



Uf801P

Ultrasonic portable flowmeter



media measured
liquids & gases



Pipe diameters
up to 10 000mm



Model
Standard
Dual pipes
or chords

Calorimeter
Dual calorimeter

Compact

- Light weight (less than 1kg)
- Easy to use

Robust

- IP68 ABS enclosure

Reliable

- Automatic zero calibration
- Ten flow calculations per second

Advanced functions

- Multi-parameter data logger
- Stores up to 11 configurations/sites
- Timer/programmer
- Optional Input/output modules (analog, digital)

High performance

- Graphic screen
- Echo, gain and quality index displayed
- Battery life up to two months, using timed operation

Multiple uses

- On every type of homogeneous liquid, even non-conductive
- On most types of gases - high and medium pressure*
- Non ideal flow conditions taken into account

Typical Applications

Water:

Leakage detection, pump flow control, control of in-line flow meters

Flow surveys:

Troubleshooting installations, resolving disputes

Civil engineering:

Validation of system performance before handover of a project

HVAC engineering:

System balancing, thermal assessment

Hydrocarbons:

Temporary flow measurement

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MODEL	STANDARD	DUAL PIPE & DUAL CHORD	CALORIMETER	DUAL CALORIMETER
Nature of equipment	Portable			
Internal ø of pipe	From 6mm to 9,900mm approximately (depending on wall thickness)			
External ø of pipe	From 10mm to 10,000mm			
Standard mounted Inputs/outputs	2 static relays outputs (50v-10ma) usable as frequency outputs (up to 1kHz) – Module 2 (single)			
Inputs for Calorimetry configuration	—		2 x PT100/PT1000 – Module 5 (dual) taking up the physical space of two modules	
Additional inputs for calorimetry configuration	—	—	—	2 x PT100/PT1000 – Module 5 (dual) taking up the physical space of two modules
Use	Flow measurement	Flow measurement in two pipes (with one speed chord per pipe) or with 2 speed chords on 1 pipe	Flow measurement and calorimetry	Flow measurements in two pipes and dual calorimetry
Single or dual pipes	Single pipe	Single or Dual pipes	Single pipe	Dual pipes
Single or dual chords	Single chord	Dual chords (single pipe) Single chord (dual pipes)	Single chord	Single chord
In option, Single input/output modules	Up to 4 modules to choose from:		Up to 2 modules to choose from:	—
	› 1 isolated, active analogue output: current 4-20mA, 0-20mA, 0-24mA • Module 1 › 2 static relay outputs (50v – 10mA) usable as frequency outputs (up to 1kHz) • Module 2 › 2 isolated current inputs 4-20mA, 0-20mA, 0-24mA • Module 3 › 2 0-10V voltage inputs • Module 4 › 2 contact inputs (pulse or state) • Module 6 › 2 static relay outputs (50v – 100mA) usable as frequency outputs (up to 30 Hz) – module 8 (single)			
Display	› Graphical LCD screen (14 lines x 20 characters) › Backlit screen with time delay feature			
Troubleshooting help	Oscilloscope function (echo displayed) • Gain • Quality index			
Damping & Memory	Adjustable from 0 to 3600s			
Set-up	› Quick and simple – uses 7-key touch pad – or via dedicated software supplied › Possible to build in an access code			
Information storage	› 4MB data logger: time stamping – between 1 and 30 variables – up to 266,706 lines › 3-variable time stamping: 133,353 lines • 14 variables: 35,560 lines • 30 variables: 17,206 lines › Logging frequency from 1 second to 24 hours			
Operating system	Ultraflux dedicated software (Windows compatible) for configuration (upload/download the settings), read/record the measurement values and download the logger's data. Measured values and logged data are readable with spread sheet software (Microsoft Excel, etc.)			
Programmer	Programmable power-up to increase the logger and battery life			
2/3 Languages	English & Russian or French & English + 1 additional language to be chosen: German • Portuguese • Spanish • Italian			
Battery life	Up to 14hr continuous use • Charge indicator			
Serial link	RS232 to JBUS/MODBUS protocol • 115,200 Bauds • 1 RS232 to USB converter link cable included			
Accessory included	1 RS232 to USB converter link cable			
Electrical characteristics	› 12V NiMh sealed battery › Charger with input: 100-240V AC / 50-60Hz / 1.0-0.5A and output: 18V DC / 2.22A › Cable for auxiliary power supply available as an option			
Enclosure	ABS • 900g • 220 x 115 x 64mm			
Protection	IP68			
Temperature range	For use from -10°C to 50°C			
Technology	Performances			
Ultrasonic transit time • Continuous bidirectional measurement Signal analysis • By digital signal process (real-time echo shape control, digital filtering and regulation of gain on each firing)	Accuracy • Up to 0.5% Repeatability • Up to 0.1% Linearity • Up to 0.1%	Temporal resolution • 0.1ns Time between each flow calculation • 100ms Units of measurement • From litres per second to cubic metres per day	Volume metering • From a millilitre up to 1,000 cubic metres Multi-layer pipe • Up to three materials taken into consideration Memory capacity • Up to 11 configurations	Other important information • Laminar and turbulent transitions considered (calculation of the reynolds number) – except for parallel chords • Freedom to mount probes: modes /, N, V, W