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# PORTALEVEL™ MINI

TECHNICAL SPECIFICTIONS



# COLTRACO

Ultrasonics | since 1987

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# OUR MISSION: THE SAFESHIP™& THE SAFESITE™

We welcome you into our mission to create accurate, reliable and easy to use instrumentation, which enhances our customers' safety management.

The issue is not just about compliance with the regulations; it is about the safe ship offshore and the safe site onshore.

This helps our customers to ensure lower risk, higher protection and business continuity.

Safety for safety's sake.

# CONTENTS

- **03** PORTALEVEL™ MINI INTRODUCTION
- 04 FUNCTION
- **05** HOW THE PORTALEVEL™ MINI WORKS
- **06** ADVANTAGES
- **07** OPERATION
- **08** TECHNICAL SPECIFICATIONS
- **09** WHY BUY FROM COLTRACO?
- **10** AFTER SALES

# INTRODUCING THE PORTALEVEL<sup>TM</sup> MINI

**TYPE:** Portable Ultrasonic Non-Invasive Liquid Level Indicator

**FUNCTION:** 7th generation, modified for hands-free use

PART NUMBER: 2290334-MINI



# **FUNCTION**

The Portalevel<sup>™</sup> MINI is the 7th generation unit of its kind. It is based on the Portamarine<sup>™</sup> design with the key modification for hands-free use.

Ideal for testing in difficult to access areas where hands free use is beneficial to enable the operator to move around the area more easily.

The Portalevel® range is used for identifying the content of critical fire suppression cylinders. A wide variety of fire suppressant agents can be monitored including: CO2, Dupont™, FM-200™, NOVEC™1230, old Halons such as 1301 and 1211, FE-13™, FE-25™, FE-36™ and HFC-225 & 227.

The 7th generation models is tailored to suit those operators who want a small, compact unit for easy testing. It is more accurate (to 1.5mm+/-), quicker and safer than weighing cylinders.

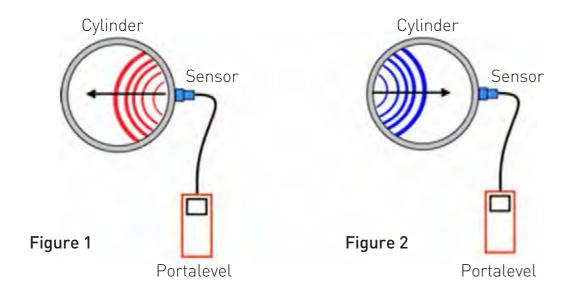
- **PORTABLE:** Lightweight small unit which comes with a durable, rugged case
- **EASY TO USE:** no formal training necessary, accessible to a wide range of audiences and is easy for existing Portalevel® operators to adapt to
- **DURABLE:** The unit is housed in a solid plastic enclosure ideally suited to protecting the internal electronics, even if the unit is lightly dropped or slightly roughly handled.
- **SPA Feature:** used to increase the power output of the unit and increase the sensitivity of the unit when registering the return signal.



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# HOW THE PORTALEVEL™MINI WORKS

- 1. The Portalevel™ MINI sends an ultrasonic signal directly into the cylinder using a sensor (Figure 1).
- 2. The sensor 'listens' to the ultrasound signal which is reflected back by the cylinder and its contents (Figure 2).
- It then automatically analyses this information and provides a readout to the user which represents how strong the received signal is.
- 4. The way the ultrasonic waves travel through different materials changes the signal which the Portalevel unit receives.
- 5. The changes in the received signal can then be used to identify the location of the liquid level in a cylinder to an accuracy of  $\pm$  1.5 mm.
- 6. There is a large change in readings from the gas phase to the liquid phase. By finding the exact point at which this change occurs the liquid level can be located.



# **ADVANTAGES**

- **HANDS-FREE:** Making servicing cylinders easier than ever in hard to access areas thanks to the eyelets which allow straps to be connected. This allows the unit to hand around the operator's neck, providing hands-free use allowing work to be completed more quickly
- **PROVEN TECHNOLOGY:** Based on the established 7th Generation Portalevel® unit which has 15,000 units operating in 105 countries
- ACCURATE: Locates liquid level to within +/- 1.5mm
- **VERSATILE:** Can test a wide range of fire suppressant agents & operates as a conventional Portalevel® unit if required
- **LED PANEL:** Extended panel of 10 bright LEDs providing indication to the Operator of the liquid level state. This allows for easy use in dark environments and highly accurate readings

