

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



Ultrasonic Measurements



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 ...

- Resolution time measurement : 0.1 ns
- Typical accuracy :
 - V > 0.5 m/s : +/- 1% of reading
 - V < 0.5 m/s : +/- 0.5 cm/sin the case of a fully developed flow and if ID > 200 mm
- Linearity : 0.1%, Repeatability : 0.2%
- Temperature stability : 50 ppm/°C
- Bidirectionnal measurement (+/-)
- Correction of viscosity and automatic correction of hydraulic coefficient (K_H)
- Measurements on liquids up to 200° C (for higher, please consult us)



ELECTRICAL CHARACTERISTICS

- Power supply :
 - Rechargeable battery Ni-Cd – up to 4 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
- Programmable static relays (x2)
100 V – 100 mA – 10 VA max.



DISPLAY

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

RESOURCES

- Quick & easy calibration by keyboard (drop down menu) - Flowrate in different units (m³/h, l/h, m³/s...)
- Oscilloscope function : help for diagnostics & probes positioning
- Output signals, (DB 25) :
 - 0-4-20 mA galvanic insulated
 - Relays (x2) : flow direction, threshold, volume, fault, ...
 - Serial RS 232 – JBUS protocol
- Setting – Programming : data logger with more than 44,000 date, time, flow & other readings
- 17 password protected site setups can be stored in memory
- Language choice : French, English, German, Spanish, Italian ...



MECHANICAL CHARACTERISTICS

- Cabinet : cast aluminium + epoxy painting
- Weight : 2.6 Kg
- Dimensions : 246 x 188 x 70 mm (L x H x P)
- Protection : IP 65
- Ambient temperature : -25°C to +50°C (converter)
- 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 ...)
- Ultrasonic (numerical & graphical) wall thickness measurement
- Temperature & calorific value measurement

