



## GSM 3G UC15 Secure Ultrasonic Sensor

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

### Applications

- Liquid level monitoring
  - Fuel – Oil, Kerosene
  - Water
  - Waste Oil
- Fixed or portable tanks
- Ensure continued supply
- Optimise delivery or collections
- Spot and continuous inventory measurement
- Programmable alarms
  - Full alert
  - Empty alert
  - Spill alert (bundled tanks)
- 24/7 monitoring



### Benefits

- Accurate, reliable tank level monitoring
- GPRS/SMS Communication
- Spot and continuous inventory management
- Programmable GPRS/SMS reporting interval
- Compatible with Microsoft Azure Cloud:
  - IoT-Hub ready
  - Secure (TLS/SSL)
- Remote configurability
- Easy to install
- Minimum 1 year warranty
- CE Conformance and ROHS Compliant

# Specification

Characteristic	Transmitter
Dimensions	101mm (W) x 93mm (L) x 150mm (H) ±1mm / 4" (W) x 3.7" (L) x 5.9" (H) ±0.04"
Weight	530g(1.2lb) including 4 x C size batteries/290g (0.64lb)without batteries
Housing Material	UV Stabilized Polypropylene (compatible with Oil)
Operating Temperature	-10°C to 50°C / -4°F to 122°F ( <b>Note 1</b> )
Storage Temperature	-30°C to 60°C / -22°F to 140°F ( <b>note 1</b> )
Altitude Range	<2Km/1.25 Miles above sea level
Environmental Protection	IP67 – Outdoors
Radio Frequency	900/2100MHz@UMTS 900/1800MHz@GSM 2G/3G dual band (EU: UC15EB Module)
Gauge Type	Ultrasonic
Ultrasonic Range	>12cm to <4m / >4.7" to <157" ( <b>Note 2</b> )
Ultrasonic Signal Diversion	30° ( <b>Note 3</b> )
Ultrasonic Resolution	±1cm/±(0.4")
Accuracy	Typically ±2cm from 12cm to 3m / ±0.78" from 4.7" to 118"
Material compatibility	( <b>Note 4</b> )
Power requirements	4 of Type C LR14 Alkaline 1.5V (fitted)
Battery life	> 5 Years ( <b>Note 5</b> )
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/68°F may reduce battery life. Minimum distance measured is derated with temperatures <0°C/32°F.

**Note 2:** Based on a measurement to a flat liquid target of size 30cm<sup>2</sup>/4.7"<sup>2</sup>

**Note 3:** The maximum spatial diversion of the ultrasonic signal will be < +/-15° 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.