



PORTASCANNER®

The ultrasonic air leak-site detector for
room integrity testing

Made in the UK.

INTRODUCING THE PORTASCANNER®

The Portascanner® is a low-cost, handheld instrument for locating air leak-sites without pressurisation – suitable for use before, during and after a blower / door fan test. It uses ultrasound – sound with frequencies above the range of human hearing – to identify and locate air leak-sites in a room non-destructively and with minimal disruption to normal operation.

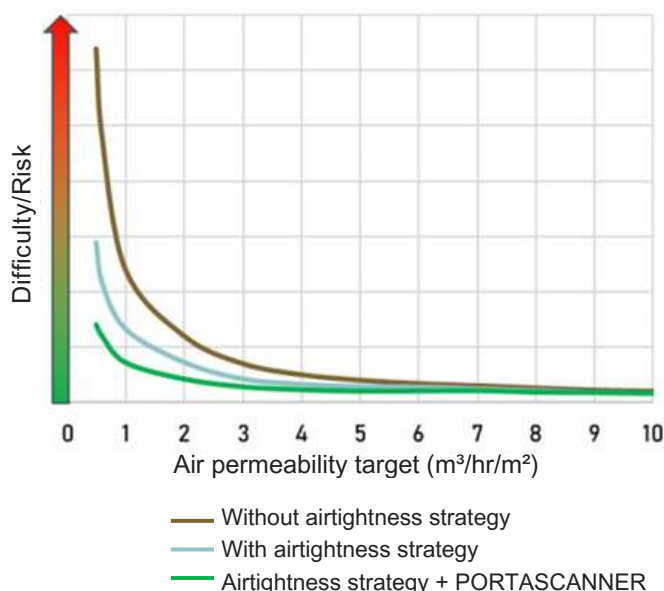
- **Type** – Ultrasonic Room Integrity Tester
- **Function** – To test the airtightness of sealed compartments/rooms
- **Part Number** – 509004-0311
- **NSN** – 6625-99-257-8336
- **IMPA** – 652778
- **Application** – Used for detecting leaks in Energy Efficient Buildings, Construction, Passive house, Computer Rooms, Telecommunication Centres, Data Centres, Laboratories, Clean Rooms, Control Rooms, Manufacturing, Robotics, Storage



THE CHALLENGE OF AIRTIGHT BUILDINGS

The UK industry is moving towards increasingly airtight buildings, with standards such as Passive House achieving air leakage rates 90% lower than a typical building.

Up to now, airtightness could only be assessed by air pressure ('blower door') testing, which is typically only effective during the later stages of construction when the building is sufficiently sealed. By this stage it is often too late, or too costly to carry out remedial work. While earlier air pressure tests are possible, these often require significant preparatory work (temporary sealing) and are disruptive to the build programme.



KEY BENEFITS OF USING PORTASCANNER®



- ✓ No building pressurisation needed
- ✓ No temporary sealing (reduces costs)
- ✓ No disruption to construction (reduces costs)
- ✓ No disruption to personnel working whilst testing is carried out
- ✓ No out of hours testing (reduces costs)
- ✓ Build confidence in airtightness over time - avoid nasty surprises at the first blower door test
- ✓ Reduces risk of failing airtightness target
- ✓ Able to detect leaks that can't be found by a pressure test

PORTASCANNER® APPLICATIONS



For Construction Industry

- No pressurisation or temperature differentials needed
- Test early in the Build Programme
- Increase certainty of passing the Blower Door Test
- Any person can be trained in minutes.
- Reporting on the device for easy tracking of leaks



