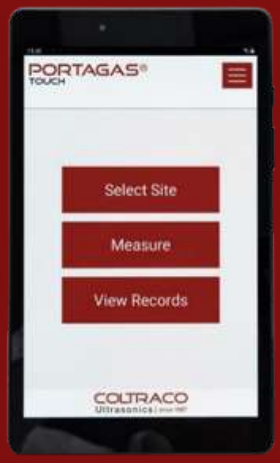
COLTRACO
Ultrasonics | since 1987



PORTAGAS®

The world's first acoustic and non-invasive pressure monitoring system

Made in the UK.

CALL +44 207 629 8475 | SALES@COLTRACO.CO.UK |
WWW.COLTRACO.COM/COLTRACO-PRODUCTS/PORTAGAS

INTRODUCING THE PORTAGAS®

Portagas® is a world's first for non-invasive, monitoring of pressurised, inert gas systems. It is a unique and innovative solution for monitoring the pressure of pressurised, non-liquified Inert gas and compressed gases cylinders, such as Inergen®, Nitrogen, Oxygen and Argon.
It utilises sophisticated signal processing and acoustic technology to detect even small changes in internal cylinder pressure, with better precision than the 5% required by regulations, making it a valuable tool for ensuring safety and compliance.



- **Type** – Acoustic, non-invasive pressure monitoring system, in an intuitive Android platform
- **P/N:** 3107505-GAS
- **CAGE Code:** KD983 – COLTRACO LIMITED

APPLICATIONS

- **Healthcare** - Respiratory therapy, anaesthesia, and other medical applications.
- **Pharmaceutical** - Production of medicine.
- **Food and Beverage** - Carbonation and preservation of food and beverages.
- **Power Generation** - Fuel sources for power generation and heating.
- **Oil and Gas** - Maintain pressure and prevent corrosion in oil and gas pipelines.
- **Manufacturing** - Used in welding, cutting, and other industrial processes.
- **Environmental** - Monitor and reduce greenhouse gas emissions.
- **Mining** - Mine ventilation and safety.
- **Chemicals** - Production of chemicals and fertilizers.
- **Transportation** - Alternative fuels for vehicles.
- **Agriculture** - Enrich the air in greenhouses to enhance plant growth.
- **Construction / Metal** - For welding, cutting and heating.
- **Textile** - Spinning and weaving of textile fibres.
- **Aerospace** - Pressurization and propulsion.
- **Refrigeration** - Refrigerants in commercial and industrial refrigeration systems.







FEATURES OF THE PORTAGAS®

The world's first acoustic and non-invasive pressure monitoring system



PRECISE DETECTION

Detects changes in pressure from an initial known value. These changes in pressure are adjusted for changes in temperature and used to determine precisely whether an observed change is due to temperature or a leak.

DATALOGGING

Keeps records of all tests, organised by date, time, site and cylinder. These records can easily be filtered and exported via email or USB as either a simple CSV file, or as an automatically generated PDF report.

ADAPTABILITY

Works on pressurised, seamed and seamless non-liquified inert gas and compressed gases cylinders.

REGULATION COMPLIANCE

ISO 14520-1 Gaseous fire-extinguishing systems 9.2.1.3

The storage container contents shall be **checked at least every six months** as follows: Non-liquefied gases: for inert gas agents, pressure is an indication of agent quantity. If a container shows a loss of agent quantity or a loss of pressure (adjusted for temperature) of more than 5%, it shall be refilled or replaced.

NFPA 2001 Inspection, Servicing, Testing, Maintenance, and Training 11.3.4*

For inert gas clean agents, if a container shows a loss in pressure (adjusted for temperature) of more than 5 percent, it shall be **refilled** or **replaced**.

Inergen™ or Inert Gases are stored in high-pressure cylinders (up to 100 Bar), which can experience slow seepage or accidental discharge. If the gas available is not at the design concentration, **the fire will not be extinguished**. To assess a cylinder's contents, both pressure and temperature must be considered, as they are directly related. The Portagas® calculates these automatically with no user input by combining information from the built in infra-red thermometer on the sensor with the Fill Pressure and Fill Temperature (printed on the cylinder).

