Uf 801-P

ULTRASONIC PORTABLE FLOW METER

FULL PIPE

LIQUID & GAS APPLICATION

MEDIA MEASURED
LIQUIDS & GASES

PIPE DIAMETERS UP TO
10000MM

MODEL
STANDARD
DUAL PIPE
DUAL CHORD
CALORIMETER
DUAL CALORIMETER

COMPACT

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

ROBUST

- IP68 ABS enclosure

ADVANCED FUNCTIONS

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

HIGH PERFORMANCE

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

RELIABLE

- Automatic zero calibration
- Ten flow calculations per second

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

Drinking water:
Leakage detection,
pump flow control,
control of in-line flow meters

Water (raw, waste):
Pump flow control

Flow surveys: Troubleshooting installations, resolving disputes

Civil engineering:
Validation of system performance before handover of a project

Climate engineering: System balancing, thermal assessment

Hydrocarbons:
Temporary flow measurement

* APPLICATION CONDITIONS: PLEASE CONTACT US

Ultraflux
Ultrasonic flowmeters

Uf 801-P

MODEL	STANDARD	DUAL PIPE	DUAL CHORD	CALORIMETER	DUAL CALORIMETER
REFERENCE	CO_801POR1BINAB___	CO_801POR2BINAB___	CO_801POR2BINAB___	CO_801CAL1BINAB___	CO_801CAL2BINAB___
TECHNOLOGY	Portable ultrasonic transit-time flowmeter - Continuous and bidirectional flow metering - 10 flow measurement/s				
SIGNAL ANALYSIS	By Digital Signal Process (real-time Echo Shape Control, digital filtering and regulation of gain on each firing)				
ACCURACY REPEATABILITY LINEARITY	Up to 0.5 % of reading - minimum velocity 0,2m/s for pipes above 300mm Up to 0,1% Up to 0,1 %				
VELOCITY RANGE	+/- 30 m/s				
TEMPORAL RESOLUTION	0,1 ns				
RESPONSE TIME	Less than 1 second				
DAMPING	Adjustable from 0 to 3600 s				
INTERNAL Ø OF PIPE	From 8mm to 9,900mm approximately (depending on pipe thickness)				
EXTERNAL Ø OF PIPE	From 10mm to 10,000mm				
PIPE MATERIAL	Aluminium, asbestos, cast iron, copper, glass, grey cast iron, nylon, Plexiglas, polyethylene, PTFE, PVC, stainless-steel and steel. Other materials can be used if their physical properties are known.				
MULTI LAYER PIPE MATERIAL	Aluminium, asbestos, cast iron, copper, glass, grey cast iron, nylon, Plexiglas, polyethylene, PTFE, PVC, stainless-steel and steel. Other materials can be used if their physical properties are known.				
STANDARD INPUTS/OUTPUTS	—				
TEMPERATURE INPUTS FOR ENERGY CALCULATION - DUAL MODULE -	—			PT100/PT1000 2-input module taking up the physical space of two modules	
TEMPERATURE INPUTS FOR ENERGY CALCULATION (DUAL CALORIMETRY) - DUAL MODULE --	—	—	—	—	PT100/PT1000 2-input module taking up the physical space of two modules
USE	Flow measurement	Flow measurement in two pipes	Flow measurement with two speed chords	Flow measurement and calorimetry	Flow measurements in two pipes and dual calorimetry
SINGLE OR DUAL PIPE	Single pipe	Dual pipe	Single pipe	Single pipe	Dual pipe
SINGLE OR DUAL CHORD	Single chord	Single chord	Dual chord	Single chord	Single chord
PIPE THICKNESS MEASUREMENT	Function available in digital and graphical mode(SE-1701)				
IN OPTION, SUPPLEMENTARY INPUT/ OUTPUT SINGLE MODULES	Up to 4 modules to choose from: › 1 isolated, active analogue output: current 4-20mA, 0-20mA, 0-24mA, maximum load impedance 750 Ω · 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			Up to 2 modules to choose from: —	
DISPLAY	› Graphical LCD screen (14 lines x 20 characters) › Backlit screen with time delay feature › Flowrate unit: l/s, l/min, l/h, m^3/s, m^3/h, m^3/day, Gps, Gpm, Gph, Bps, Bpm, Bpd				
MEASURED VALUES	Volumetric flowrate, fluid velocity and speed of sound - Totalizers: 4 independent and adjustable Signal quality analysis: strength, quality index and shape (via the oscilloscope function)				
TROUBLESHOOTING HELP	Oscilloscope function (echo displayed) · Gain · Quality index				
SET-UP	› Quick and simple - uses 7-key touch pad with 2 for dynamic allocation - or via dedicated software supplied › Possible to build in an access code				
MEASUREMENT DAMPING TIME	From 0 to 3600 seconds				
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				
CONFIGURATION RECORDING	Up to 11 embedded configurations				
TOTALIZATION	Resolution from 1 ml to 1000 m^3				
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's 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				
COMMUNICATION	Serial link RS232 or RS485 to JBUS/MODBUS protocol · 115,200 Bauds - USB port				
ACCESSORY INCLUDED	1 RS232 to USB converter link cable				
ELECTRICAL CHARACTERISTICS	› 12V NiMh sealed battery › Charger with input: 100-240V ac / 1.05-0.55A / 47-63Hz and output: 18V / 2.5A" › Cable for auxiliary power supply available as an option				
ENCLOSURE	ABS · 900g · 220 x 115 x 64mm				
PROTECTION	EN/IEC 60529 IP68				
COMPLIANCE	EMC compliance: EN/IEC 61326-1 - Safety compliance: EN/IEC 61010-1				
TEMPERATURE RANGE	For use from -10°C to 50°C				
PROBE CABLE	Ultraflux cable - Standard: 5 meters - Optionnal: up to 100 meters				

Ultraflux