Uf 821

ULTRASONIC FIXED FLOW METER

FULL PIPE

GAZ APPLICATION

MEDIA MEASURED
LIQUIDS & GASES

MODELS
SINGLE PIPE
MULTI-PIPE

HIGH PERFORMING

- Graphic screen
- Echo, gain and quality index displayed
- Up to 4 speed chords
- Optional pression/temperature compensation

ADAPTIVE

- Multi-variable data logger
- Mathematical functions generator
- Optional Input/output modules
- Optional HART protocole

RELIABLE

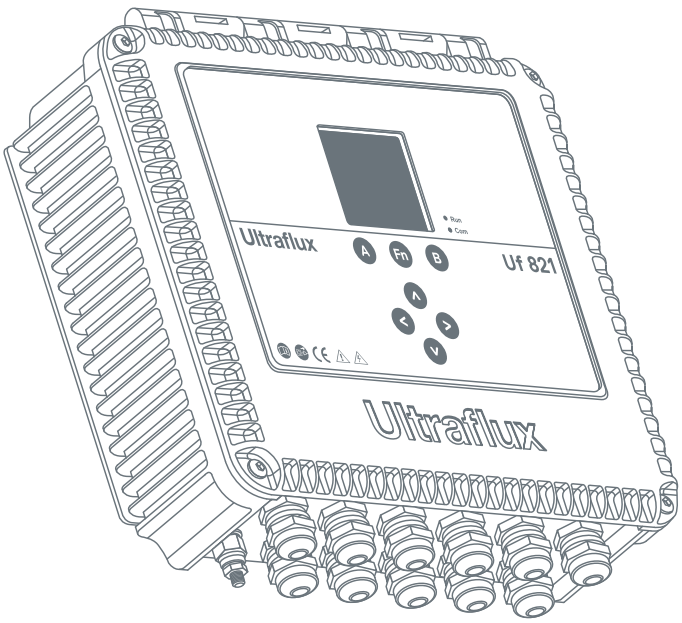
- Automatic calibration of the zero point on site
- Auto-diagnostic

GREAT FEATURES

- **Up to 4 measurement points (4 pipes) with a single device**
- **Rapid installation**
- **No moving parts, no mechanical wear: little or no maintenance required**

COMPATIBLE

- **All Ultraflux probes or probes already installed***



TYPICAL APPLICATIONS

Drinking/raw water:
Flow measurement and metering, system monitoring...

Waste water:
Flow measurement at pumping stations, in systems, inlets/outfalls in treatment works

Gaz:
All type of gases*

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

Ultraflux

EXPERT IN FLOW METERS
SINCE 1974

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MODEL	SINGLE PIPE	MULTI-PIPE
NATURE OF EQUIPMENT	Fixed	
MEASUREMENT ON PIPE UNDER LOAD	Yes	
FLOW MEASUREMENT ON OPEN CHANNEL	No	
INTERNAL DIAMETER OF PIPE	From 8mm to 9 900mm approximately (depending on wall thickness)	
EXTERNAL DIAMETER OF PIPE	From 10mm to 10 000mm*	
STANDARD MOUNTED INPUTS/OUTPUTS	—	
IN OPTION, SINGLE INPUT/OUTPUT MODULES	Up to 4 single modules (or 2 dual) 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 pipe with the ability to incorporate up to 4 speed chords	Flow measurement on 1 to 4 pipes with the ability to incorporate up to 4 speed chords
IN OPTION	› Pressure and temperature compensation › HART protocole › Interface detection	
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: 10-32 V DC • Peak consumption < 12 W • Average consumption < 6 W › AC power supply: 110-240 V AC • Peak consumption < 15 W • Average consumption < 7,5 W	
ENCLOSURE	› Fibreglass-reinforced polycarbonate V0 • PG11 and PG13 gland connectors › Weight: 3kg • Dimensions: 290 mm x 285 mm x 100 mm	
PROTECTION	IP 67	
TEMPERATURE RANGE	For use from - 20 °C to + 60 °C	

TECHNOLOGY

ULTRASONIC TRANSIT TIME
› Continuous bidirectional measurement

SIGNAL ANALYSIS
› Digital Signal Process (real time Echo Shape Control, digital filtering and gain control on each firing)

PERFORMANCES

ACCURACY
› Up to 0,5%

REPEATABILITY
› Up to 0,1%

LINEARITY
› Up to 0,1%

TEMPORAL RESOLUTION
› 0,1ns

TIME BETWEEN EACH FLOW CALCULATION
› 100ms

UNITS OF MEASUREMENT
› From litres per second to cubic metres per day

VOLUME METERING
› From a millilitre up to 1,000 cubic metres, gallon...

MULTI-LAYER PIPE
› Up to three materials taken into consideration

MEMORY CAPACITY
› Up to 11 configurations

OTHER IMPORTANT INFORMATION
› Laminar and turbulent transitions considered (calculation of the Reynolds number) - except for parallel chords
› Freedom to mount probes: modes /, V, N and W

* For gas, please enquire

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