INDUSTRIAL TANK LEVEL INDICATOR

PORTATANK®

INTRODUCING PORTATANK®

Portatank® is the ideal solution for non-invasively identifying levels of water and clean liquids in large industrial tanks
An innovative handheld tool to accurately identify the level of contents in large containers.

- **Type** – Portable Ultrasonic Liquid Level Indicator
- **Function** – Designed for inspecting the liquid levels of tanks with widths between 0.5 - 15 metres
- **Part Number** – 3141184-TANK

Quick Testing	**Versatile**	**Non-Invasive**
Very clear LED results for liquid indication	Applicable for a wide range of tanks & liquids	Testing outside tanks through the outer wall

ADVANTAGES VS. OTHER LEVEL METHODS

QUICK: easy to use, instant liquid level detection

ACCURATE: to +/-10mm with very clear LIQUID / NO LIQUID results

SAFE: Non-invasive, non-intrusive – suitable for testing hazardous liquids

EFFICIENT: Handheld, portable device – no installation time or costs required

NO RISK: Measures levels of fluids, particularly hazardous liquids, where the tank cannot be opened for safety reasons and a float gauge cannot be installed

NO DOWNTIME: liquid level measurement can be taken when the tank systems are "live"

ADAPTABLE: can work with liquid levels that fluctuate over time

FLEXIBLE: suitable for a wide range of cylinders & liquids

APPLICATIONS

Quickly, safely and easily identify the liquid level in containers between 0.5-15 metres diameter range.

Tank Diameter Range: 0.5 metres – 15 metres

Tank Wall Material: Most common types such as steel, plastic, aluminium etc.

Liquid types: Most standard industrial liquids. E.g. water and oils, if you are unsure please ask our experts

- **For tanks that already have an in-built level system**, our portable non-invasive technology allows operators to verify liquid levels in tanks with existing in-built level indicators, as some of these can be from an old technology that can be inaccurate such as float level or sight-glass methods.
- **For tanks without any form of liquid level indication**, the Portatank® can detect the liquid levels non-invasively through the outer walls of the tank.
- Portatank® requires no installation for either application

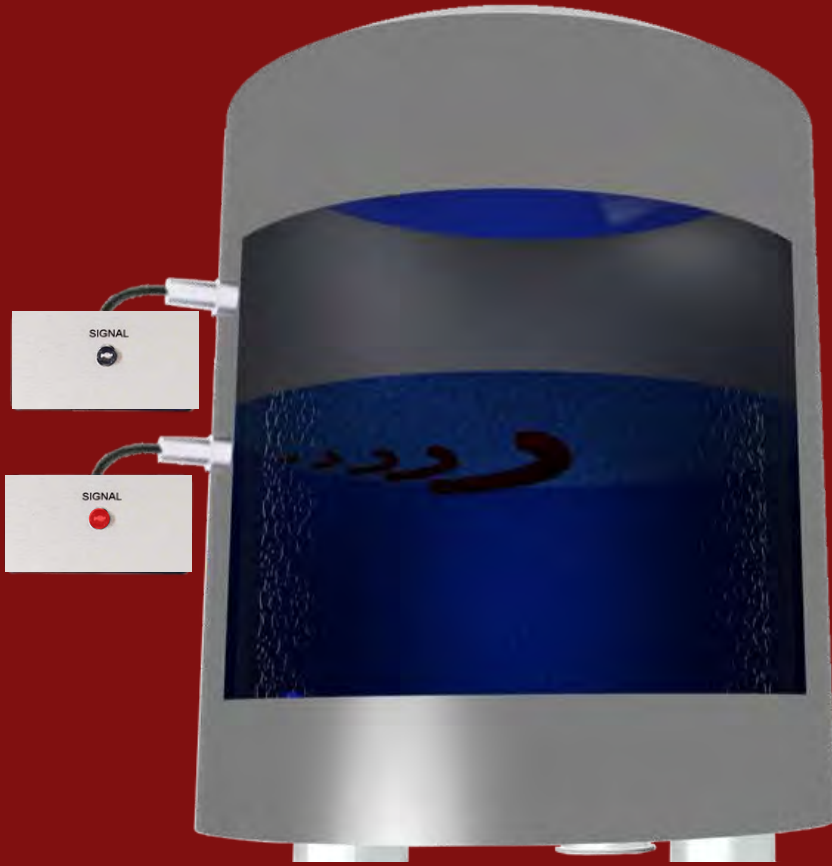|		
Fire Safety Engineering	Food & Drink Processing	Pharmaceuticals
Oil & Gas		Water Treatment Facilities
Chemicals	Petrochemicals	Get in touch with your requirements to find out how we can help your application!

