

# **FAME Systems – Logger PL810A**

**Version 1.0**



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## 1. Introduction

**PL810A** is a portable flight data recorder made to meet General Aviation needs. It was designed as a handy device for the personal use of every GA pilot.

**PL810A** enables automatic completion of personal flight logs. The pilot is able to recall all of his flown legs stored in the FAME-database by mapping to VFR charts, displaying in altitude or speed diagrams, zooming to details or exporting the data in various formats.

Due to these capabilities **PL810A** is an ideal tool to analyse student pilot flight behaviour, to document the progress of skill, to detect and to interpret errors during solo flights. The **PL810A** is able to substitute the traditional barograph devices used at check rides normally.

**PL810A** is characterized by:

- Small dimensions
- Less weight
- Easy handling
- High storage capacity
- Long battery running time
- Comfortable data analysis

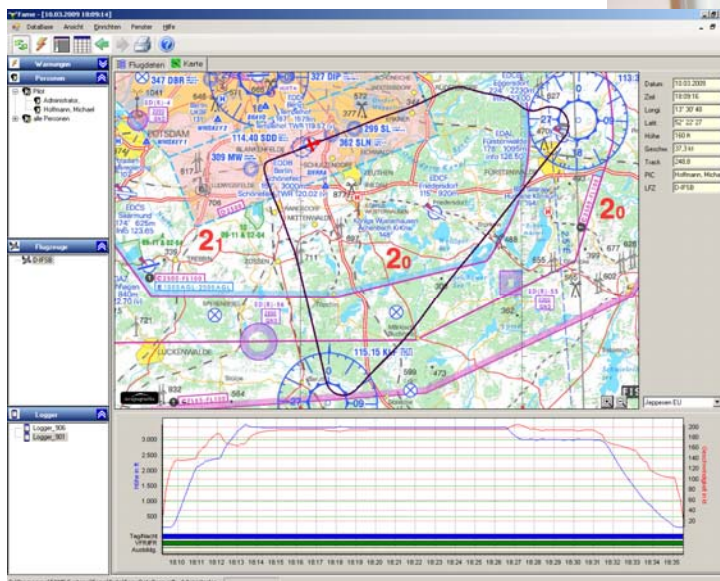


Fig. 1: Software **FAME** and Logger **PL810A**

**FAME Systems**  
*smart Solutions - smart Systems*

*...Fly Smart !*

## 2. Usage

This lamp indicates the operating status (green if ready).

Status Data

This button turns the logger on or off.

ON/OFF Switch

This button adds a marker to the position data.

Set Marker

This lamp indicates the charging status of the battery.

Status Battery



The following optical signals indicate the operational status:

Data-LED is green:  
logger is on and ready

Data-LED flashing green:  
logging Data (GS > 5 kt)

Data-LED is yellow:  
logger is docked to the PC, data transfer

You should never see these red lights ...

Battery voltage sufficient

Battery is being charged

Battery power is low, please connect to external power and recharge!

Systemstatus		
<u>Daten</u>		
● Dauer	Grün	Funktionsbereit
● Blinkend	Grün	Datenerfassung
● Dauer	Rot	Interner Fehler
● Dauer	Gelb	Datentransfer
● Blinkend	Rot	Speicher voll
<u>Akku</u>		
● Aus	Grün	Spannung ok
● Dauer	Gelb	Ladevorgang
● Dauer	Rot	Spannung gering
Gerätenummer: PL810A0705119		

## 2.1 Getting Started

The **PL810A** is turned on by pressing the I/O button. To protect the device from unintentional powering on, you have to press the button for at least 2 seconds.

The “ON-state” is acknowledged by a green data-LED. The battery status LED will flash for a short time as well.

The **PL810A** will turn on automatically, if connected to a power source via the USB interface. Hence the logger is ready by itself, if connected to a PC or external power supply.

Immediately after turning on, the logger starts to search for GPS signals.

The GPS receiver is buffered by an internal backup battery. So a “hot start” within 30 – 60 s is enabled. If the device is turned off for more than a week, a “cold start” is performed. This means the acquisition time is much longer, and it takes up to 5 minutes that the logger becomes ready and starts logging. This is a normal behavior during the first start of your Personal Flight Data Logger.

## 2.2 Data Logging

The **PL810A** starts logging if moved with a velocity greater than 5 knots. This threshold value guaranties a recording of all important flight data and prevents burdening the storage with useless static data. Data logging is signalled by a flashing green data-LED.

## 2.3 Setting a Marker

To mark important position in flight the **PL810A** owns a “Marker-button”. Press this button to set a marker sign at your present position. These flags can be interpreted by the FAME software and are displayed at the VFR charts. The setting of a marker is acknowledged by a flashing red data-LED (for 1 second).

