

# Uf 831 OPEN CHANNEL & RIVER

## ULTRASONIC FIXED FLOW METER



MEDIA MEASURED LIQUIDS



CHANNELS UP TO 30M (WIDTH)



RIVERS UP TO 500 M (DISTANCE BETWEEN BANKS)



MODELS SINGLE CHANNEL MULTI-CHANNEL RIVER

### HIGH PERFORMANCE

- > Up to four level measurements per channel/river
- > Up to 10 input/output modules (analogue, digital)
- > Graphic screen
- > Echo, gain and quality index displayed

### HIGH ACCURACY

- > Accurate up to 0.5%
- > Repeatability up to 0.1%
- > Breakdown of the section into 20 height/width points and left/right points
- > Calculation method as per standard ISO 6416

### ADVANCED FUNCTIONS

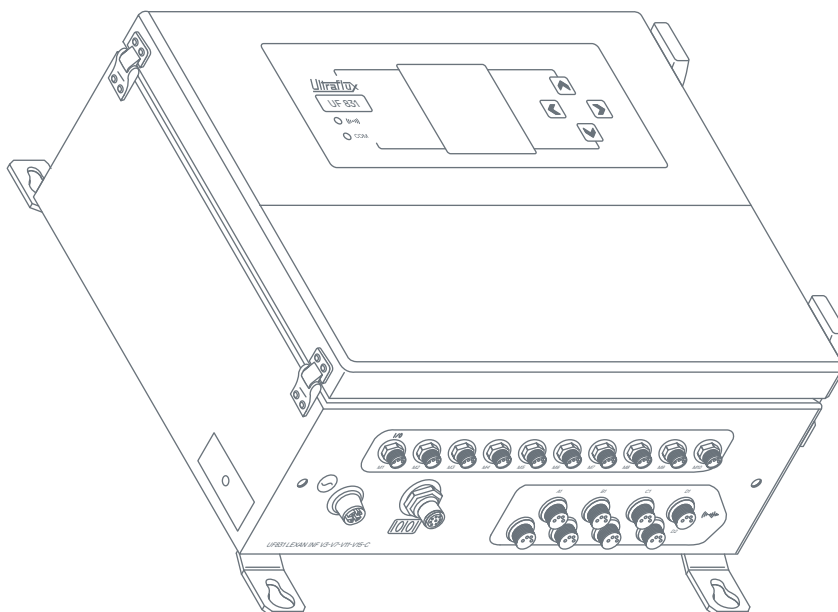
- > Mathematical functions generator
- > Multi-function data logger
- > Field bus option: Modbus TCP/Modbus RTU
- > Low flow calculations using level/velocity standards
- > Possibility of integrating a virtual chord

### GREAT FEATURES

- > Up to eight measurement points (eight channels) with a single device
- > Up to eight speed chords on a single channel
- > Rail probe mounting system for ease of maintenance\*

### ADAPTABLE

- > Connection of all Ultraflux probes or probes already installed\*



### TYPICAL APPLICATIONS

**Waste water:** Flow measurement on treatment works inlets/outfalls, flow measurement within treatment process

**Raw water:** Flow measurement in irrigation channels, in rivers up to 500m (distance between banks)

\* PLEASE ENQUIRE

# Ultraflux



EXPERT IN FLOW METERS SINCE 1974

# Uf831CO / Uf831RV

MODEL	SINGLE CHANNEL	MULTI-CHANNEL	RIVER
NATURE OF EQUIPMENT	Fixed		
WIDTH OF CHANNEL	Up to 30m in clear water		Up to 500m in clear water
USE	Flow measurement in a channel with the ability to incorporate up to eight speed chords (optimum accuracy for difficult hydraulic conditions)	Flow measurement in one to eight channels with the ability to incorporate up to eight speed chords (depending on the configuration chosen)	Flow measurement in a river with the ability to incorporate up to eight speed chords
INPUT/OUTPUT	> With Field bus option: up to 5 programmable input/output modules > Without Field bus option: up to 10 programmable input/output modules		
3 TO 6 MANDATORY BASE MODULES	> 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) > 2 isolated current inputs 4-20mA, 0-20mA, 0-24mA* (single module) * Multi-channel versions : 4 chords: 2 isolated current input modules 4-20mA, 0-20mA, 0-24mA (4 inputs) 6 chords: 3 isolated current input modules 4-20mA, 0-20mA, 0-24mA (6 inputs) 8 chords: 4 isolated current input modules 4-20mA, 0-20mA, 0-24mA (8 inputs)		
IN OPTION, OTHER MODULES AVAILABLE	> 1 isolated, active analogue 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, COMMUNICATION PROTOCOL - FIELD BUS -	Choice of 2 buses: > Modbus TCP > Modbus RTU Note: physically takes the place of 5 input/output modules		
DISPLAY	> 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	> 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 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			
<b>ULTRASONIC TRANSIT TIME</b> > Continuous bidirectional measurement  <b>SIGNAL ANALYSIS</b> > By double Digital Signal Process (real-time Echo Shape Control, digital filtering and regulation of gain on each firing)	<b>ACCURACY</b> > Up to 0.5%	<b>TEMPORAL RESOLUTION</b> > 0.1ns	<b>VOLUME METERING</b> > From a millilitre up to 1,000 cubic metres	<b>OTHER IMPORTANT INFORMATION</b> > Ability to incorporate a virtual chord (please ask) > Level measurement not included
	<b>REPEATABILITY</b> > Up to 0.1%	<b>TIME BETWEEN EACH FLOW CALCULATION</b> > 100ms	<b>MEMORY CAPACITY</b> > Up to 11 configurations	
	<b>LINEARITY</b> > Up to 0.1%	<b>UNITS OF MEASUREMENT</b> > From litres per second to cubic metres per day		

