

# Uf 821 OPEN CHANNEL & RIVER

## ULTRASONIC FIXED FLOW METER



FLUIDS MEASURED  
LIQUIDS  
& GASES



CHANNELS UP TO  
30M (WIDTH)



RIVERS UP TO  
300M (DISTANCE  
BETWEEN BANKS)



MODELS  
SINGLE CHANNEL  
MULTI-CHANNEL  
RIVER



### HIGH PERFORMING

- > Graphic screen
- > Echo, gain and quality index displayed
- > Possible measurement in liquids with solids\*

### ADAPTIVE

- > Multi-variable data logger
- > Mathematical functions generator
- > Optional HART protocols and input/output modules
- > Low flow calculations using level/velocity standards

### ACCURATE

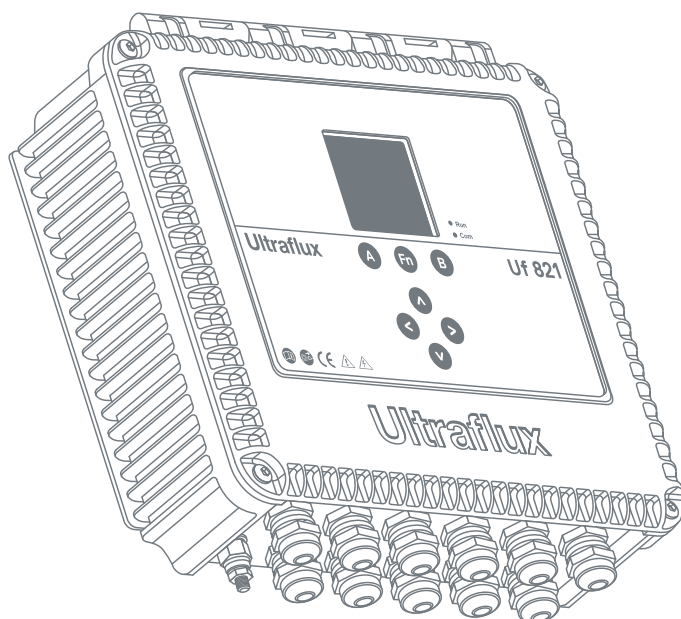
- > Breakdown of the section into 20 height/width points and left/right points
- > Calculation method as per standard ISO 6416

### GREAT FEATURES

- > Up to 4 measurement points (4 channels) with a single device
- > Up to 4 speed chords on a single channel

### COMPATIBLE

- > All Ultraflux probes or probes already installed\*



### TYPICAL APPLICATIONS

**Waste water:**  
Flow measurement at treatment works inlets/outfalls (small channels)

**Raw water:**  
Flow measurement in irrigation channels, small rivers...

\* PLEASE ENQUIRE

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MODEL	SINGLE CHANNEL	MULTI-CHANNEL	RIVER
NATURE OF EQUIPMENT	Fixed		
MEASUREMENT ON PIPE UNDER LOAD	Yes		
FLOW MEASUREMENT ON OPEN CHANNEL	No		
WIDTH OF CHANNEL	Up to 30m in clear water		Up to 300m in clear water
STANDARD MOUNTED INPUTS/OUTPUTS	2 isolated current inputs 4-20mA, 0-20mA, 0-24mA (single module) * * For 4 channels, 2 modules are required (4 inputs)		
IN OPTION, SINGLE INPUT/OUTPUT MODULES	Up to 3 single modules to choose from: > 1 isolated, active analogue output: current 4-20mA, 0-20mA, 0-24mA · Module 1 (Single) > 2 static relay outputs usable as frequency outputs (up to 1kHz) · Module 2 (Single) > 2 isolated 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 PT100/PT1000 temperature inputs - taking up the physical space of 2 modules · Module 5 (Dual) > 2 contact 5V inputs (pulse or state) · Module 6 (Single)		
USE	Flow measurement in a channel with the ability to incorporate up to 4 speed chords (optimum accuracy for difficult hydraulic conditions)	Flow measurement in 1 to 4 channels with the ability to incorporate up to 4 speed chords (depending on the configuration chosen)	Flow measurement in a river with the ability to incorporate up to 4 speed chords
IN OPTION	> HART protocole		
DISPLAY	> Graphical LCD screen (14 lines x 20 characters) > Backlit 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 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		
COMMUNICATION	> Serial link RS232 and RS485 to JBUS/MODBUS protocol · 115,200 Bauds > USB Port		
POWER SUPPLY	> DC power supply: 10-32V dc · Peak consumption < 12W · Average consumption < 6W > AC power supply: 110-240V ac · Peak consumption < 15W · Average consumption < 7,5W		
ENCLOSURE	> Fibreglass-reinforced polycarbonate V0 · PG11 and PG13 gland connectors > Weight: 3kg · Dimensions: 290mm x 285mm x 100mm		
PROTECTION	IP 67		
TEMPERATURE RANGE	For use from - 20°C to + 60°C		

NON CONTRACTUAL DOCUMENT

TECHNOLOGY	PERFORMANCES			
<b>ULTRASONIC TRANSIT TIME</b> > Continuous bidirectional measurement  <b>SIGNAL ANALYSIS</b> > Digital Signal Process (real time Echo Shape Control, digital filtering and gain control on each firing)	<b>ACCURACY</b> > Up to 0,5%  <b>REPEATABILITY</b> > Up to 0,1%  <b>LINEARITY</b> > Up to 0,1%	<b>TEMPORAL RESOLUTION</b> > 0,1ns  <b>TIME BETWEEN EACH FLOW CALCULATION</b> > 100ms  <b>UNITS OF MEASUREMENT</b> > From litres per second to cubic metres per day	<b>VOLUME METERING</b> > From a millilitre up to 1,000 cubic metres, gallon...  <b>MEMORY CAPACITY</b> > Up to 11 configurations	<b>OTHER IMPORTANT INFORMATION</b> > Ability to incorporate a virtual chord (please ask) > Level measurement not included

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