langewiesen  
GERMANY

Phone: +49 (0)3677 8042 0 (no support)  
Fax: +49 (0)3677 8042 256  
e-Mail: [contact@falcom.de](mailto:contact@falcom.de)

Internet: <http://www.falcom.de>