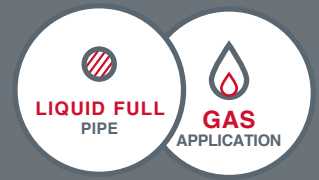


# Uf-821

## FIXED ULTRASONIC FLOWMETER



MEDIA  
MEASURED  
LIQUIDS & GASES



PIPE DIAMETERS  
UP TO  
10000MM



MODELS  
STANDARD  
DUAL PIPE  
DUAL CHORD

### HIGH PERFORMING

- › Graphic screen
- › Echo, gain and quality index displayed
- › Accuracy up to 0,5 % of flow reading (minimum velocity 0,2 m/s for pipes > 300 mm)
- › Repeatability up to 0.1%
- › Range +/- 20m/s

### ADAPTIVE

- › Multi-parameter data logger
- › Mathematical functions generator
- › Optional Input/output modules (analogue, digital)
- › UF 821 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

### COMPETITIVE

- › Up to 4 measurement points with the same device
- › Reduced installation & commissioning time



### 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...**

**Gas:**  
Measuring on homogenous gas \*

MODEL	SINGLE PIPE VERSION	MULTI PIPE VERSION
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	Up to 0,5% of flow reading (For pipes above 300 mm velocity of minimum 0,2 m/s required)	
REPEATABILITY	Up to 0,1%	
LINEARITY	Up to 0,1 %	
VELOCITY LIMITS	+/- 20 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	
USE	Flow measurement in a single pipe with the ability to incorporate up to 4 speed chords	Flow measurements in 1 to 4 pipes with the ability to incorporate up to 4 speed chords
INPUTS/OUTPUTS MOUNTED AS STANDARD	2 static relay outputs (50 V - 10 mA) usable as frequency outputs (up to 1KHz) - Module 2 (Single)	
IN OPTION, SUPPLEMENTARY INPUT/OUTPUT SINGLE MODULES	Up to 4 single or 2 dual modules to choose from: to choose from: - › 1 isolated, active analog output: current 4-20mA, 0-20mA, 0-24mA • Module 1 (Single) › 2 static relay outputs (50V - 10mA) usable as frequency outputs (Single) (up to 1kHz) • Module 2 (Single) › 2 isolated, passive current inputs 4-20mA, 0-20mA, 0-24mA • Module 3 (Single) › 2 isolated, passive analogue 0-10V inputs: 0 to 15V voltage • Module 4 (Single) › 2 Pt 100 / Pt 1000 temperature - Module 5 (Dual) › 2 contact 5V inputs (pulse or state) • Module 6 (Single)	
DISPLAY	› Graphical LCD screen (14 lines x 20 characters) › Backlit screen with time delay feature › Flowrate unit from l/s to m³/day	
TROUBLESHOOTING HELP	Oscilloscope function (echo displayed) • Gain • Quality index	
SET-UP	› Quick and simple - by 7-key touchpad with 2 dynamically allocated - or - via dedicated software supplied › Possible to build in an access code	
INFORMATION STORAGE	› 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	
TOTALIZATION	Resolution from 1ml to 1000 m³	
OPERATING SYSTEM	Windows for transfer of content and operation of logger using common software (Excel...) Window XP or later	
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	DC power supply: 10-32 Vdc - Peak consumption < 12W - Average consumption < 6W AC power supply: 110-240 Vdc - Peak consumption < 15W - Average consumption < 7,5W	
ENCLOSURE / IP	Reinforced polycarbonate VO fiberglass • Dimensions 290x285x100mm - Weight 3kg - IP67 / EN / IEC 60529	
TEMPERATURE RANGE	For use from -20°C to 60°C	