SMS Tankalert

Specification

Characteristic	Transmitter
Dimensions	101mm (W) x 93mm (L) x 150mm (H) ±1mm
Weight	530g including 4 x C size batteries/290g without batteries
Housing Material	UV Stabilized Polypropylene (compatible with Oil)
Operating Temperature	-10°C to 50°C **(Note 1)**
Storage Temperature	-30°C to 60°C **(Note 1)**
Altitude Range	<2Km above sea level
Environmental Protection	IP67 – Outdoors
Radio Frequency	Tri-Band GSM/GPRS (Quad band available)
Gauge Type	Ultrasonic
Ultrasonic Range	>12cm to <3M **(Note 2)**
Ultrasonic Signal Diversion	30° **(Note 3)**
Ultrasonic Resolution	±1cm
Accuracy	Typically ±2cm from 12cm to 3m
Material compatibility	**(Note 4)**
Power requirements	4 of Type C LR14 Alkaline 1.5V (fitted)
Battery life	> 5 Years **(Note 5)**
Humidity range	15% - 95%

Accessories

SIM Card	Options available
Tank mounting options	Fit directly into 1 ¼", 1 ½" or 2" BSP existing tank connection
Bund switch option	Can be supplied with Bund switch for double skinned tanks – 3m cable

Conformity

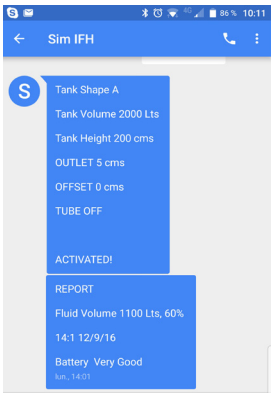
Complies with Directive 2004/108/EC for Electromagnetic compatibility and the Low voltage directive 2006/95/EC for product safety and the R&TTE directive 1999/5/EC for radio. Compliance was demonstrated to the following specifications as listed in the official journal of the European Communities.

EN 55022,A1,A2	Limits and methods of measurement of radio disturbance characteristics of information technology equipment.
EN 61000-4-2/3	Electromagnetic compatibility
EN 301 489-1	ERM and EMC standard for radio equipment and services Part1
EN 301 489-7	Electro-magnetic Compatibility and Radio Spectrum Matters (ERM); Electro-magnetic Compatibility (EMC) Standard for Radio Equipment and Services; Part 7: Specific Conditions for Mobile and Portable Radio and Ancillary Equipment of Digital Cellular Radio Telecommunications Systems (GSM and DCS)
EN 301 511	Global System for Mobile Communications (GSM); Harmonized EN for Mobile Stations in the GSM 900 and GSM 1800 Bands Covering Essential Requirements Under Article 3.2 of the R&TTE Directive (1999/5/EC)
ETSI EN 301 489-3	Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC)
RoHs Compliance	Yes

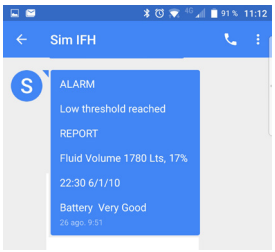
Note 1: Storage and operation above 20°C may reduce battery life. Minimum distance measured is derated with temperatures <0°C.
Note 2: Based on a measurement to a flat liquid target of size 30cm².
Note 3: The maximum spatial diversion of the ultrasonic signal will be < 30° from the central axis of the transducer.
Note 4: Suitable for use in tanks for the storage of water diesel fuel, kerosene, gas oil types A2,C1,C2 and D as defined by BS2869.
Note 5: Based on 8 GPRS messages per month in standard configuration at a location with adequate GPRS coverage.

(*) Magnet activation point or 'Hot-spot'

SMS example 1



SMS example 2



GSM Tank Sensor is a flexible and configurable battery operated liquid level sensor with integrated GSM modem.

Features:

- Liquid level monitoring for tanks:
  - Fuel tanks – Oil, diesel, kerosene, water, waste oil,
  - Fixed or portable tanks
  - Vertical or horizontal cylindrical tanks
  - Height range: 0,5 mt - 3 mt.
  - Volume range 100 - 65.535 litres
- Ensure continued supply
- Optimise delivery or collections
- Long life battery management concept
- Programmable alarms:
  - Full alert
  - Empty alert
- Monitoring each 15 minutes
- Programmable SMS reporting interval (2 hours– 1 month)

Benefits:

- Accurate, reliable tank level monitoring
- GSM/SMS wireless communication
- Alarm and continuous inventory management
- Programmable SMS reporting interval
- Remote configurability (by local activation from sensor "hot spot")
- Easy to install
- 1 year warranty
- Smart and easy SMS information delivery without extra cloud data maintenance or fee needed

SOLUTION FOR RESERVOIRS WITH OBSTACLES:

Waveguide Mode Operation:

SMS Tankalert can be mounted and programmed at installation site with a 32 mm OD tubing (not included). This avoids any ultrasonic read error in the case of an obstacle is the inner tank (suction pipe, not regular tank walls, etc ...) avoids the correct ultrasonic function, as the reading is done inside this tube.

inpro® research & development

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