

**Measurement Unlimited by The Imagination.**

Ultrasonic Flowmeter  
**UW-10**



## Features

### 1. Multi-path System

Up to 4-path system is achievable for stable measurement on the even short-pipe run.

### 2. Multi-output Ports

2 Analog / 4 Contact output

### 3. 2 digital output

1port can be selectable for MODBUS protocol.

### 4. Easy Configuration

Menu driven 4-keys input / Graphical PC Configuration

### 5. Data Acquisition software (Online-LOG) available

PC software shows graphical trend as standard.

### 6. Off-line configuration available

PC software can be input all parameters without connection to main unit.

### 7. Logging

Support the Measurements are logging and Setting change logging.

## Specifications

|             |                                                                                                                                           |                                                                                                                                                                    |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measurement | Method                                                                                                                                    | Ultrasonic pulse transit time difference method                                                                                                                    |
|             | Diameter Range                                                                                                                            | DN 25mm ~ 6000mm                                                                                                                                                   |
|             | Accuracy                                                                                                                                  | $\pm 1.0\%$ R.D. ( $V > 0.8\text{m/s}$ at $DN \geq 300\text{mm}$ )<br>( $V > 2\text{m/s}$ at $DN \leq 250\text{mm}$ )                                              |
|             | Repeatability                                                                                                                             | $\pm 0.3\%$                                                                                                                                                        |
|             | Multi - path Measurement                                                                                                                  | 4 - path (Max.)                                                                                                                                                    |
| Output      | Analog output                                                                                                                             | 2ports (Std.) / 2range output / Allowable load resistance $1\text{k}\Omega$ Max                                                                                    |
|             | Relay output                                                                                                                              | 4ports (Std.) / Totalizing signals & Alarms                                                                                                                        |
|             | Digital output                                                                                                                            | 2ports (Std.) One - way / Inter - communication mode & Modbus (RS232C)                                                                                             |
| Main Unit   | Protection Degree                                                                                                                         | IEC 60529 IP66                                                                                                                                                     |
| Transducer  | Temperature Range                                                                                                                         | $-25^{\circ}\text{C} \sim 65^{\circ}\text{C}$                                                                                                                      |
|             | Environmental Class                                                                                                                       | IEC 60529 IP67 (Option; IP68)                                                                                                                                      |
|             | Cable Length                                                                                                                              | 300m Max. (Between Main Unit and Transducers)                                                                                                                      |
| Logging     | Measurement logging                                                                                                                       | Date & Time, Flow rate, Totalize, Warning, Direction, Status etc total 10 data will be logged.<br>(1 year storage in 10-minute intervals / more than 500,000 data) |
|             | Setting change logging                                                                                                                    | Date & Time, Name and Value of changed parameter up to 1,000 Parameters                                                                                            |
| Function    | Self - diagnostics & failure processing                                                                                                   | Automatic Gain Adjustment (AGA function)                                                                                                                           |
|             | Disturbance detection                                                                                                                     | Automatic Gain Control (AGC function)                                                                                                                              |
|             | No echo receiving warning                                                                                                                 | Preset totalize start                                                                                                                                              |
|             | Full scale warning                                                                                                                        | Data retention                                                                                                                                                     |
|             | Over range warning                                                                                                                        | Path fixing                                                                                                                                                        |
|             | Low flow cut                                                                                                                              | Forward / Backward flow change processing                                                                                                                          |
|             | Zero shift                                                                                                                                | Basic data display                                                                                                                                                 |
|             | Span compensation                                                                                                                         | Error historic counter                                                                                                                                             |
|             | Filtering (Smoothing)                                                                                                                     | Mass indication                                                                                                                                                    |
|             | Fixed analog output                                                                                                                       | Metric & English unit                                                                                                                                              |
|             |                                                                                                                                           |                                                                                                                                                                    |
|             |                                                                                                                                           |                                                                                                                                                                    |
| Certified   | EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU,<br>RoHS Directive RoHS2((2011/65/EU)+(EU)2015/863), KS C 9811, 9610-4-2~8, 11 |                                                                                                                                                                    |

