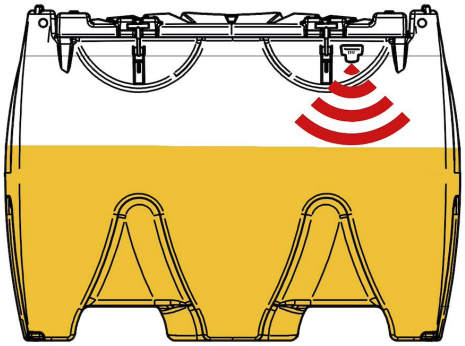
Emil Level

Remote control system for monitoring the fuel level in the tank

NEW



Description

EMIL-LEVEL is an innovative **laser sensor** designed **to remotely monitor the liquid level inside a tank** with high precision and safety, transmitting data directly to a device via Cloud and a dedicated app. Its operating principle is **electro-optical**: thanks to cutting-edge laser technology, it provides continuous and accurate fill level readings, ensuring maximum reliability even in changing conditions.

The device has been developed to ensure **extremely simple and quick installation**, with no need for wiring or external power supply: it operates completely autonomously with **long-life integrated batteries**. EMIL-LEVEL can be used with diesel and AdBlue® and it is compatible with tanks of various capacities and sizes:

- transportable tanks
- fixed storage tanks
- generator sets

Thanks to **NB-IoT / Cat-M connectivity**, **built-in GPS**, and the dedicated **mobile app** (available for Android and iOS), level monitoring can be done anytime, anywhere. All data is sent to the Cloud, which keeps the app updated, allowing users to check real-time operating conditions.

It is an advanced yet practical system, designed to make tank management safer, more efficient, and more connected.

Main features

- High-precision level measurement via laser sensor
- Automatic readings every hour, even with tilt up to ±10°
- Integrated GPS geolocation
- Remote control via Android / iOS app with NB-IoT / Cat-M technology
- Data backup for up to 7 days offline (150 readings) with automatic sync upon network recovery
- Powered by 2 easy-to-replace LR14 1,5v-type batteries
- Integrated NFC for fast local and online readings
- Display of reserve thresholds (yellow 10-20% / red <10%)
- Complete daily log with reading history, levels, and GPS location
- eSIM data subscription included for 2 years, renewable directly via the app

COMPATIBILITY LIST

- Carrytank®
  - Carrytank® 150
  - Carrytank® Pick-up 220
  - Carrytank® 330
  - Carrytank® Pick-up 330
  - Carrytank® CTK 330
  - Carrytank® 440
  - Carrytank® Pick-up 440
  - Carrytank® 400+50
  - Carrytank® Pick-up 400+50
  - Carrytank® CTK 600
  - Carrytank® CTK 900
  - Carrytank® CTK 900+100
- Traspo®
  - Traspo® 250
  - Traspo® 380
  - Traspo® 450
  - Traspo® 620
  - Traspo® 910
  - Traspo® Inox 330
  - Traspo® Inox 910
  - Traspo® Doppelwand 980

- Tankube
  - Tankube 440
  - Tankube 960

- Emilcube

- Giantank®

- Horizontal Tank Fuel 110% bunded (entire range)

- Vertical Tank Fuel 110% bunded (entire range)

- Double-wall vertical Tank Fuel (entire range)

- Horizontal GE Tank (entire range)

- Vertical GE Tank (entire range)

- Quioil

- Bluetank

Outfittings

TECHNICAL SPECIFICATIONS AND ADVANCED FEATURES

Hardware

- Sensor type: Laser
- Reading frequency: 1/h (automatic)
- Communication: NB-IoT / Cat-M
- Online operation: via eSIM
- Data backup: up to 7 days offline (150 readings)
- Installation thread: 1.5” and 2” Gas Thread / Glass-filled Nylon
- Power supply: Powered by 2 easy-to-replace LR14 1,5v-type batteries
- GPS: Integrated geolocation
- NFC: Compatible with Android / iOS mobile app
- Maximum reading height: 3 m
- Operating temperature: -10°C to +55°C

Software functions

- App available on Google Play Store and Apple Store
- Creation of company and personal accounts using passkey, for secure and shared sensor management
- Readings based on custom or standard centimetric table for standard tanks
- Option to set calibration OFFSET for special tanks
- Smart automatic reading:
    - The sensor takes a measurement every hour (low energy consumption)
    - Data is sent to the Cloud (high energy consumption) only if:
        - there's a variation in liquid level, or
        - the sensor is moved for more than 5 minutes (measurements resume after 30 minutes of inactivity).
    - If no level or position changes occur, the previous reading remains valid → significant battery savings.
    - To avoid malfunction doubts, data is sent to the cloud every two days even without changes.
- Offline mode: stores up to 150 readings and automatically syncs them when the network is restored
- Standby mode, which disables automatic readings, can be enabled/disabled via the app with an NFC tap, either continuously or according to a scheduled calendar
- Multiple localization of several EMIL-LEVEL devices installed in the same location
- Forced GPS reading when required
- Tank inclination detection:
- Reliable readings up to ±5°, partial between ±5° and ±10°, blocked beyond ±10°
- Temperature measurement associated with each valid reading
- Reserve level notification
- List of the last 150 readings with level and GPS position
- Manual level reading:
    - Local Manual (NFC): visible only on the smartphone used for the TAP
    - Online Manual (NFC): also sent to the Cloud and visible to all company users
- Five available languages: Italian, English, Spanish, French, German