## 2.4 Data Transfer

If the **PL810A** is connected via a USB cable to a PC which has the FAME software installed, the data-LED is shining yellow (docking). Being docked to a PC the function of data recording is turned off. About 1 minute after disconnecting the data-LED is turning green again, the logger is ready to record data.

## 2.5 Charging the Battery

As soon as the logger is connected to an external power supply (PC or adaptor) the charging of the internal battery will start. The battery-LED starts shining yellow. If charged fully the LED turns green. The actual charging state of the battery is displayed in percent of capacity if docked to the FAME software. Charging time is about 1 to 3 hours.

## **2.6 Turning off**

Pressing the I/O button for more than 2 seconds will turn off the logger. The shutdown is performed immediately if the logger is operating on battery power.

Connected to an external power source (PC or adaptor) the shutdown request is acknowledged by a yellow data-LED but not performed. The shutdown will be accomplished when disconnected from external power.

### 3. Specifications

Dimensions	: (126,0 x 67,8 x 25,4) mm
Weight	: 150 g
Memory	: 512...2048 MB
Running time on battery	: 16 h
Recording capacity	: 1000 h
GPS-Receiver	: internal 16-channel ANTARIS 4 SuperSense Technology - 158dbm weak signal sensitivity Ultra low power consumption
Internal battery	: Li-Polymer Accumulator 3.7 V 1600 mAh
PC-Interface	: USB 2.0
External power supply	: 5V via USB-connector Adaptor 12V and 24 V (cigar lighter jack)

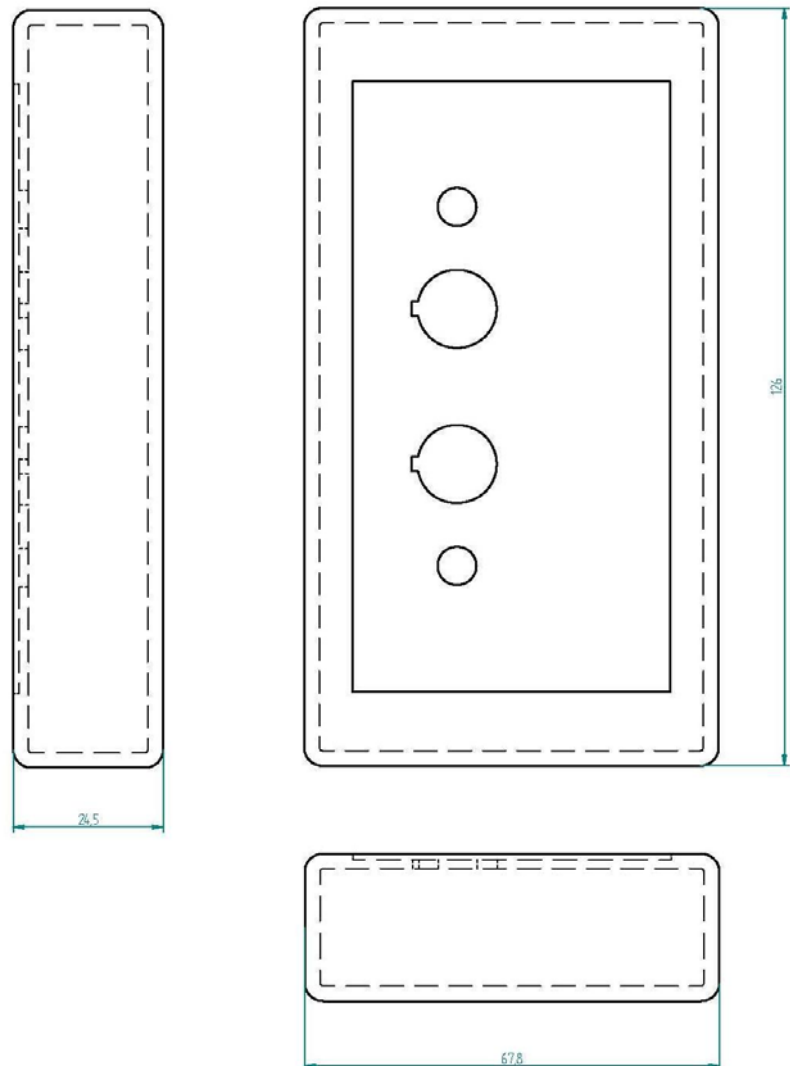
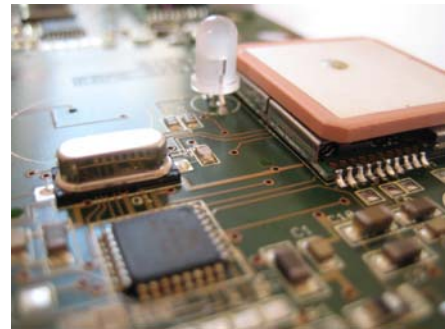


Fig. 2: Dimension and configuration of the Loggers PL810A