



PORTABLE ULTRASONIC FLOWMETER



Degree of
Protection
IP 68

Built-in
**Data
Logger**

Extended
Battery
24 Hrs

Light
Weight
3 kg

PORTALOK 7S

Technical Datasheet

Advantages

- Weatherproof Flowmeter and sensors
- Dual Mode Transit Time and Doppler
- Very user friendly
- No cutting of pipes
- No shutting down of process
- Affordable
- Lightweight and easily transportable
- Quick response
- Integral data logging
- Current & Binary Output
- Extended battery management system

Features

- Fully weatherproof IP 68 rated Flow Computer, connectors and sensors. 60,000 point built in datalogger, analog output, backlit LCD displaying flow and total, RS 232 and 5 M cable as standard
- Extremely easy to install clamp-on sensors with no process interruption. Advanced signal transmission Noninvasive flow measurement of liquids, no pipeline disturbance, no pressure loss.
- Suitable for all commonly used pipe materials and all sonically conductive liquids
- Measurements in imperial or metric units
- With improved signal transmission the standard sensors cover a wider range from DN 10... DN 2500 mm (1/2"... 98")



The standard EESIFLO® Portalok 7S is sold and supplied as a complete kit ready for measurements on all types of metal or plastic pipes

Ordering Information/Kit Model Number

EESIFLO® Portalok 7S Weatherproof Transit time/Doppler Portable Flowmeter Kit suitable for measurements on pipes between DN 10... DN 2500 mm (1/2" ... 98") from -30°C to 100°C (22°F to 212°F) with built in 4-20mA output, Binary outputs, 60,000 point datalogger, RS 232 port, cable and Windows Software . 110/220 VAC Wall mount battery charger, 5 M sensor cable, pipe clamping fixtures, ultrasonic couplant bottle, measuring tape , calculator and manual.



SPECIFICATIONS

Measurement Technology:	Ultrasonic time difference correlation principle and doppler
Flow velocity:	(0.01...25) m/s (0.003 to 82 ft/s)
Resolution:	0.025 cm/s (0.0008 ft/s)
Repeatability:	0.25% of reading $\pm$ 0.02 m/s (0.06 ft/s)
Accuracy:	(for fully developed, rotationally symmetrical flow profile)
- Volume flow:	$\pm$ 1% ..3% of reading $\pm$ 0.02 m/s(0.06 ft/s) depending on application $\pm$ 0.5% of reading $\pm$ 0.02 m/s (0.06 ft/s)with process calibration
Measurable fluids:	all sonically conductive fluids with < 10% gaseous or solid content in volume
Recommended Pipe Measuring range:	P Type Sensors DN10 to 1000mm (1/2 inch to 40 inch) M Type Sensors DN50 to 2500mm (2 inch to 98 inch)

NOTE: Sensors are sold in pair and are potted with a 5 M cable to ensure they are watertight. Electronic connectors are rated IP 68 and the sensors are also potted into the connector.

Electronics Enclosure

Enclosure	
- Weight:	3 kg (6.6 lbs)
- Degree of protection:	Designed to IP68
- Material:	High density Polyethylene (Weatherproof and crushproof)
Measuring channels:	1
Power supply:	(100-240) VAC
Battery Operation:	24 hour usage on full charge.
Display:	2 x 16 characters, dot matrix, backlit
Electronics Operating temperature	-10°C...60°C (14 °F to 140 °F)
Sensor Operating Temperature	-30°C...120° up to 150 °C for short periods
Power consumption:	< 10 W
Signal damping:	(0...100) s, adjustable
Measuring cycle:	(100...1000) Hz (1 channel)
Response time:	1 s (1 channel)

Measuring functions

Quantities of measurement:	Volume and mass flow rate, flow and sound velocity
Totalizers:	Volume and mass
Built in Datalogger	Approx. 60,000 values
Operating languages:	English