This temperature-adjusted pressure is then compared with the pressure determined acoustically by the Portagas®. This allows it to recognise if a change in pressure is due to changing temperatures or loss of contents, **all with the tap of a finger.**



TECHNICAL DATA

Dimensions	**210 x 124.4 x 8mm (L x W x D)**
Unit Weight	**345g (12.17 ounces)**
Power Supply	**Rechargeable, 5100mAh Li-Po battery Micro-USB charging (charger provided)**
Reporting	**Test data in CSV file format Automatically generated PDF report Export via USB or email**
Connectivity	**Wi-Fi**
Sensor Dimensions	**Height: 70mm (2.76 in) Width: 50mm (1.97 in) Depth: 30mm (1.18 in)**
Sensor weight	**90g (3.17 ounces)**
Sensor Power Supply	**Sensor powered by the USB port on the tablet**
Sensor Sampling frequency	**32kHz**
Sensor Thermometer	**Infrared thermometer**
Sensor connectiviy	**Micro-USB**
Sensor Cable	**1m Micro-USB -> Micro-USB (different lengths available on request)**
Sensor Operating temperature	**-10 °C to +40 °C / 14 F to 104 F**

WHAT'S IN THE BOX?

- 8" Android Tablet
- Portagas® Acoustic Sensor
- Micro-USB to USB-A cable
- USB-A to Micro-USB Adapter
- 2GB USB stick for exporting records or data
- Micro-USB Charger



OUR THROUGH-LIFE COMMITMENT TO YOU

We look after our customers throughout the lifetime of your equipment.

Every main unit is supplied with **3 years warranty** and **1 year warranty on its sensors and accessories.**

We are proud to offer free lifetime technical support and online training is available on request with a range of solutions designed to meet your calibration requirements:



Onshore Calibration
This can be done in our UK laboratory or in one of our 11 ODA Service Centres present globally
We also support 1-1 exchanges with a pre-calibrated unit to reduce processing time
We also offer a unit collection service for customers who are not used to sending equipment out of their respective countries.

Remote Calibration
This can be done remotely onboard the vessel by a competent crew member to reduce the hassle of offloading the instrument while the vessel is at sea

ABOUT COLTRACO ULTRASONICS

Coltraco is ISO 9001:2015 and ISO 14001 approved

Our organisation comprises:

- Our **Company**
- Our **Laboratory**, co-located with the Centre for Advanced Instrumentation at Durham University
- Our **Research Organisations**, the Durham Institute of Research, Development & Invention (DIRDI)
- Our **Centre for Underwater Acoustic Analysis** (CUAA)

"To see the sounds that others cannot hear"

"To measure the hitherto unmeasurable"

Engaged in Research, Design, Development, Manufacture, Integration & Sustainment of high-exporting advanced technology systems, products and services.
We monitor and measure an array of specialised environments to deliver the Safesite™ on land and the Safeship™ at sea.

BY BEING SCIENCE-LED:

We identify and nurture brilliant minds, creating a unique research environment at Durham University, which is a globally outstanding centre of teaching and research excellence.

In our research at DIRDI, we undertake fundamental research into the physical laws of the universe, alongside applied research in Physics, Mathematics, Engineering and Computer Science in acoustics, electromagnetism and information engineering.

It is this research and manufacturing excellence, and our enduring commitment to the sustainment of our technologies in the field, that makes Coltraco Ultrasonics the partner of choice for customers and distributors in 120 countries.

We deliver genuine value for our customers through our scientific and institutional values, and the global quality of our commercial and technical services.

Safeship™
Today our instruments are aboard 20% of the world's 60,000 ships, preventing ships' catastrophic failure, by monitoring watertight integrity on the one hand, and the safe contents of fire extinguishing gases such as CO2, on the other. These are the basic principles by which we became a Safeship™ company in the maritime sector.

Safesite™
Our instruments serve over 20 market sectors, to ensure that safety critical systems, such as gaseous fire suppression systems, sprinkler systems and process control equipment, in high value assets always work effectively, and in the Built Environment, the ability to concurrently identify airtightness and energy loss. This is how we are a Safesite™ company, on land.

Contact and support

Coltraco Ultrasonics
NETPark Research Institute
Joseph Swan Road
Sedgefield
TS21 3FB
United Kingdom

sales@coltraco.co.uk
+44 20 7629 8475
www.coltraco.com

British manufacturer of ultrasonic technologies, exporting to 120 countries and twice winners of The Queen's Award 2019 and 2022.