

# Minisonic 600

ULTRASONIC FIXED FLOW METER



MEDIA  
MEASURED  
LIQUIDS



PIPE DIAMETERS  
UP TO  
630MM



MODELS  
STANDARD  
DUAL PIPE  
DUAL CHORD

## SIMPLE

- > Quick and easy installation
- > Intuitive operation

## GREAT BENEFITS

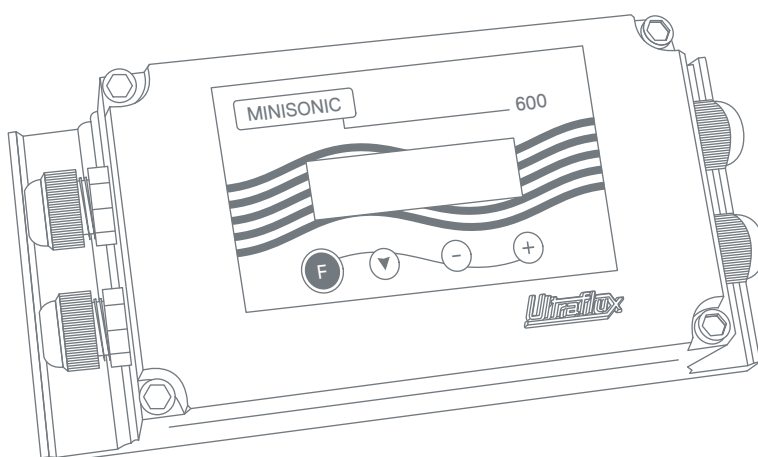
- > Low installation cost
- > No mechanical wear: little or no maintenance

## RELIABLE AND ROBUST

- > Automatic zero calibration
- > Signal quality display
- > IP67 cast aluminium enclosure

## FLEXIBLE

- > On every type of homogeneous liquid - even non-conductive
- > Non ideal flow conditions taken into account



## TYPICAL APPLICATIONS

### Drinking water:

Flow measurement and metering in treatment works, abstraction metering, system control

### Waste water:

Flow measurement at pumping stations, in systems, at intakes/outlets in treatment works

### Raw water:

Flow measurement in fire mains, system supervision

### Chemical products:

Flow measurement for acids, chlorides

### Pharmaceutical sector, including aggressive liquids:

Ultrapure water flows

Automotive, food and farming, energy...

# Minisonic 600

| MODEL                            | STANDARD                                                                                                                                                                                                                                | DUAL PIPE (IDENTICAL PROBES)                                                                                                                 | DUAL CHORD                             |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| NATURE OF EQUIPMENT              | Fixed                                                                                                                                                                                                                                   |                                                                                                                                              |                                        |
| MEASUREMENT ON PIPE UNDER LOAD   | Yes                                                                                                                                                                                                                                     |                                                                                                                                              |                                        |
| FLOW MEASUREMENT ON OPEN CHANNEL | No                                                                                                                                                                                                                                      |                                                                                                                                              |                                        |
| INTERNAL Ø OF PIPE               | From 8mm to 600mm approximately (depending on wall thickness)                                                                                                                                                                           |                                                                                                                                              |                                        |
| EXTERNAL Ø OF PIPE               | From 10mm to 630mm                                                                                                                                                                                                                      |                                                                                                                                              |                                        |
| INPUTS/OUTPUTS                   | <ul style="list-style-type: none"> <li>&gt; 2 current outputs, 4-20mA (1000Ω galvanically isolated as a passive output/impedance of 150Ω as an active output)</li> <li>&gt; 2 static relay outputs (100V - 100mA - 10VA max)</li> </ul> |                                                                                                                                              |                                        |
| USE                              | Flow measurement                                                                                                                                                                                                                        | Flow measurement in two pipes                                                                                                                | Flow measurement with two speed chords |
| SINGLE OR DUAL PIPE              | Single pipe                                                                                                                                                                                                                             | Dual pipe: for two pipes that might have different diameters and thicknesses, be made of different materials, but which must use same probes | Single pipe                            |
| SINGLE OR DUAL CHORD             | Single chord                                                                                                                                                                                                                            | Single chord                                                                                                                                 | Dual chord                             |
| DISPLAY                          | <ul style="list-style-type: none"> <li>&gt; Alphanumeric and graphical (2 lines x 16 characters)</li> <li>&gt; Backlit LCD screen with time delay feature</li> </ul>                                                                    |                                                                                                                                              |                                        |
| SET-UP                           | <ul style="list-style-type: none"> <li>&gt; Quick and simple using 4-key touch pad - or - via dedicated software supplied</li> <li>&gt; Possible to build in an access code</li> </ul>                                                  |                                                                                                                                              |                                        |
| OPERATING SYSTEM                 | Windows for set-up and saving application data                                                                                                                                                                                          |                                                                                                                                              |                                        |
| 7 LANGUAGES                      | French · English · German · Portuguese · Spanish · Italian · Polish                                                                                                                                                                     |                                                                                                                                              |                                        |
| SERIAL LINK                      | RS232 or RS485 to JBUS/MODBUS protocol · 9600 Bauds                                                                                                                                                                                     |                                                                                                                                              |                                        |
| ACCESSORY (OPTIONAL)             | 1 RS232 to USB converter link cable                                                                                                                                                                                                     |                                                                                                                                              |                                        |
| BASIC POWER SUPPLY               | Low voltage: 9-36V dc or 7-25V ac (5VA)                                                                                                                                                                                                 |                                                                                                                                              |                                        |
| OPTIONAL POWER SUPPLY            | 18-72V dc or 90-230V ac (5VA)                                                                                                                                                                                                           |                                                                                                                                              |                                        |
| ENCLOSURE                        | Cast aluminium & epoxy paint · 1.5kg · 237 x 108 x 79mm                                                                                                                                                                                 |                                                                                                                                              |                                        |
| PROTECTION                       | IP67                                                                                                                                                                                                                                    |                                                                                                                                              |                                        |
| TEMPERATURE RANGE                | For use from 0°C to 50°C (60°C on demand)                                                                                                                                                                                               |                                                                                                                                              |                                        |

| TECHNOLOGY                                                                                                                                                              | PERFORMANCES                                                                                                        |                                                                                                               |                                                                                                                                                             |                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ULTRASONIC TRANSIT TIME</b><br>> Continuous bidirectional measurement<br><br><b>SIGNAL ANALYSIS</b><br>> By Echo Shape Control (optimisation of the acoustic signal) | <b>ACCURACY</b><br>> Up to 0.5%<br><br><b>REPEATABILITY</b><br>> Up to 0.1%<br><br><b>LINEARITY</b><br>> Up to 0.1% | <b>TEMPORAL RESOLUTION</b><br>> Better than 0.1ns<br><br><b>TIME BETWEEN EACH FLOW CALCULATION</b><br>> 500ms | <b>UNITS OF MEASUREMENT</b><br>> From litres per second to cubic metres per day<br><br><b>VOLUME METERING</b><br>> From a centilitre up to 100 cubic metres | <b>OTHER IMPORTANT INFORMATION</b><br>> Laminar and turbulent transitions considered (calculation of the Reynolds number) - except for parallel chords<br>> Freedom to mount probes: modes /, V, N and W |

NON CONTRACTUAL DOCUMENT