



PORTAMARINE®  
TECHNICAL SPECIFICATIONS

**COLTRACO**  
Ultrasonics | since 1987

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- TYPE - PORTABLE ULTRASONIC MARINE LIQUID LEVEL INDICATOR
- PART NUMBER - 2290334-COPM
- NATO STOCK NUMBER: 6680-99-192-2735
- NCAGE: KD983

# IDEAL FOR MARINE ENVIRONMENTS

Specifically designed for Marine Applications

Used onboard commercial vessels & Marine Service Companies

RINA Classification Society Approval

Allows vessels to comply with IMO SOLAS FSS Codes



The Portamarine® is an upgraded version of Coltraco Limited's previous Portamarine generation, providing an updated solution, tailored specifically to Marine requirements. Over the last 27 years, Coltraco Limited has had the pleasure of supporting the Marine Industry with the ability to inspect fixed fire suppression systems in a quick and safe manner and we currently have equipment onboard 9,000 commercial vessels worldwide and many hundred Marine Service Stations globally. We hope this equipment will help to grow that experience and provide new, improved solutions for our customers.

The Portamarine® has been specifically designed for testing multi-banked CO2 Cylinder Fire Suppression System Cylinders, stored in 2, 3 or 4 rows deep, to make the process as quick as possible to complete. It can also operate on the vast majority of other fire system agents including FM200™, NOVEC 1230™, Halon (for Defence applications) and all other clean agent systems. The equipment is fully Classification Society Approved, accurate to +/-1.5mm and proves a significantly safer and quicker solution when compared to weighing as a means of identifying cylinder content.



# TECHNICAL SPECIFICATIONS

MANUFACTURER	Coltraco Limited, UK
MODEL	Portamarine
PART NUMBER	2290334-COPM
NATO STOCK NUMBER	NSN 6680-99-192-2735
POWER SUPPLY	4 x AA 1.5V batteries, Approx 10 hour battery life
ACCURACY	Proven accurate to +/-1.5mm (0.063")
WEIGHT	328g (420 with batteries included)
DISPLAY	LCD Numeric Digital and LED display
CONTROLS	ON, OFF, SPA, CAL
LIQUID GASES APPLICABLE	CO2, FM200™, NOVEC 1230™, Halon, Clean Agents, Water Oils & a variety of other liquids
OPERATING TEMP & HUMIDITY	-10C to +70C, Humidity range 5% to 95%. Some agents can restrict the operating temperature range.
SENSOR	Ultrasonic, single crystal, piezoelectric, transceiver sensor. Fitted with hand enclosure and magnetic head
WARRANTY	3 Year Warranty provided with the equipment and full replacement service in the event of any failures. 1 Year Warranty provided on Sensors.



## KEY FEATURES

### Multi-Banked Extension Rod

Available in two variants, the extension rod allows the rear rows of Marine CO2 systems to be easily reached and tested.

- STANDARD ROD - 20mm - Ideal for the vast majority of applications & Standard spacing between cylinders.
- MINI-EXTENSION ROD - 12mm - The compact, lightweight variant (pictured above). At only 14mm wide, able to work on even the most tightly packaged cylinder systems.

### SPA Feature

The SPA is used to increase the power output of the unit and increase the sensitivity of the unit when registering the return signal. This allows for continued operation on poor condition, rusty or thick walled cylinders.

### CAL Feature

The unit has an auto-Cal feature which, at the touch of a button, allows an operator to set the unit up correctly for each cylinder, taking into account the wall thickness, paint or coating on the cylinder, dimensions, agent and all other variable involved. This has a number of benefits:

1. User Error is reduced as there is no manual tuning required which can often corrupt readings if done incorrectly.
2. Dramatically reduces the time required to carry out testing as engaging feature only takes a matter of seconds
3. Easy for the operator as testing process very simple to understand and carry out.

### Hands free Operation

Each model has eyelets to allow straps to be connected, for the unit to hang around the operators neck. This provides complete hands free operation for the technician, allowing work to be completed quicker.

### LED Panel

Comes with an extended panel of 10 bright LED's providing indication to the Operator. This allows for easy use in dark environments and highly accurate readings.

