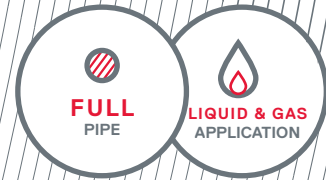


# Uf 811

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_---
<b>TECHNOLOGY</b>	Ultrasonic transit-time flowmeter - Continuous and bidirectional flow metering - 10 flow measurement/s				
<b>SIGNAL ANALYSIS</b>	By Digital Signal Process (real-time Echo Shape Control, digital filtering and regulation of gain on each firing)				
<b>ACCURACY REPEATABILITY LINEARITY</b>	Up to 0.5 % of reading - minimum velocity 0,2m/s for pipes above 300mm Up to 0,1% Up to 0,1 %				
<b>VELOCITY RANGE</b>	+/- 30 m/s				
<b>TEMPORAL RESOLUTION</b>	0,1 ns				
<b>RESPONSE TIME</b>	Less than 1 second				
<b>DAMPING</b>	Adjustable from 0 to 3600 s				
<b>INTERNAL Ø OF PIPE</b>	From 8mm to 9,900mm approximately (depending on pipe thickness)				
<b>EXTERNAL Ø OF PIPE</b>	From 10mm to 10,000mm				
<b>PIPE MATERIAL</b>	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.				
<b>MULTI LAYER PIPE MATERIAL</b>	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.				
<b>STANDARD INPUTS/OUTPUTS</b>	—				
<b>TEMPERATURE INPUTS FOR ENERGY CALCULATION - DUAL MODULE -</b>	—	—	—	PT100/PT1000 2-input module taking up the physical space of two modules	—
<b>TEMPERATURE INPUTS FOR ENERGY CALCULATION (DUAL CALORIMETRY) - DUAL MODULE -</b>	—	—	—	—	PT100/PT1000 2-input module taking up the physical space of two modules
<b>USE</b>	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
<b>SINGLE OR DUAL PIPE</b>	Single pipe	Dual pipe	Single pipe	Single pipe	Dual pipe
<b>SINGLE OR DUAL CHORD</b>	Single chord	Single chord	Dual chord	Single chord	Single chord
<b>IN OPTION, SUPPLEMENTARY INPUT/OUTPUT SINGLE MODULES</b>	Up to 4 modules to choose from: <ul style="list-style-type: none"> <li>&gt; 1 isolated, active analogue output: current 4-20mA, 0-20mA, 0-24mA, maximum load impedance 750 Ω - Module 1</li> <li>&gt; 2 static relay outputs (50V - 10mA) usable as frequency outputs (up to 1kHz) - Module 2</li> <li>&gt; 2 isolated, passive current inputs 4-20mA, 0-20mA, 0-24mA - Module 3</li> <li>&gt; 2 isolated, passive analogue 0-10V inputs: 0 to 15V voltage - Module 4</li> <li>&gt; 2 Pt 100 / Pt 1000 temperature - Module 5</li> <li>&gt; 2 contact 5V inputs (pulse or state) - Module 6</li> </ul>			Up to 2 modules to choose from:	—
<b>DISPLAY</b>	<ul style="list-style-type: none"> <li>&gt; Graphical LCD screen (14 lines x 20 characters)</li> <li>&gt; Backlit screen with time delay feature</li> <li>&gt; Flowrate unit: l/s, l/min, l/h, m<sup>3</sup>/s, m<sup>3</sup>/h, m<sup>3</sup>/day, Gps, Gpm, Gph, Bps, Bpm, Bpd</li> </ul>				
<b>MEASURED VALUES</b>	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)				
<b>TROUBLESHOOTING HELP</b>	Oscilloscope function (echo displayed) · Gain · Quality index				
<b>SET-UP</b>	<ul style="list-style-type: none"> <li>&gt; Quick and simple - by 7-key touchpad with 2 dynamically allocated - or - via dedicated software supplied</li> <li>&gt; Possible to build in an access code</li> </ul>				
<b>MEASUREMENT DAMPING TIME</b>	From 0 to 3600 seconds				
<b>INFORMATION STORAGE</b>	<ul style="list-style-type: none"> <li>&gt; 8MB data logger: time stamping - 1 to 30 variables - up to 536,886 lines</li> <li>&gt; 3-variable time stamping: 268,443 lines · 14 variables: 71,584 lines · 30 variables: 34,637 lines</li> <li>&gt; Logging frequency from 1 second to 24 hours</li> </ul>				
<b>CONFIGURATION RECORDING</b>	Up to 11 embedded configurations				
<b>TOTALIZATION</b>	Resolution from 1 ml to 1000 m <sup>3</sup>				
<b>OPERATING SYSTEM</b>	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.)				
<b>7 LANGUAGES</b>	French · English · German · Portuguese · Spanish · Italian · Russian				
<b>COMMUNICATION</b>	Serial link RS232 or RS485 to JBUS/MODBUS protocol · 115,200 Bauds - USB port				
<b>POWER SUPPLY</b>	Low voltage power supply: 10-32V dc / Peak consumption < 12W / Average consumption < 6W				
<b>ENCLOSURE</b>	Metallic · Robust and compact · 2kg · 221 x 231 x 59mm				
<b>PROTECTION</b>	EN/IEC 60529 IP68				
<b>COMPLIANCE</b>	EMC compliance: EN/IEC 61326-1 - Safety compliance: EN/IEC 61010-1				
<b>TEMPERATURE RANGE</b>	For use from -20°C to 70°C (Screen reading from -20°C to 60°C)				
<b>PROBE CABLE</b>	With the Twinax cable supplied by Ultraflux, up to 300 meters per probe. Above that, consult Ultraflux.				

# KIT SE 1815

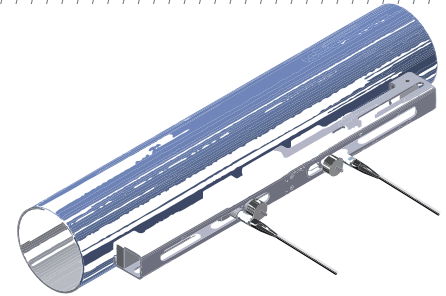
High performance



MEDIA  
MEASURED  
LIQUIDS



PIPE DIAMETER  
FROM DN 40  
UP TO DN 3000



## SALES DESCRIPTION

- Set of 2 probes with their support
- External probes for liquid flow measurement on a full pipe
- Mounting on a pipe from DN40 up to DN3000
- Maximum operating temperature of 110°C
- Push-Pull connection
- Magnetic support in 2 parts SU-1707 included

## INSTALLATION

Non intrusive

## APPLICATION

Full pipe

## CONDITIONS OF USE

Difficult - Clear or charged liquids, old or dirty pipes

## DIAMETER OF THE PIPE

Recommended probe range: 40 - 2000 mm for difficult application  
Extended probe range: 40 - 3000 mm on clear liquid application

## THICKNESS OF THE PIPE

> 0,4 mm

## CONNECTIC

Push-Pull connectors

## MOUNTING TYPE

/, V, N, W

## TEMPERATURE

From -20°C to +110°C

## COMPATIBLE CONVERTERS

ALL

## ATEX CERTIFICATION

NO

## INGRESS PROTECTION

EN/IEC 60529 IP68

## SUPPORT TYPE

SU1707

## MATERIAL OF THE PROBES

Peek

## MATERIAL OF THE SUPPORT

Anodized aluminum

## OVERALL SIZE (support & probes)

500 x 36,5 x 48,5 mm (can be split in 2 parts)

## OVERALL WEIGHT (support & probes)

1040 g

## SENSOR FREQUENCY

1 MHz