HOW TO TEST: 3 SIMPLE STEPS

After unit has been set up for the application.

1. Apply ultrasonic gel to the tank wall, connect the sensor to the unit and turn the unit on

2. Place the sensor on the tank wall starting from the upper section, then move the sensor down in steps.

3. The red LED indicator will light up when liquid level is encountered

HOW DOES PORTATANK® WORK

Clear results: The red LED indicator will light up when liquid level is encountered. Clear LIQUID / NO LIQUID indication.

Working principle: Ultrasonic pulse-echo measurement. An ultrasonic signal is transmitted through the walls, across the tank's contents and its reflection is measured to determine the presence or absence of liquid.

Troubleshooting made easy: by connecting the included oscilloscope

ADVANCED TROUBLESHOOTING

Handheld Oscilloscope Specification

- Screen size: 2.4 inch
- Bandwidth: 30 MHz
- Sampling rate: 200 MS/s
- Vertical sensitivity: 50mV – 100V
- Time range: 50S – 15nS
- Trigger mode: Single / Normal / Auto
- Maximum test voltage: 1X = 60V, 10X = 800V
- Voltage precision: +/- 2%
- Battery: 1200 mAh, rechargeable via micro
- USB
- Standby time: 3 hours

WHY USE OSCILLOSCOPE:

1. Allows you to SEE the ultrasound signal travelling across the tank
2. Helps you SELECT the optimum parameters for liquid level detection specific to your tank, enhances accuracy and reliability
3. Assists you in UNDERSTANDING the underlying issues associated with any unsuccessful measurement

WHEN IS THE OSCILLOSCOPE REQUIRED:

1. Setting up the Portatank® with your application for the first time: To select the optimum parameters for your tank for enhanced accuracy and reliability
2. Investigate the underlying issues if an unsuccessful measurement is made: To view the ultrasound signal and identify the appropriate solution

DISCLAIMER: THE OSCILLOSCOPE IS NOT REQUIRED DURING NORMAL OPERATION OF THE PORTATANK- ONCE THE UNIT IS SET UP TO WORK FOR YOUR APPLICATION.

TECHNICAL SPECIFICATIONS

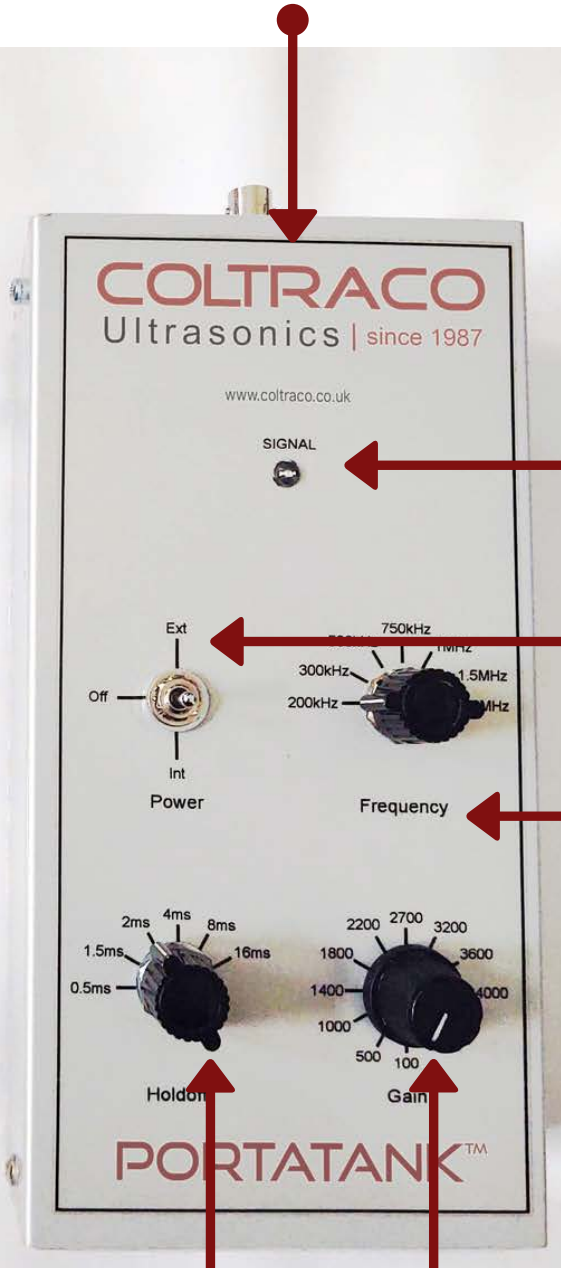|	
Dimensions	Main Unit: L (20cm) x W (10cm) x D (7cm)
Weight	Main Unit: 750 grams (with batteries)
Accuracy	+/- 10mm
Verifiable Agents	Water and most clean liquids (get in touch for more details)
Sensor options	200 kHz, 500 kHz, 1 MHz, 2 MHz (depending on application) connected by BNC connector
Power	8 x 1.5V AA batteries
Display	Liquid Level Detection: Visual LED indication
Operating Temperature	Ambient temperature range: -20°C to +70°C
Warranty	Main Unit: 3 Years Warranty Sensor: 1 Year Warranty
Package Contents	1 Main Unit 1 Sensor 1 Handheld Oscilloscope (+ BNC cable & Micro USB Cable) 1 Robust Carrying Case 1 Calibration Certificate 2 Operating Instructions 1 Ultrasonic Gel
Manufacturing Location	Coltraco Ultrasonics, United Kingdom