### Durable

The unit is housed in a solid plastic enclosure, ideally suited to protecting the internal electronics, even if the unit is dropped or roughly handled. The equipment comes with a 3 Year Warranty but frequently lasts many years longer.



# MARINE SERVICE STATION APPLICATIONS

For Marine Service stations or companies inspecting fixed Marine CO2 Fire Suppression systems, the Portamarine® provides an invaluable tool. Being very quick to operate, highly accurate and Classification Society Approved, the Portamarine allows operators to complete their jobs quickly and accurately.

As this provides a better solution compared to weighing, there is no longer a need to remove the cylinder from the manifold. This is not only safer but saves a vast amount of time, especially on very large systems.

The equipment can be strapped around the operators neck, allowing two free hands to work and a series of bright LED's make operating in dark or cramped environments much easier. With the capability for easily measuring 2, 3 or 4 rows of CO2 cylinders, the equipment is specifically tailored to the needs of Marine applications.

# SHIPPING COMPANY APPLICATIONS

Coltraco Limited has the pleasure of having Portamarine® equipment working onboard 9,000 vessels around the world. Here the Portamarine® provides a unique capability onboard to help protect the vessel, cargo and crew from potential damage.

It is common to come across Marine CO2 Fire Suppression systems where the cylinders have discharge or leaked, which leads to a reduction in the effectiveness of the system as a whole. This can easily go undetected in the interim period between annual inspections and by introducing an onboard maintenance procedure using this equipment, the Crew, Managers & Owners can have confidence the system will operate effectively if required to do so.

This can also lead to significant cost and time savings. If during Annual Inspections, cylinders are found to have discharged and replacements are needed, vessels could be stuck in port,

unable to leave until replacements arrive. This can cost many days sailing not to mention additional costs incurred whilst waiting. By introducing a regular maintenance program, the Crew can check prior to annual inspections, identify any cylinders that need replacing and thus allow for preparations to take place, leaving no room for surprises.

The Portamarine® is fully Classification Society Approved and helps owners comply with IMO, SOLAS Regulations as described here:

## COMPLIANT WITH IMO SOLAS REGULATIONS



EXTRACT FROM IMO & FSS CODES:  
International Maritime Organisation (IMO)  
Safety of Life at Sea (SOLAS)  
International Fire Safety Systems (FSS) Code

CHAPTER 5 - FIXED GAS FIRE-EXTINGUISHING SYSTEMS  
1. Application - This chapter details the specifications for fixed gas fire-extinguishing systems as

required by chapter II-2 of the Covention  
2. Engineering Specifications  
2. 1 General  
2. 1. 1 Fire-Extinguishing Medium  
  
2. 1. 1. 3 MEANS SHALL BE PROVIDED FOR THE CREW TO SAFELY CHECK THE QUANTITY OF THE FIRE-EXTINGUISHING MEDIUM IN THE CONTAINERS



# OPERATION

## HOW DOES PORTAMARINE® WORK?

1. Ensure the surface of the cylinder is clear and free from debris. Select a portion of the cylinder clean from rust and peeling paint.
2. Place the sensor / extension rod near the top of the cylinder, below the shoulder.
3. Press & Hold the 'CAL' button. The panel of 10 x LED's will all ignite.
4. Move the sensor / extension down the cylinder in small steps of a few inches.
5. The LED's will remain ignited whilst the unit is detecting gas (i.e. above the liquid level).
6. When the LEDs go off, the sensor / extension rod has identified Liquid.
7. Move the sensor / extension rod back up the cylinder in very small steps to identify the exact interface.
8. When the LED's come completely back on, this is the exact liquid level.

## INTERACTIVE TRAINING PROGRAMME

To aid new users learn how to use the Portamarine® and to provide the best methods for existing users to make the most of the equipment we have developed a training programme available both on DVD and online. [www.youtube.com/user/ColtracoVideos](http://www.youtube.com/user/ColtracoVideos)



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# OPTIONAL EXTRAS

## ANCILLARY PARTS

### Additional Sensors

WET SENSORS – For rugged applications such as poor conditioned or rusty cylinders  
DRY SENSOR – For Standard Applications

### Multi-Banked Extension rod

STANDARD ROD – 28mm wide, normal build. Ideal for vast majority of applications.  
SLIM LINE ROD – only 14mm wide and lightweight, ideal for where cylinders are tightly packed.

