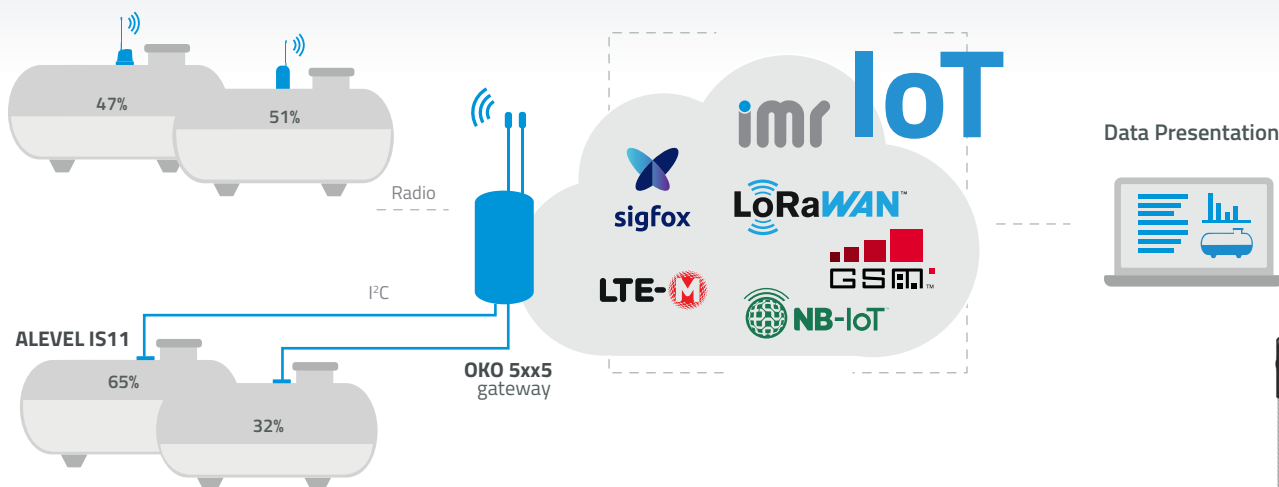




# LPG Tank Monitoring

**OKO 5xx5 xxC3 & ALEVEL IS11** Smart unit for remote tank monitoring



Wireless technology, multiple communication protocols



Long life battery - up to 10 years (depending on technology and configuration)



Robust design (IP 68)



Remote configuration and firmware upgrade



Monitoring of up to 6 tanks with one unit



Compatible with all R3D dial equipped tanks



GPS (optional)



ATEX & QPS certified



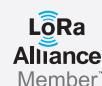
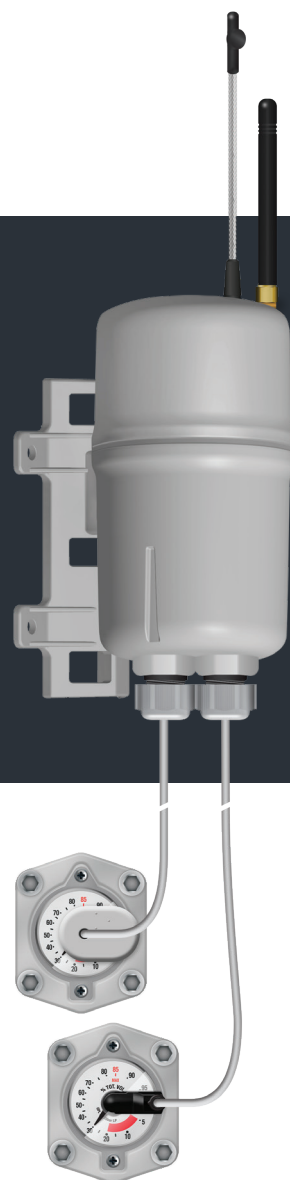
Various communication interfaces



Bluetooth low energy (optional)

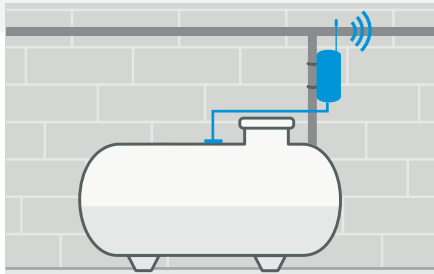
**OKO 5xx5** is a battery powered, wireless data gateway equipped with smart ALEVEL IS11 tank level sensor that connects to an R3D dial. It can also work as a master logger for radio sensors. The data from the past few months are stored and transferred to acquisition server periodically (e.g. daily at a specified time). OKO 5xx5 is adaptable and compatible with the mobile services provided by various mobile generation technologies. Its flexible design allows it to be used in different configurations supporting multiple communication protocols. The compact size of **ALEVEL IS11** enables easy installation in areas of limited space.