For Medical Facilities

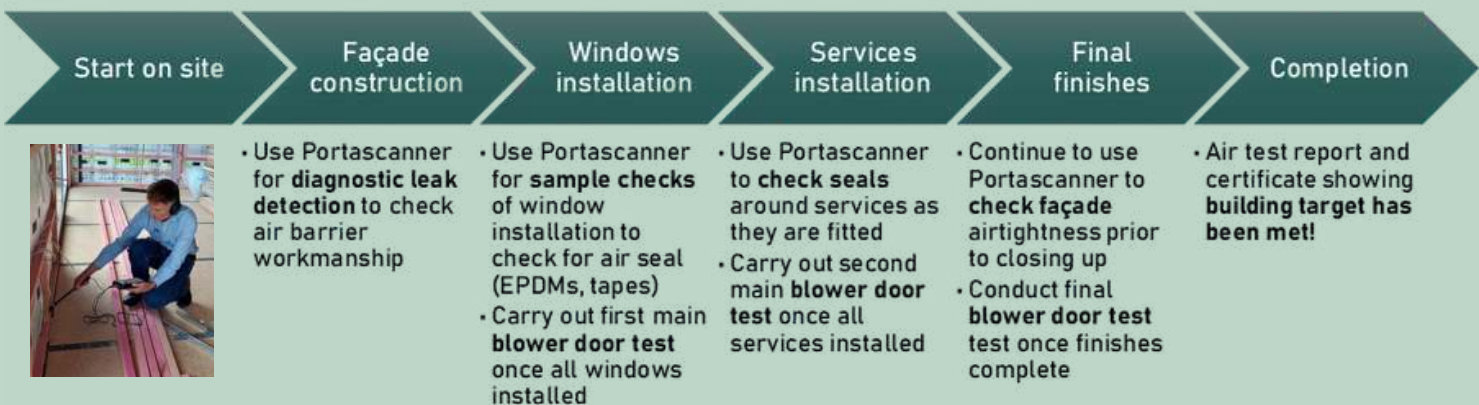
- SAFE - Occupants remain on the wards during testing
- Reduce airborne infection contamination
- Reduce unwanted noise and pest infestation through minimised openings
- Increase fire compartmentation
- Improve energy efficiency



For Airtightness Testers

- Used before, during and after a Blower Door or Pulse Test
- Lightweight, ergonomic, handheld, battery powered
- Objective timestamped instant reports of leakage found
- No interruption to execution of the Build Programme
- Instantly detect and locate air leaks as small as 0.06mm
- Can be used in buildings that are beyond the capacity of available fan pressurisation equipment

WHEN TO USE



PORTASCANNER® MODEL COMPARISON

There are two models of Portascanner with different specifications, functionality and accessories:

- Portascanner:** The essential version, with a visual indicator of ultrasound readings
- Portascanner AIRTIGHT:** Sophisticated unit with a touch screen to record leak location, PDF reporting of leaks found and the potential to measure the physical size of leaks

	Portascanner®	Portascanner® AIRTIGHT
Standard receiver unit	•	
AIRTIGHT receiver unit		•
Single ultrasonic generator	•	•
Triple ultrasonic generator		•
Leak detection wand w. 2.5m cable	•	•
Generator tripod, stand and clamp		•
Headphones	•	•
USB connectivity		•
Output reports to PDF		•
Carry case	•	•
Operating manual	•	•
Calibration certificate	•	•

TECHNICAL DATA

DIMENSIONS	Main Unit: 225mm (L) x 85mm (W) x 33mm (D) Sensor Wand: 230mm (L) x 85mm (D)
WEIGHT	Main Unit: 419g
READINGS	Display received amplitude on either a decibel scale or a linear digital scale
ACCURACY	Detect leaks as small as 0.6mm and below Quantify leak areas to within 10%
POWER SUPPLY	1 x PP3 9V battery, up to 12 hours continuous use
OPERATING TEMPERATURE	-10°C to +65°C / 14F to 149F
ENCLOSURE RATING	IP65 water and dust resistant enclosure
RESULTS AND READINGS	Display received amplitude on either a decibel scale or a linear digital scale
WARRANTY	Main unit – 3 Year Warranty Sensor – 1 Year Warranty Technical Support – Lifetime of the unit

WHATS IN THE BOX?

- Portascanner® Main Receiver Unit
- Portascanner® Ultrasound Sensor Wand
- 2 x Aluminium Sections and 1 x Sensor Handle: Additional aluminium sections to extend the sensor wand for difficult-to-reach areas
- Portascanner® Ultrasonic Generator: The magnet on the rear of the generator allows it to be mounted on many metal structures for ideal placement
- Pair of Headphones: For additional, audio feedback on leak detection
- Operating Manual: Contains further information regarding the functionality of the instrument and how-to-use
- Calibration Certificate: Unit is checked to stringent standard before dispatch.
- Robust Carrying Case: For portability and safekeeping of the equipment



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.

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 17% 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, process control equipment, and ventilation systems in high-value assets always work effectively. In the Built Environment, we provide the ability to locate and measure airflow so that buildings are energy efficient and healthy for occupants and for our planet.

Contact and support

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