### Portatherm™

Infrared thermometer providing quick indication of ambient temperatures.

### Gas Monitors

We also provide a wide range of Portable Gas Monitors when required.

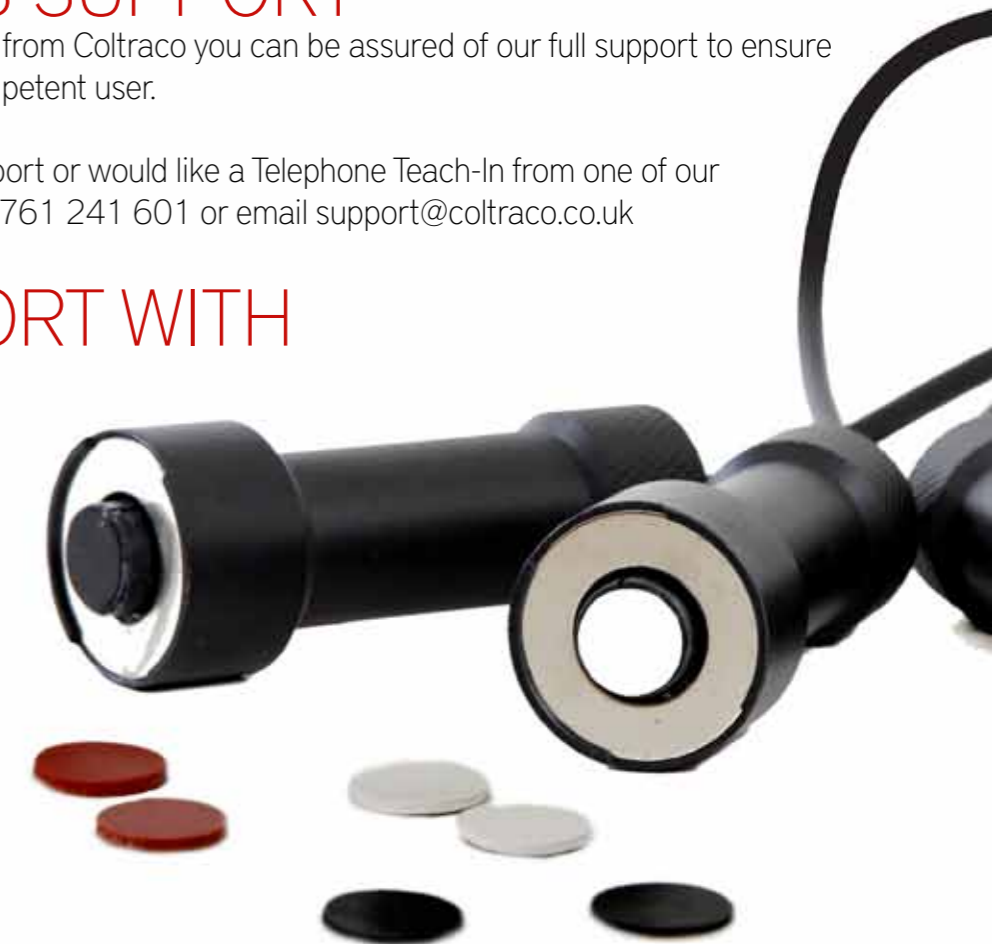
## AFTER SALES SUPPORT

By purchasing the Portamarine® from Coltraco you can be assured of our full support to ensure you become a confident and competent user.

If ever you require additional support or would like a Telephone Teach-In from one of our Technical Team please call +44 1761 241 601 or email [support@coltraco.co.uk](mailto:support@coltraco.co.uk)

## TOTAL SUPPORT WITH PORTACARE®

3 or 5 Year Total Maintenance Program to completely cap the cost of ownership and guaranty maximum availability. Back up units provided in the event of unit breakages with beyond Warranty levels of support.



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