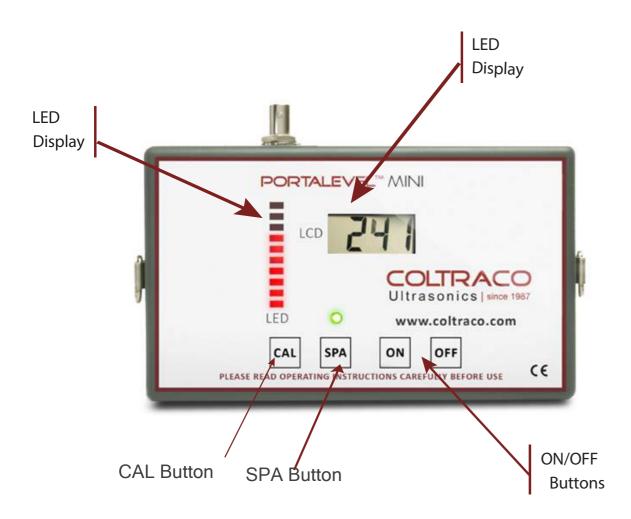


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# **OPERATION**

- 1. Remove the dirt and debris form a vertical strip of the cylinder using a damp cloth
- 2. Apply a strip of couplant gel down the chosen vertical strip
- 3. Place the sensor at any chosen position on this vertical strip where it is certain that it is above the liquid level
- 4. Calibrate the sensor to the cylinder
- 5. Move the sensor 5cm down the strip each time, stopping to record and save measurements, until the measurements reduce drastically
- 6. Move the sensor back up in smaller steps until the readings increase again.
- 7. The position at which this occurs is the liquid level

This process outlines how to find the liquid level. Please refer to the Operating Instructions to find out more about how to record and download the readings



# TECHNICAL SPECIFICATIONS

Manufacturer	Coltraco Limited, 46 Mount Street, London, W1K 2SA, UK
Accuracy	+/- 1.5 mm
Verifiable Liquids/Gases	CO2, FM-200, Novec, Halon, Fe-13, Fe-25, NAF SIII and Halon substitutes are typical amongst many others –please ask for a specific liquid
Dimensions	200x100x43mm
Weight	328 g; 420g with batteries included
Power Supply – Battery	4 x AA 1.5V batteries, approx 10 hour battery life
Controls	On, Off, SPA, Cal
Approvals	Coltraco is ISO 9001 approved; RINA Approved
Government NCage Code	KD983 – Coltraco Limited
Part Number	2290334-MINI
Operating Temp & Humidity	-10C to +70C; Humidity range 5% to 95%. Some agents can restrict the operating temperature range based on their chemical properties.



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# WHY BUY FROM COLTRACO?

### STORY OF COLTRACO

Since 1987 Coltraco Ultrasonics have been designing and manufacturing ultrasonic instrumentation for safety and servicing.

# **READY-TO-GO PACKAGE**

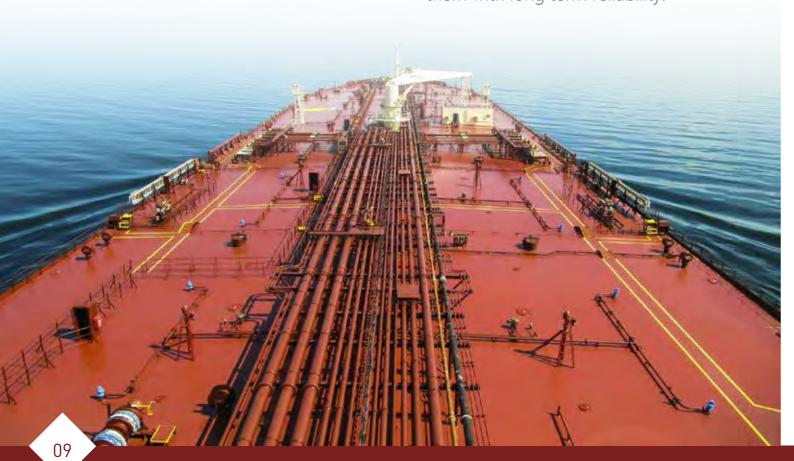
The Portalevel™ Datalogger comes in a ready-to-go-package complete with items required to carry out liquid level indication with recording capability: main unit, carrying case, sensor set, cables, accesso-ries and instruction manual.

# **OUR COMMITMENT** TO SAFETY

We are dedicated to being a Safeship™ and Safesite™ company, encouraging safety for safety's sake. Our Portalevel™ Datalogger is part of our range of products and systems which are all designed to offer alternative methods to traditional means of testing, for example fire suppression systems, watertight integrity, flow testing and more.

## **QUALITY**

All of our products are carefully hand built and undergo rigorous quality testing to ensure they meet the high standards expected by our customers, and provide them with long term reliability.



# OPTIONAL ACCESSORIES

SENSOR: Additional sensors are available to purchase as a back-up replacement

MULTI-BANK EXTENSION ROD: It operates with exactly the same principles of the Sensor and has simply been adapted to provide an easy method for testing the 2nd, 3rd or 4th row of cylinders in a Banked Fire Suppression System. The extension rod comprises 3 major components: the "L" shaped applicator, extension sections and handle.

PORTATHERM®: We are able to supply small portable infrared non-contact thermometers which are simple, accurate and reliable for testing in warm climates.

GAS MONITORS: We also supply various types of hand-held monitors, to minimize risk when testing in environments where gas has potentially leaked.

# COLTRACO CUSTOMER CARE

- 3 year warranty
- Guaranteed against defects in materials & workmanship
- Technical Support for the life time of the equipment via telephone/email
- See terms and conditions for details

# OPTIONAL: PORTACARE®

In addition to our standard after sales customer care, you can upgrade to our Portacare <sup>®</sup> plan. This is our 3 - 5 year total care maintenance package which will:

- Cap the cost of ownership during the term you choose
- Guarantee maximum operational ability so your equipment is ready to go whenever you need to test
- Back-up units provided in the event of fault
- We promise to support you above and beyond the warranty
- Providing you with peace of mind so you can have confidence your equipment is well maintained















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