**IMR Remote Tank Monitoring System**, designed and developed by AIUT, is a state of the art solution for remote readout of tank level data and used among other applications for the LPG Inventory Management.

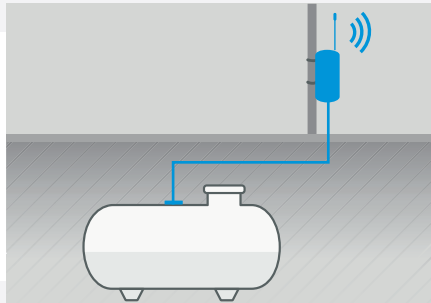


## Installation

User friendly structure of OKO 5xx5 and its HMI makes it intuitive and easy to set up. The system user, with clear-cut and simplified instructions, is able to perform all required operations and manage the system unassisted. The installation procedure does not disturb the regular work of LPG installation. OKO 5xx5 can collect data from ALEVEL IS11 sensors installed on both above and underground tanks.



OKO 5xx5 installed on the pipe and collecting the data from ALEVEL IS11 on the aboveground tank



OKO 5xx5 installed on the pipe and collecting the data from ALEVEL IS11 on the underground tank

**OKO 5xx5** can be conveniently located close to the tank, on well-maintained, gas or ventilation pipe line, at a height ensuring the best possible network coverage.

**ALEVEL IS11** is easily clicked-in into the R3D dial.



OKO 5xx5 can also be equipped with Bluetooth Low Energy for convenient 24/7 local access to data via dedicated mobile applications. For user convenience, to support on-site installation procedures, AIUT provides access to SITA; application that helps to find the place with the best reception, assign OKO 5xx5 device to the location in the System and supervise IoT installations.

## Functional and Technical Specifications

### General Features

- Dimensions: H x H (with antenna) x D: 100mm x 170mm x 61mm
- Weight: 317g
- Cable length : 3m
- Visual state indication on diagnostic LEDs

### Communication Technologies

- 2G (GSM, SMS / GPRS)
- LTE 4G + fallback 2G (EU) / 3G (USA)
- NB-IoT / LTE cat.M / 2G
- Lora / Sigfox
- Opto Port (IEC 62056-21 standard) for local communication and easy diagnostic

### Interfaces

- RF 169MHz, 433 MHz, 869 MHz, 915 MHz (up to 6 tanks)
- GPS, BLE (optional)
- I<sup>2</sup>C cable sensors (up to 2 tanks)

### Certificates

Certified for hazardous locations (zone 0 or zone 2):

- ATEX, IECEx, QPS

The product conforms with the requirements of the applicable CE:

- RED, LVD, EMC, FCC, PTCRB, IP68

### Data Structures

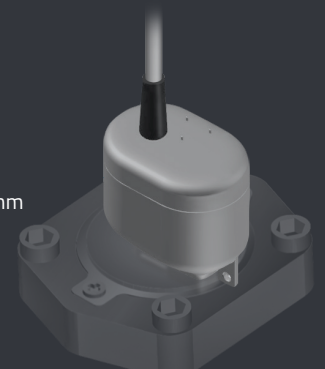
- Periodical (scheduled - autonomous, preconfigured): current readouts, OKO status, functionality, GSM signal quality, ambient temperature
- On request: current and archive readouts, diagnostics. Remote configuration and firmware upgrade
- Data transmitted in one package incorporating diagnostics and smart sensor information
- In case of missing the data in the system, OKO 5xx5 can resend the data from its own internal archive

### Power Supply

- User replaceable long life Lithium battery (up to 10 years)
- OKO 5xx5 is able to provide battery level and the estimated lifetime

### ALEVEL IS11 Sensor

- Tank level hall sensor: sensor resolution 0,1%, accuracy  $\pm 3\%$
- Ambient temperature
- Dimensions: H x L x W: 26mm x 33mm x 23mm



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