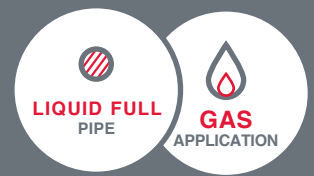


Uf-831



FIXED ULTRASONIC FLOWMETER



media measured liquids



Pipe diameters Upto 10000mm



models single pipe multi-pipe

HIGH PERFORMING

- › Up to eight speed chords on a single pipe
- › Up to 10 input/output modules (analogue, digital)
- › Graphic screen
- › Echo, gain and quality index displayed

ACCURATE

- › Accurate up to 0.5%
- › Repeatability up to 0.1%
- › Automatic zero calibration

ADVANCED FUNCTIONS

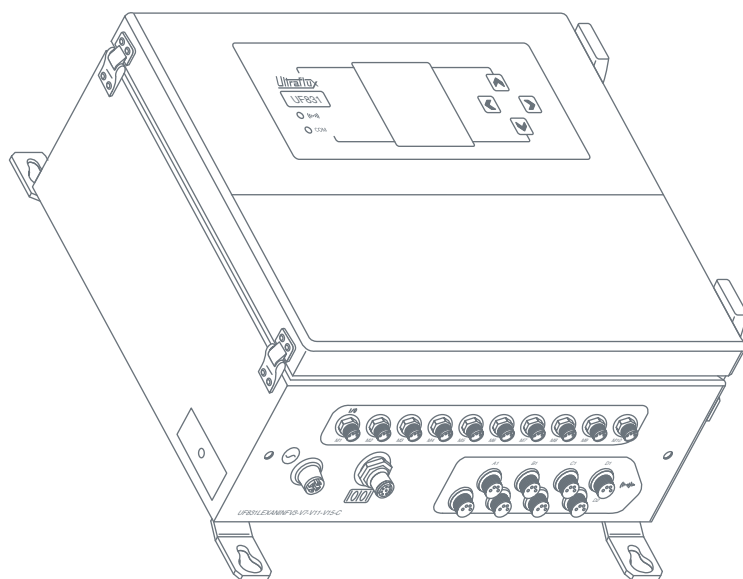
- › Mathematical functions generator
- › Multi-parameter data logger
- › Serial communication option: Modbus TCP/Modbus RTU

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 8 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 *

* please enquire

Uf 831

MODEL	SINGLE PIPE	MULTI-PIPE
Nature of equipment	fixed	
Internal diameter of pipe	from 8mm to 9,900mm approximately (depending on wall thickness)	
External diameter of pipe	from 10 mm to 10,000 mm	
Input / Output	<ul style="list-style-type: none"> › with field bus option: Up to 5 programmable input/output modules › without field bus option: Up to 10 programmable input/output modules 	
2 mandatory base modules	<ul style="list-style-type: none"> › 1 isolated active analogue output: current 4-20mA, 0-20mA, 0-24mA (single module) › 2 static relay digital outputs (50V - 10ma) usable on frequency outputs (single module) 	
In option, Other modules available	<ul style="list-style-type: none"> › 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 (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 temperature inputs Pt100 / Pt1000 • module 5 (dual) › 2 contact 5V inputs (pulse or state) • module 6 (single) 	
In option, calorimetric function	<ul style="list-style-type: none"> › 2 temperature inputs Pt100/Pt1000 • module 5 + 2 probes Pt100 + 2 2.5m cables 	
Use	flow measurement in a pipe with the ability to incorporate up to eight speed chords (optimised accuracy for difficult hydraulic conditions)	flow measurement on 1 to 8 pipes with the ability to incorporate up to eight speed chords (depending on the chosen configuration)
Option, Communication protocol	choice of 2 buses: <ul style="list-style-type: none"> › modbus TCP › modbus RTU note: physically takes the place of 5 input/output modules	
Display	<ul style="list-style-type: none"> › numeric and graphical (14 lines x 20 characters) › backlit lcd screen with time delay feature 	
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 	
Information storage	<ul style="list-style-type: none"> › 8mb data logger: time stamping - 1 to 30 variables - up to 536,886 data items › 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 	
Operating system	windows for transfer of content and operation of logger using common software (excel, etc.)	
7 languages	french • english • German • portuguese • spanish • italian • russian	
Serial link	RS232 or RS485 to Jbus / Modbus protocol • 115,200 bauds	
Choice of power supply	low voltage: 9-36V dc • mains: 110 to 240V ac	
Enclosure	Stainless steel 304, epoxy paint • plug-in connectors • 8kg • 300 x 346.5 x 148mm	
Protection	ip67 (except with field bus option: ip20)	
Temperature range	for use from -10°C to 50°C	

TECHNOLOGY	PERFORMANCES			
ultrasonic transit time › c ontinuous bidirectional measurement signal analysis › by double digital signal process (real-time echo shape control, digital filtering and regulation of gain on each firing)	accuracy › Up to 0.5%	temporal resolution › 0.1ns	volume metering › from a millilitre up to 1,000 cubic metres	another important detail › laminar and turbulent transitions considered (calculation of the reynolds number) - except for parallel chords › freedom to mount probes: modes l, V, n and w
	repeatability › Up to 0.1%	time bet ween each flow calculation › 100ms	memory capacit y › Up to 11 configurations	
	linearity › Up to 0.1%	units of measurement › from litres per second to cubic metres per day		