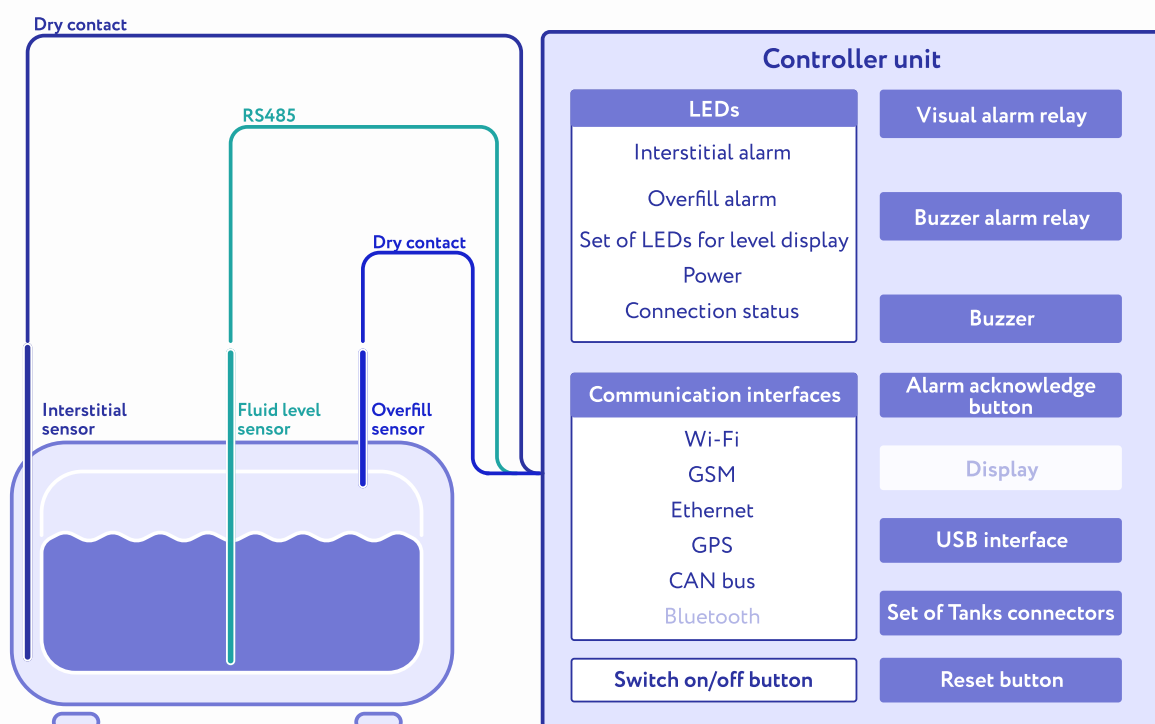
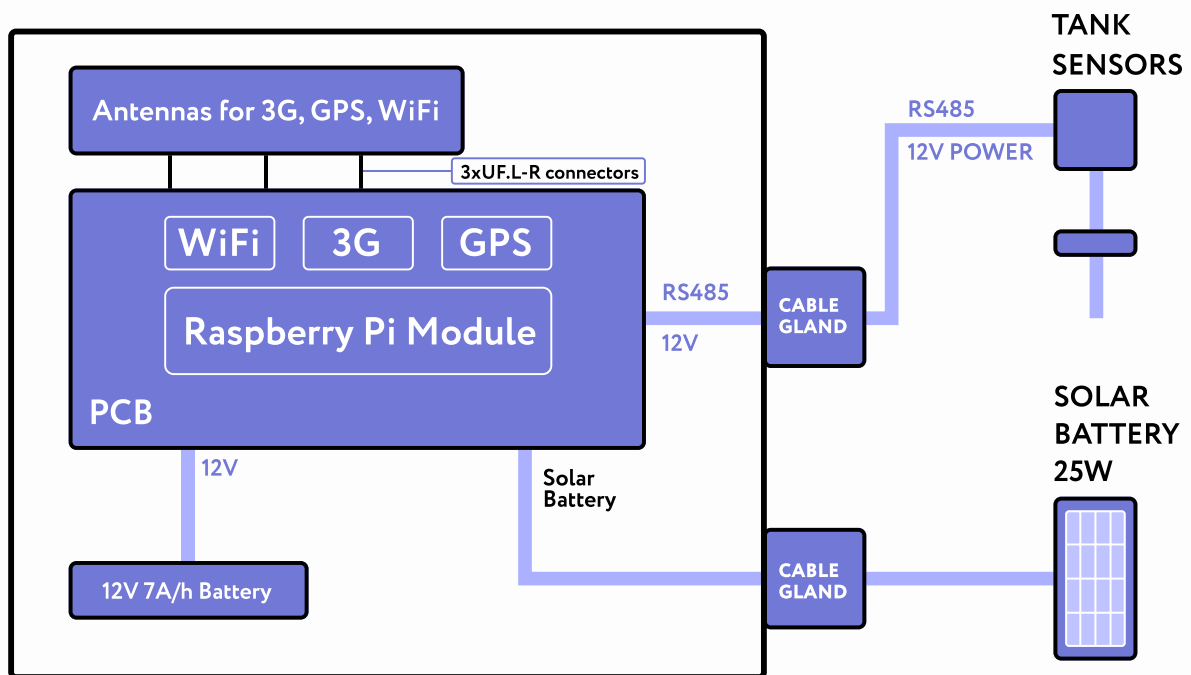


FUEL TANK MONITORING SYSTEM

Datasheet

Project objective

Create a finalized requirements specification for the low-cost fuel tank monitoring system to ensure seamless development, assembly, and production without technical and financial risks. The product is to consist of sensors, a control unit, and solar batteries for cost-effective fluid level monitoring, as well as detection of overfilling and leakages. It should send the collected data via Wi-Fi, 3G, and GPRS and be appropriate for commercial scale.



Result

The fuel tank monitoring system is architected and ready for further development, assembly, and production using off-the-shelf components. Monitoring is ensured via level, overfilling, and interstitial sensors. A comprehensive hardware system would allow the monitoring of up to 8 tanks simultaneously and can be applied for both resting and mobile fuel tanks.

Scope of work

- ❖ A detailed system description, including its architecture, assembly guide, components requirements, product use cases, and all the functional and non-functional requirements
- ❖ Selection of affordable and weather-resistant off-the-shelf components, including Raspberry Pi module, communications board, enclosure, battery, solar panels, and mounting equipment
- ❖ Estimation of the product implementation for 2k units, including prototypes, and production cost

Activities

- ❖ Market research
- ❖ Requirement definition
- ❖ Architecture design
- ❖ Product specification creation
- ❖ Components selection


About the project

Technologies

 MS Office

 Office

Project size

 6 people

Duration


1,5
months

Platform

 Embedded