Ultrasonic portable flowmeter



DIGISONIC[®] E+ for field survey work – Pipe sizes from DN 8 mm to DN 5000 mm*

* For larger, please consult us

- ✓ clamp-on probes
- ✓ fast & easy to install
- ✓ no maintenance
- ✓ echo display (helpful for diagnostics)
- ✓ data acquisition

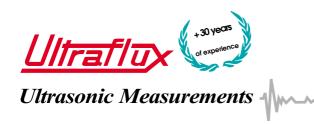
- ✓ high accuracy
- ✓ ergonomically designed
- ✓ user friendly
- ✓ sturdy
- ✓ cost effective

Advantages

- no contact with the fluid
- no shut down of the process
- no moving parts, no pressure drop
- thickness measurement, temperature
 & calorific value measurement (options)
- compatible with all our insertion probes

Applications

- most liquids (water, chemical & petrochemical products, foodstuffs ...)
- most pipe materials (stainless steel, steel, copper glass, PVC, cast iron ...) irrespective of lining
- flow speed from a few mm/s to more than 10 m/s



Represented by:

PRINCIPLE

DigiSonic E+ is based on the ultrasonic transit-time principle.

SPECIFICATION

DigiSonic E+ is used for help in diagnostic, network management, counting, checking installed flowmeters, process regulation ...

- O Resolution time measurement: 0.1 ns
- O Typical accuracy:

 $V \ge 0.5 \text{ m/s}$: +/- 1% of reading

V < 0.5 m/s : +/- 0.5 cm/s

in the case of a fully developed flow and if $ID \ge 200 \text{ mm}$

- O Linearity: 0.1%, Repeatability: 0.2%
- O Temperature stability: 500 ppm/°C
- Bidirectionnal measurement (+/-)
- O Correction of viscosity and automatic correction of hydraulic coefficient (K_H)
- O Measurements on liquids up to 200° C (for higher, please consult us)



ELECTRICAL CHARACTERISTICS

- O Power supply:
 - Rechargeable battery Ni-Cd up to 8 hr battery life
 - External power source (220 V or 110 V) used as a charger
 - Cable for any DC source from 12 to 50 V (option)
- Output 0-4-20 mA galvanic isolated
- O Programmable static relays (x2) 100 V 100 mA 10 VA max.



MWW DISPLAY

- O Numerical & graphical display
- LCD screen (with backlighting)

RESOURCES

- O Quick & easy calibration by keyboard (drop down menu) Flowrate in different units (m³/h, l/h, m³/s...)
- Oscilloscope function : help for diagnostics & probes positionning
- O Output signals, (DB 25):
 - 0-4-20 mA galvanic isolated
 - Relays (x2) : flow direction, threshold, volume, fault, ...
 - Serial RS 232 JBUS protocol
- O Setting Programming : data logger with near to 200,000 date, time, flow & other readings
- O 17 password protected site setups can be stored in memory
- O Language choice: French, English, German, Spanish, Italian ...



MECHANICAL CHARACTERISTICS

- O Cabinet: cast aluminium + epoxy painting
- Weight: 2.6 Kg
- O Dimensions: 246 x 188 x 70 mm (L x H x P)
- O Protection: IP 65
- O Ambient temperature : -25°C to +50°C (converter)
- O Fitted case: 415 x 330 x 200 mm (L x H x P) for electronic converter, probes & accessories (belts, cables, coupling gel

OPTIONS:

- Windows compatible communication software: logger conversion into data file compatible with standard software (excel ...)
- O Ultrasonic (numerical & graphical) wall thickness measurement
- O Temperature & calorific value measurement