PACKAGE

Comes in a ready to go package so that your servicing teams will be able to start testing as soon as they have read the Operating Instructions.
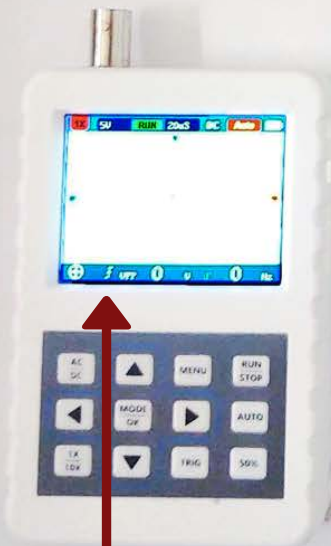
Sensor & Cable

Main Unit

LED indicator

Power (Off / external 12V DC / internal batteries)

Frequency (multiple options depending on application, please refer to manual)

Oscilloscope

Holdoff Time (to control the period when the device starts to listen for the echo, please refer to manual)

Gain (to increase incoming signal strength to trigger LED indicator, please refer to manual)

Also included but not pictured:
- Carrying Case
- Instruction Manual
- Calibration Certificate
- Ultrasonic Gel
- BNC cable (for connecting oscilloscope)
- Micro USB cable (for charging oscilloscope)

CUSTOMER CARE COMMITMENT

Technical Support provided free of charge for the unit's lifetime.

Every unit provided by Coltraco comes with a 3 year warranty supporting the manufacturing quality of the main unit and 1 year on sensor.

OPTIONAL PORTACARE® after sales package for Total Care maintenance.

We have local partners to support you worldwide through our global network of Partners, Distributors and ODA (Organisational Delegated Authorities).

ODAS are Service Centres which provide regional support for caliibration in UK, France, Greece, UAE, India, Singapore and USA.

Coltraco Ultrasonics — **REVIEWS**.io

"The instruments acquired by Benguella Enterises (Pty) Ltd has enabled our technicians to work faster delivering accurate undisputed test results. The staff at Coltraco has been truly most supportive and professional during the years of dealing with them. We can vouch for a..."

★★★★★ Verified Reviewer

Coltraco Ultrasonics — **REVIEWS**.io

"We have been working with Coltraco since 2009 and we are always happy to continue working togheter.
Good customer service with prompt answer from the Coltraco's team. Right time of delivery and material always received in excellent..."

★★★★★ Verified Reviewer

ISO 14001 REGISTERED FIRM

ISO 9001 Certified — UKAS MANAGEMENT SYSTEMS 8613 — ExVeritas®

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