



In-vitro tool calibration & cloud

Our client, a medical device producer, asked us to implement SW for his HW solution, which is used to measure and display measurements from sensors to calibrate lab equipment. Thaumatec developed a portable device that was then connected to the cloud, where all the data is up-to-date available in one place and efficient accessible for all needed laboratory applications.

Interface to sensors

Graphic library

Cloud integration

Protocol layers

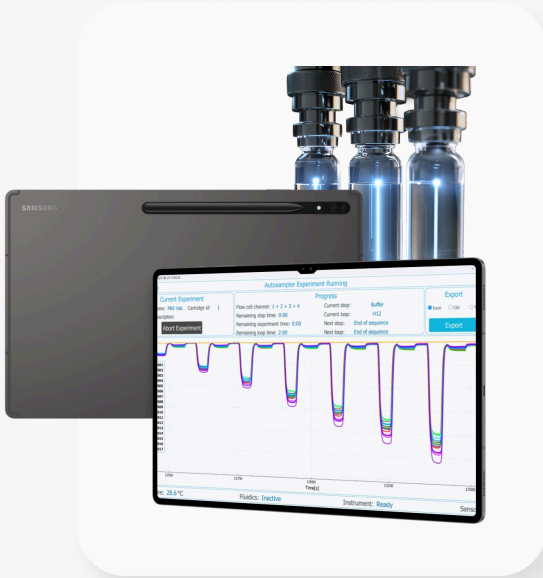
Visualization

HW configuration

Label-free biosensing platform

Our customer, a research company, engaged in development of a new biosensing technology, approached us with a need to support preparation of their first commercial device.

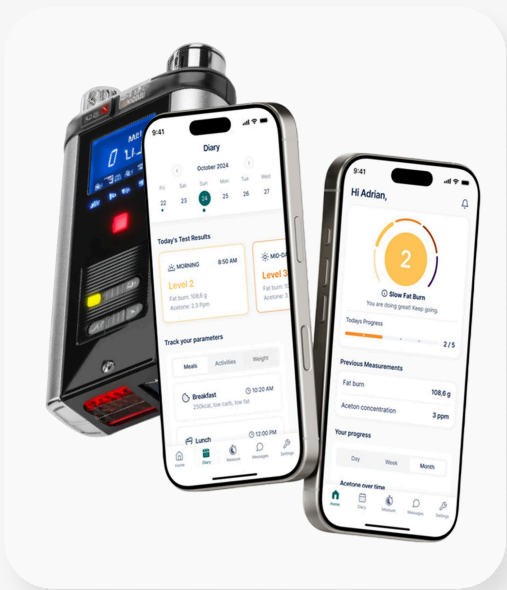
The platform can be used for basic life-science research and in development of new multi-biomarker assays for diagnostic purposes. We gathered product requirements and designed the software architecture and implemented the system including the biosensing algorithms according the strict quality and performance requirements.



Requirement Analysis

Architecture Design

Biosensing algorithms implementation



Measurement of acetone in breath

Our client specialized in breath analysis technology, developed a BLE-connected device for precise acetone measurement. The platform integrates mobile applications and cloud services to provide real-time health insights. Users can track their acetone levels via a mobile app, providing valuable metabolic insights.

Our team ensured a reliable, secure, and user-friendly system, which helped the customer to provide an innovative health monitoring product on the market.

Cloud Platform

Connectivity

Mobile App

Embedded SW

Laboratory AI video platform

We developed for our client, a German startup, an intelligent video system to observe mice behaviours under laboratory conditions.

The solution is mounted in every observation cage and consist of up to 4 cameras, easy and flexible cabling, customized and precise housing for cameras to containers, AI pipeline for recognition of mice, their movements and behaviour, intelligent zone monitoring with pre-calibration and pre-formatting videos.



Artificial intelligence

Embedded Linux edge modules

IP cameras

3D designing, modelling housing, mounting systems

Embedded spy cameras

Linux based CCTV Server