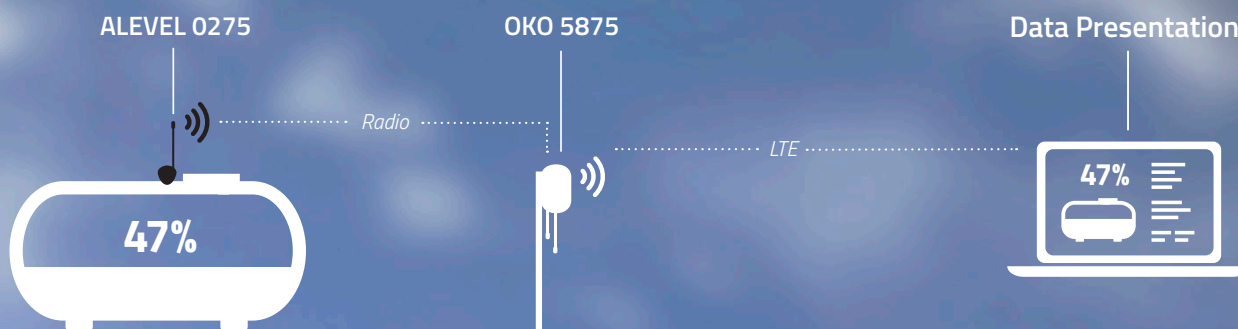




Tank Monitoring ALEVEL 0275 Tank Level Smart Sensor



Wireless smart sensor, IoT



Robust outdoor design



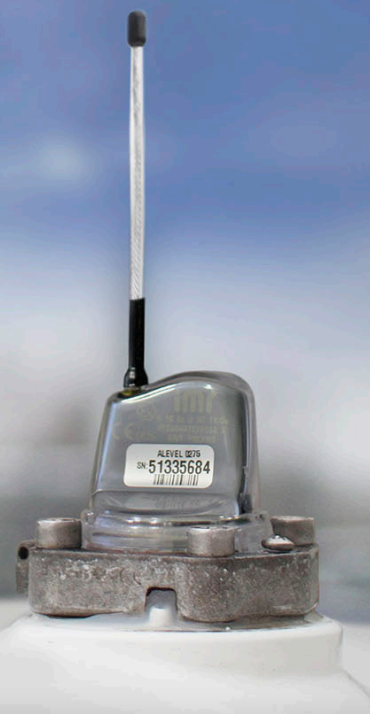
Compatible with wide range of tanks & gauge types



Certified to work in Hazardous Location Class I, Div 1 and Zone 0



Long life battery (up to 6 years)



Alevel 0275 is a smart tank sensor that works in configuration with OKO 5875 data gateway or autonomously with IoT network in Intelligent Meter Reading **IMR System**.

Alevel 0275 is the most innovative smart sensor developed for typical float arm level gauges. Engineered for direct & easy installation on various types of tanks, Alevel 0275 measures the propane levels and transmits the data over the radio link to OKO 5875 data gateway. Up to 6 Alevels 0275 can be assigned to one OKO 5875 data gateway.

IMR System, designed and developed by AIUT, is a state of the art solution for remote readouts of the tank level data and used among other applications for the Propane Inventory Management.

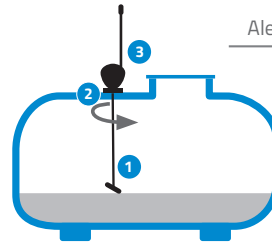


Tank Monitoring

ALEVEL 0275 Tank Level Smart Sensor

Operating Principle

The movement of the arm (1) results in the circular motion of the magnet (2) and the change of magnetic field - Alevel 0275 reads the magnetic field direction based on the Hall Effect. Obtained value is converted to an output that is indicative of the float arm position and hence the amount of fuel contained in the tank. Additionally, the built-in mechanical level indicator allows immediate visual readout regardless the electronics (3).



Alevel readout



The built-in mechanical indicator allows immediate visual readout.

Installation Process

The installation process is easy, intuitive and only requires replacing the original dial with ALEVEL 0275 using two original bolts. Simply unscrew the original dial bolts, take out the original dial and place Alevel 0275 on the gauge. **The installation procedure does not disturb the tank system performance and can be carried out during its regular operation.**



- Custom built fitting secures proper placement on all types of level gauges (such as Rochester Junior, Cotraco, GOK and REGO).
- ALEVEL 0275 is dedicted for horizontal tanks, however, it is possible to install it also on vertical tanks.
- The vertical tanks model of the ALEVEL 0275 must be configured during the production stage.

Installation Options

ALEVEL 0275 can be installed directly on majority of tank level gauges. However, in some cases special adapter or gauge replacement is necessary. All adaptors (for 2" , 4" and 8" gauges) can be ordered & delivered separately.



ALEVEL Adapter 02

plastic adapter with built in dial socket designed to install ALEVEL sensor on 2" senior type gauges



ALEVEL Adapter 04

Specially designed Accu-Max 4" gauge to fit in the ALEVEL sensor



ALEVEL Adapter 08

Specially designed Accu-Max 8" gauge to fit in the ALEVEL sensor

Functional and Technical Specification

General Features

- Weight: 1.4 oz (41g)
- Dimensions : H (with antenna) x W x D: 4.7in (120mm) x 1.8in (46mm) x 1.8in (45mm)

Power Source

- Long lifetime (up to 6 years) Lithium battery
- ALEVEL 0275 is able to provide battery level and the estimated lifetime

Communication

- Radio frequency 915MHz ISM band, 1mW
- Radio range: 656ft (200m) for above-ground tanks, 65ft (20m) underground for 1mW transmission
- Frequency, channel, output power can be adjusted to local requirements
- EMC, R&TTE, FCC Compliant

Environmental Parameters and Certifications

- Operating temperature: -40°F (-40°C) to 140°F (60°C)
- IP68 – can work submerged in 1.7 ft (0.5 m) water deep
- FCC: 15C
- IECEx: Ex ia IIB T3 Ga
- QPS: Hazardous Location Class I, Div 1 and Zone 0

Sensor & Readout Data

- Data trasmitted over radio link every 3 minutes
- Trasmitted data: tank level, temperature, battery status
- Resolution 1%, the total accuracy of 5%
- Ambient temperature sensor, the accuracy of + -37°F (+- 3°C)
- Operation parameters can be changed remotely (via RF commands sent through OKO 5875).



ALEVEL 0275 with optional protective