PORTASONIC® PLUS

P/N: 2618949-PSOPLUS Ultrasonic Flowmeter with Thickness Gauge Functionality & Datalogging

FRONT VIEW SIDE VIEW

PRODUCT SUMMARY

The Portasonic® PLUS is a handheld, ultrasonic transit time clamp on flowmeter designed for measuring the flow rate within a pipe. Portasonic® PLUS can be attached to and detached from a wide range of pipes varying in thickness and material, making it a versatile and portable way of measuring flowrate. Two sizes of sensors are available depending on the size of the pipe being measured and fully waterproofed variants are available on request. The Portasonic® PLUS also has a secondary function as a thickness gauge, allowing an operator to measure and monitor the pipe wall thickness alongside the pipe flow rate. Flow rate measurements can be logged internally in its 4 MB storage and exported later, or directly logged onto a PC.

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 Portasonic® PLUS over our competitors:

1. Both metric (i.e. litres per hour) and imperial (i.e. gallons per minute) options for entering pipe dimensions.
2. The non-contact measurement means that the fluid contents of a pipe cannot be contaminated by the measurement process and the flowmeter has a longer lifespan and lower maintenance costs
3. The built-in signal oscilloscope allows an operator to receive sensor diagnostics to troubleshoot during installation and achieve the most accurate measurements possible.
4. Portasonic® PLUS uses clamp-on installation meaning measurements can be taken non-invasively without compromising the integrity of the pipe and without any downtime during installation.
5. Flow rate measurements can be logged internally and exported later, or directly logged onto a PC
6. Battery life up to 12 hours continuous use on a standard 9V PP3 battery for easy replacement, along with 24/7 power option through micro-USB using mains power or a powerbank
7. LCD backlight for easy viewing of the display in dimly lit environments.
8. 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	220mm (L) x 85mm (W) x 33mm (D)
WEIGHT	434g (with batteries)
DIAMETER RANGE	Standard Sensor (Model No. DM10): DN15 – DN 700 (1/2" – 28") Large Sensor (Model No. DS10): DN25 – DN2500 (1" – 98")
FLUID TYPES	Built-in database of over 19 fluids, including water, sea water, kerosene, petrol, fuel oil, crude oil, Freon R134a, Freon R22, diesel oil, castor oil, F-76 fuel oil, Novec™ 1230, and glycol/water. To use a custom fluid an operator can enter its speed of sound, which can be obtained from online databases.
ACCURACY	± 0.5% of measured value under ideal conditions. Repeatability of ±0.15%.
MEASUREMENT UNITS	Metric (litres) and Imperial (gallons)
MEASUREMENT TYPE	Flow Velocity, Volumetric Flow Rate, Mass Flow Rate, Energy Flow Rate (Heat Quantity), Volume, Mass, Energy
FREQUENCY	1 MHz
DISPLAY	Full 128 x 68-pixel graphics with backlight for working in poor visibility conditions
ADDITIONAL FEATURES	• Dual functionality allowing measurement of both flow and pipe thickness. • Internal datalogging with 4 MB storage and export to PC via micro-USB • Built in signal oscilloscope to provide diagnostics and allow for optimum installation.
POWER SUPPLY	9V PP3 battery, up to 12 hours continuous use. 24/7 power option available via micro-USB port
IP RATING	• Main Unit: IP 65 enclosure • Sensors: IP 66 (IP 68 Available on request)
OPERATING TEMPERATURE	• Main Unit: -10°C to +65°C • Sensors: -20°C to +150°C
SENSOR OPTIONS	• Standard Sensor (Model No. DM10): DN15-DN700 (1/2"-28") • Large Sensor (Model no. DS10): DN25 –DN2500 (1"-98")
CERTIFICATION	• CE, UKCA • Coltraco is ISO 9001:2015 and ISO 14001 approved • Option to include ISO 17025 calibration certification
WARRANTY	Main Unit: 3 years, Sensors: 1 year Lifetime customer support
PACKAGE CONTENTS	• Portasonic® PLUS Main Unit • Pair of DM10 Standard Sensors for pipes DN15-DN700 • Pair of Beaded Chain Clamps • 10mm Ultrasonic Thickness Gauge Probe • Measuring Tape • Micro-USB Cable • Silicone-based Ultrasonic Couplant • User and Installation Manuals • Calibration Certificate • Robust Carrying Case