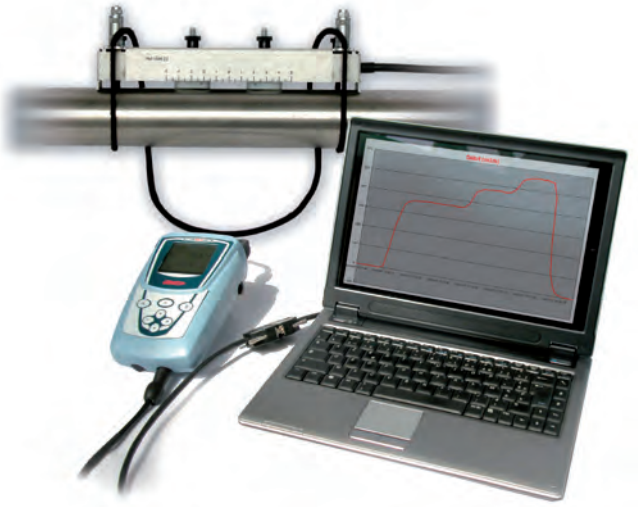
Ultrasonic portable flowmeter

UF 801-P



The most advanced portable ultrasonic flowmeter available. Incorporating over 30 years of practical field experience the **UF 801-P is the ideal portable flowmeter** for your diagnosis and monitoring requirements. Featuring **long battery life and clamp-on probe technology** using the measurement principle (Transit Time ultrasonic) which has been Ultraflux's speciality for over 30 years. **User-friendly and ergonomic,** UF 801-P is designed for **ease of use with optimum performance.** The UF 801-P uses Ultraflux's Next Generation Digital Signal Processing (DSP), flows in a wide range of pipe sizes can be measured. The meter gives **accurate, reliable results** even under extreme measurement conditions.

Versatile, diameters from 10 mm to 10 m, any liquid even non conductive, any pressure

Non invasive external probes clamped-on to the pipe

Easy and quick installation resulting in immediate measurement

User friendly operation, set up by keypad or software

Digital signal processing using multiple processors enhances response time

Possible choice of configuration from previous saved sites

Integral data logger, with over 6 months capacity at 2 min intervals

Robust, watertight (IP67) control unit enclosure

Very lightweight : less than 1 kg

Battery life indicator

Measuring accuracy : 0.5 %

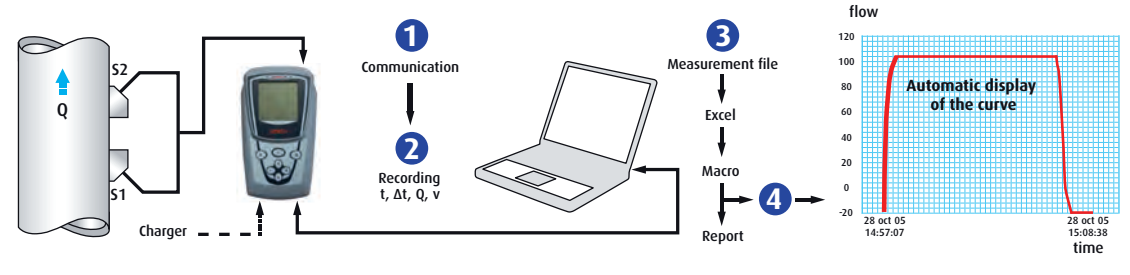
Probes available from -100°C to +200°C (pipe temperature)

High technology probes for difficult applications

Optional extra inputs/outputs

Dual pipe version available

Measurement processing using LS-801-P W software on PC



Ultraflux
Ultrasonic Measurements

FEATURES

Digital and graphic LCD display (14 lines x 20 characters) - programmable backlight
Oscilloscope function : assist with the diagnosis, installation, and verification
Fast and easy parameter set-up, with a 7-key keyboard - with access code option
Data logger 4 MB memory : time & date + 1 to 14 variables (up to 3 variables ⟶ 135000 data sets, 14 variables ⟶ 36000 data sets)
Communiction Windows software : transfer of the contents and export of the logger via software (Excel...)
Programmable delayed start : can be set to start at any hour, time period and alarm time
Choice of 6 languages : French / English / German / Portuguese / Spanish / Italian
Battery life : up to 14h, with indicator
Serial link RS 232 (JBUS/MODBUS)
Basic configuration : 1 analogue output / 2 programmable static relays
Additionnal inputs/outputs by optional modules

OPTIONS

Pipe thickness measurement (digital and graphic function)
Temperature measurement (calorimetric function)
2 additional input/output functions from the following :
⇨ 2 static relays usable as frequency outputs (until 1Khz)
⇨ 2 current inputs 4-20 mA
⇨ 1 input for 1 probe PT100 (calorimetric)
⇨ 2 voltage inputs 0 - 5 V
⇨ 2 contact inputs
Converter cable RS232 for USB

PACKAGING

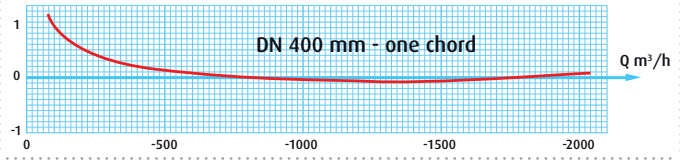
The UF 801-P is supplied in a rigid transportation case (51 x 40 x 13 cm) including :
⇨ UF 801-P Unit in carrying case
⇨ 5 m sensor cables to connect the probes to the converter
⇨ charger and PC cable
⇨ operating software and user guide on a CD-ROM
⇨ 2 straps and 1 bottle of coupling agent (80°C max)
In addition : : probes and specific attachment systems

SPECIFICATIONS*

Typical accuracy : 0.5 %
Bidirectionnal measurement
Time resolution : 0.1 ns
Repeatability : 0.2 %, linearity : 0.1 %
Choice of the units : from 1 l/d to the 100 m^3/s
Volume metering : from 10 ml to 100 m^3
Multi-layer pipes : up to 3 materials
Storage of 3 configurations
Built-in correction for multi-products or for laminar/turbulent transition flow
No pressure loss
No damage to pipe
No or very low maintenance : no drift in time
Choice of probes in installation : modes /, V, N and W

* at reference conditions

Typical results



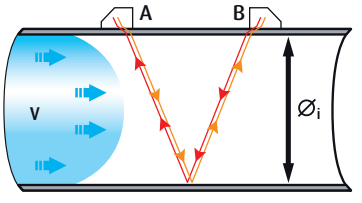
ELECTRICAL CHARACTERISTICS

CE product
Power supply:
⇨ Internal battery 12V NiMh
⇨ Charger 90 – 240 VAC - auxiliary power supply function
Isolated and active 4-20 mA output current
Static relays(250 V - 50 mA)

MECHANICAL CHARACTERISTICS

Robust ABS enclosure with carrying case :
220 mm x 115 mm x 64 mm
Weight of unit < 1Kg
IP67 protection against dust and immersion
Use temperature : -10°C with 50°C

Principle : the difference of the transit times of ultrasonic waves
$\Delta T = TBA - TAB$
$v = f(\Delta T)$
$Q = f(v, \Phi i)$
Q = flow
TAB : time of propagation of ultrasound between the 2 probes



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