FALCOM
WIRELESS COMMUNICATIONS GMBH

MAMBO

Personal tracker & mobile phone

- High sensitive 20 channel GPS receiver based on SiRFstarIII
- Tri Band GSM/GPRS phone
- Bluetooth data and voice communication integrated
- Build-in 3 axis motion sensor
- GPS antenna included
- Real time object tracking
- Configurable geofences
- GPS history function
- 3 configurable buttons
- Lithium Ion battery

The FALCOM MAMBO

Based on the GSM/GPRS and state-of-art GPS technology for satellite navigation, FALCOM introduces a new portable tracking device for personal safety and asset monitoring. The integrated GPS receiver architecture based on the SiRF starIII chipset provides more then enough precise location information using satellite signals to enable to track people where they are anywhere in the world.

With its integral housing, compact design and ultra-low power consumption, it is an outstanding quality, high-performance, operating as a stand alone unit ideally suited for personal security, asset management and automotive applications as well. The configurable internal firmware is a fundamental component which in combination with the excellent hardware performance makes the FALCOM MAMBO unit to be on the top of applications where the fleet management and personal security today are required. The FALCOM MAMBO consists of the GSM/GPRS engine, 20 channel GPS receiver, Bluetooth™ class 2 for voice and data connection and a motion detector as an all-in-one solution.

The FALCOM MAMBO provides geofence features that can be used for territory management, route verification, prohibited locations, and more. Once a geofence is established, the unit automatically notifies via SMS, Voice or Data calls, if the person carring it enters and/or leaves the predefined area(s).

In the event of an emergency, the person who carries the FALCOM MAMBO can activate it by pressing a touch button on the unit's surface. Upon activation the equipment uses the GPS signals to define its positions, and sends a SMS message with its location information or performs a voice call to the predefined number via the GSM network. The FALCOM MAMBO based on the TCP/IP protocol is also able to be monitored as real time over the internet or to send an e-mail to the predefined e-mail address.

FALCOM Tracking solution

Based-on the MAMBO and STEPP II features, FALCOM GmbH has developed a Demo Tracking Software which provides a comprehensive online reporting system producing text and graphical information. To track your MAMBO unit you only need a computer connected to the internet with the pre-installed standard web browser. No additional software or computer hardware are required. Just log-in to the tracking web site to manage your MAMBO personal security unit. With the help of the Demo Tracking Software which provides a real-time tracking map and other configuration features, the unit's position can be polled and graphically represented on the map. So it allows you to put in the know where are the persons who carring it, vehicles and others. However, via this software you can watch them as they travel.

Battery variants (1700 mAh or 850 mAh)

Geofencing

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History

The FALCOM MAMBO contains a History function enables the GPS receiver to store upto 180000 records and at a later time the history data can be downloaded either locally or over-air GSM network or TCP-connection for further evaluation.

Field of Application

FALCOM MAMBO is an equipment that can be used in a variety of applications such as:

- Personal safety and security
- Fleet tracking and management
- Navigation and positioning
- Finding streets and routes
- Travel planning and many others...

Technical specification

GPS	**GSM**
GPS frequency: L1, 1575,42 MHz	MAMBO55: 900/1800/1900 MHz
C/A code: 1.023 MHz chip rate	MAMBO56: 850/1800/1900 MHz
Channels: 20	Compliant to GSM Phase 2/2+
Datum: WGS-84	Voice, Data, SMS, TCP/IP, PPP
	GPRS class 10, class B
Accuracy	
Position: <10 m CEP without SA	**Bluetooth serial port**
Velocity: 0.1 m/s without SA	Connection: Class 2 serial port profile
Time: 1 ms sync. to GPS time	Protocol: NMEA, GGA, GGL, GSA,GSV, RMC
	Bluetooth range: 10 m
DGPS Accuracy	
Position: 1 to 5 m, typical	**Electrical characteristics**
Velocity: 0.05 m/s, typical	Rechargeable LiIon batteries 850/1700 mAh
	Power: +5 V DC input charging circuit 500mA
TTFF (Time to First Fix)	
Hot start: <8 s average	**Physical characteristics**
Cold start: <42 s average	Dimensions (LxWxH): 86 x 60 x 28 mm
	Weight: 90 g
Sensitivity	Operating temperature: 0 to + 55 °C
Tracking: 13 dbHz	
Hot start: 15 dbHz	**Interfaces**
Warm start: 26 dbHz	Bluetooth serial port Class 1.1 and 2.0
Cold start: 30 dbHz	3.5 mm power jack
	3 LEDs for status signals
Dynamic conditions	SIM card reader
Altitude: 18.000 m (60.000 feet) max.	Internal microphone & loudspeaker
Velocity: <515 m/s max.	3 axis motion sensor
Acceleration: 4 g, max.	4pol 2,5mm jack for external headsets

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