

P/N: 3174740-PIPE Ultrasonic Liquid Level Indicator for Pipes



PRODUCT SUMMARY

The Portapipe® is an accurate, two-in-one ultrasonic liquid level indicator designed for measuring and monitoring the liquid level in pipes. For horizontal pipes, the Portapipe® utilises direct, time-of-flight level measurements, telling the user how full the pipe is as a percentage of the pipe diameter. For use on vertical pipes or small cylinders, the Portapipe® uses a presence/absence method to locate the level by scanning and finding the point at which liquid is no longer detected.

We strive to offer the highest quality instruments, built with exceptional quality materials in the UK and remain competitively priced in the market worldwide through our unique R&D position.

Some of the key advantages of Portapipe® over our competitors:

1. Both metric (millimetres) and imperial (inches) options for entering pipe dimensions – liquid levels are given as % fullness in horizontal pipes and values are therefore independent of units.
2. Oscilloscope trace functionality is included to assist your measurements, observe material condition and help verify correct return echo to give you confidence that you are measuring the correct liquid level.
3. We have tried and tested a large number of different fluids and pipe materials, including various metals and hard plastics, and have created a built-in database in our Portapipe® containing speed of sound data of 12+ fluids and 13+ pipe materials pre-loaded in the unit for convenience, including an option to enter custom fluids/materials.
4. Battery life up to 12 hours continuous use on a standard 9V PP3 battery for easy replacement, with battery saving mode – turns off after 30 seconds of inactivity.
5. Optional LCD backlight for easy viewing of the display in dimly lit environments.
6. Technical support and advice available throughout the lifetime of the unit and we are here to help you with your application.

SPECIFICATIONS

MAIN UNIT DIMENSIONS	168mm (L) x 82mm (W) x 31mm (D)
WEIGHT	300g (with batteries)
DIAMETER RANGE	25mm – 331.0mm (1" – 13")
FLUID TYPES	Most fluids can be measured, built-in database contains the following: Water (at 10°C, 20 or 30), Sea Water, Diesel, Petrol, Fuel Oil, LPG, Ethanol, FK-5-1-12, Freon R134A, Freon R22, HFC-227ea, Methanol If you are testing a fluid that is not included in the database, select "Other" and enter the fluid speed of sound.
ACCURACY	± 1% of true level
MEASUREMENT UNITS	Metric (mm) and Imperial (inches)
MEASUREMENT MODES	Time-of-flight: Measures the time of flight for an echo of an ultrasonic pulse from the surface of the fluid and use speed of sound to calculate distance (for horizontal pipes) Absence/presence: Determine whether liquid is present or not, based on whether a consistent reflection is identified (for vertical pipes)
FREQUENCY	2.5 MHz, 5.0 MHz
DISPLAY	Full 128 x 68-pixel graphics with backlight for working in poor visibility conditions
ADDITIONAL FEATURES	<ul style="list-style-type: none"> • Custom fluid sound velocity input enables users to test custom fluids • Oscilloscope trace to assist in performing a good measurement and to verify correct backwall/ fluid surface echo • Bar indicator for absence/ presence method.
POWER SUPPLY	9V PP3 battery, up to 12 hours continuous use with auto shutdown after 30 seconds of inactivity
IP RATING	IP 65 enclosure
SENSOR TYPE	Dual element with 0.9m LEMO-00 cable
SENSOR OPTIONS	<ul style="list-style-type: none"> • 2.5 MHz – 14mm diameter sensor (measurable range 100mm – 331mm pipe diameter) • 5.0 MHz – 6mm diameter sensor (measurable range 25mm – 100mm pipe diameter)
CERTIFICATION S	<ul style="list-style-type: none"> • CE • Coltraco is ISO 9001:2015 and ISO 14001 approved
WARRANTY	Main Unit: 3 years, Sensors: 1 year Lifetime customer support
PACKAGE CONTENTS	<ul style="list-style-type: none"> • 1 x Portapipe® Main Unit • 1 x 2.5 MHz Dual Element Ultrasonic Sensor • 1 x 5.0 MHz Dual Element Ultrasonic Sensor • 1 x Ultrasonic Couplant • 1 x Robust Carrying Case • 1 x User Manual • 1 x Calibration Certificate