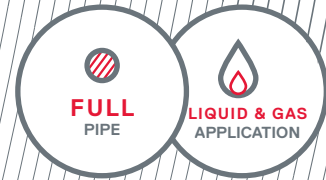


Uf 811

ULTRASONIC FIXED FLOW METER



MEDIA
MEASURED
LIQUIDS & GASES



PIPE DIAMETERS
UP TO
10000MM



MODELS
STANDARD
DUAL PIPE
DUAL CHORD

CALORIMETER
DUAL CALORIMETER

HIGH PERFORMING

- > Graphic screen
- > Echo, gain and quality index displayed
- > Accuracy up to 0,5 % of flow reading
- > Repeatability up to 0.1%
- > Velocity range +/- 30m/s

ADAPTIVE

- > Multi-parameter data logger
- > Mathematical functions generator
- > Optional Input/output modules (analogue, digital)
- > UF 811 can work on all homogenous pipe materials (Steel, PVC, Cast Iron, Stainless Steel...)
- > Up to 3 different pipe layers

RELIABLE

- > Automatic calibration of the zero point on site
- > Ten flow calculations per second
- > EU (CE) conformity according to 2014/30/UE 2011/65/UE

COMPACT

- > Reduced space requirements

COMPATIBLE

- > All Ultraflux probes or probes already installed*



TYPICAL APPLICATIONS

Drinking water:
Flow measurement and metering in treatment station works, abstraction flow measurement

Waste water:
Flow measurement at pumping stations, in systems, inlets/outfalls in treatment works

Raw water:
Flow measurement in fire mains, system monitoring

Climate engineering:
energy assessment

Chemical products, including aggressive chemicals:
Flow measurement for acids, chlorides

Pharmaceutical sector: ultrapure water flows

Automotive, food and farming, energy...

* PLEASE ENQUIRE

MODEL	STANDARD	DUAL PIPE	DUAL CHORD	CALORIMETER	DUAL CALORIMETER
REFERENCE	CO_811LIQ1PHEAU_---	CO_811LIQ2PHEAU_---	CO_811LIQ2PHEAU_---	CO_811CAL1PHEAU_---	CO_811CAL2PHEAU_---
TECHNOLOGY	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
IN OPTION, SUPPLEMENTARY INPUT/OUTPUT SINGLE MODULES	Up to 4 modules to choose from: <ul style="list-style-type: none"> > 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, passive current inputs 4-20mA, 0-20mA, 0-24mA - Module 3 > 2 isolated, passive analogue 0-10V inputs: 0 to 15V voltage - Module 4 > 2 Pt 100 / Pt 1000 temperature - Module 5 > 2 contact 5V inputs (pulse or state) - Module 6 			Up to 2 modules to choose from:	—
DISPLAY	<ul style="list-style-type: none"> > Graphical LCD screen (14 lines x 20 characters) > Backlit screen with time delay feature > Flowrate unit: l/s, l/min, l/h, m³/s, m³/h, m³/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	<ul style="list-style-type: none"> > Quick and simple - by 7-key touchpad with 2 dynamically allocated - or - via dedicated software supplied > Possible to build in an access code 				
MEASUREMENT DAMPING TIME	From 0 to 3600 seconds				
INFORMATION STORAGE	<ul style="list-style-type: none"> > 8MB data logger: time stamping - 1 to 30 variables - up to 536,886 lines > 3-variable time stamping: 268,443 lines · 14 variables: 71,584 lines · 30 variables: 34,637 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.)				
7 LANGUAGES	French · English · German · Portuguese · Spanish · Italian · Russian				
COMMUNICATION	Serial link RS232 or RS485 to JBUS/MODBUS protocol · 115,200 Bauds - USB port				
POWER SUPPLY	Low voltage power supply: 10-32V dc / Peak consumption < 12W / Average consumption < 6W				
ENCLOSURE	Metallic · Robust and compact · 2kg · 221 x 231 x 59mm				
PROTECTION	EN/IEC 60529 IP68				
COMPLIANCE	EMC compliance: EN/IEC 61326-1 - Safety compliance: EN/IEC 61010-1				
TEMPERATURE RANGE	For use from -20°C to 70°C (Screen reading from -20°C to 60°C)				
PROBE CABLE	With the Twinax cable supplied by Ultraflux, up to 300 meters per probe. Above that, consult Ultraflux.				