

## Open Channel Flowmeter UOL

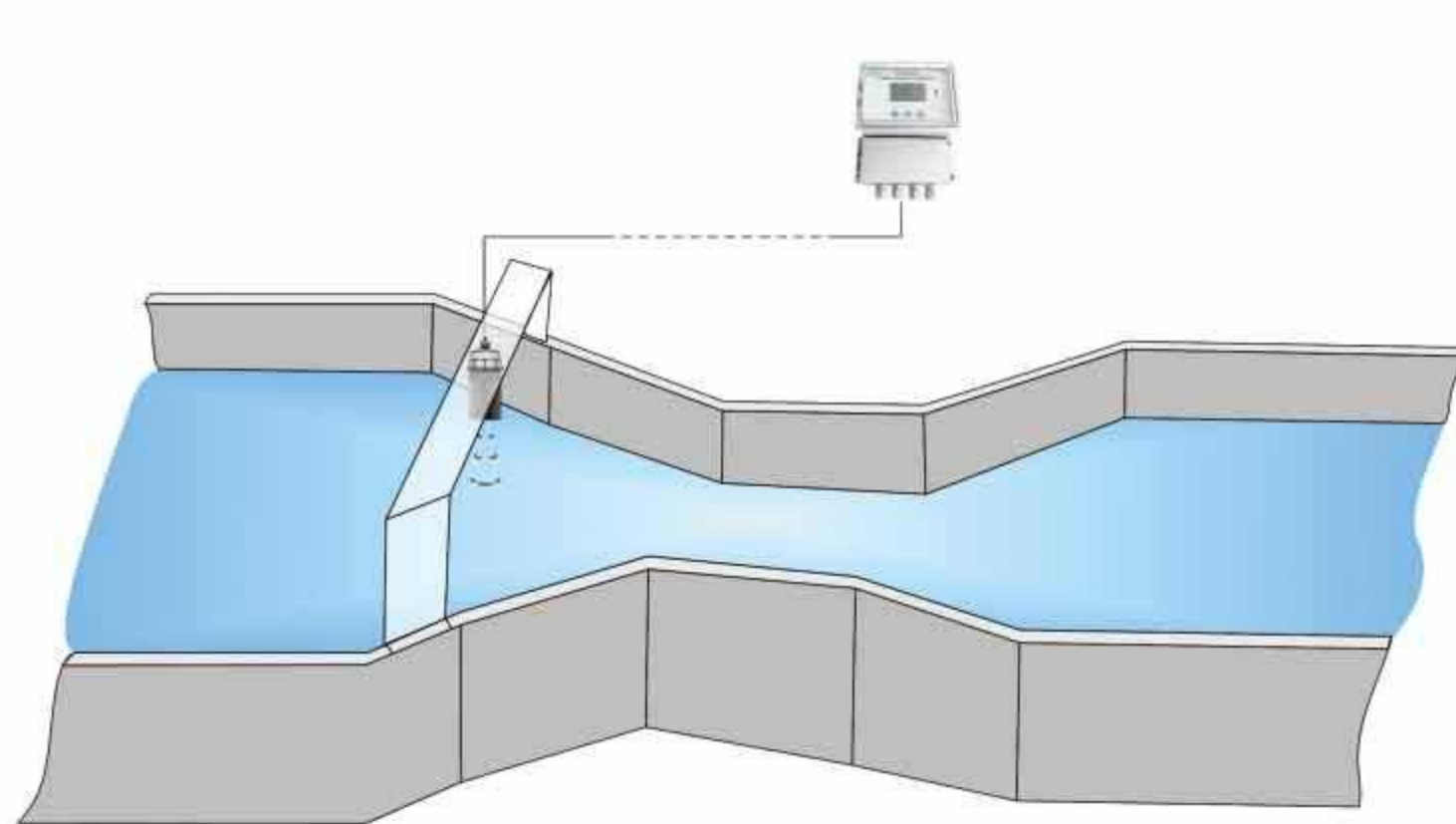
UOL series is non-contact ultrasonic open channel flow meter, with low blind area, high sensitivity, high stability. It consists of ultrasonic probe and the host, mainly used for measuring water conservancy irrigation, sewage plants, enterprises and institutions of the flow rate of the sewage outfalls, urban sewage and chemical enterprise part of the flow measurement.



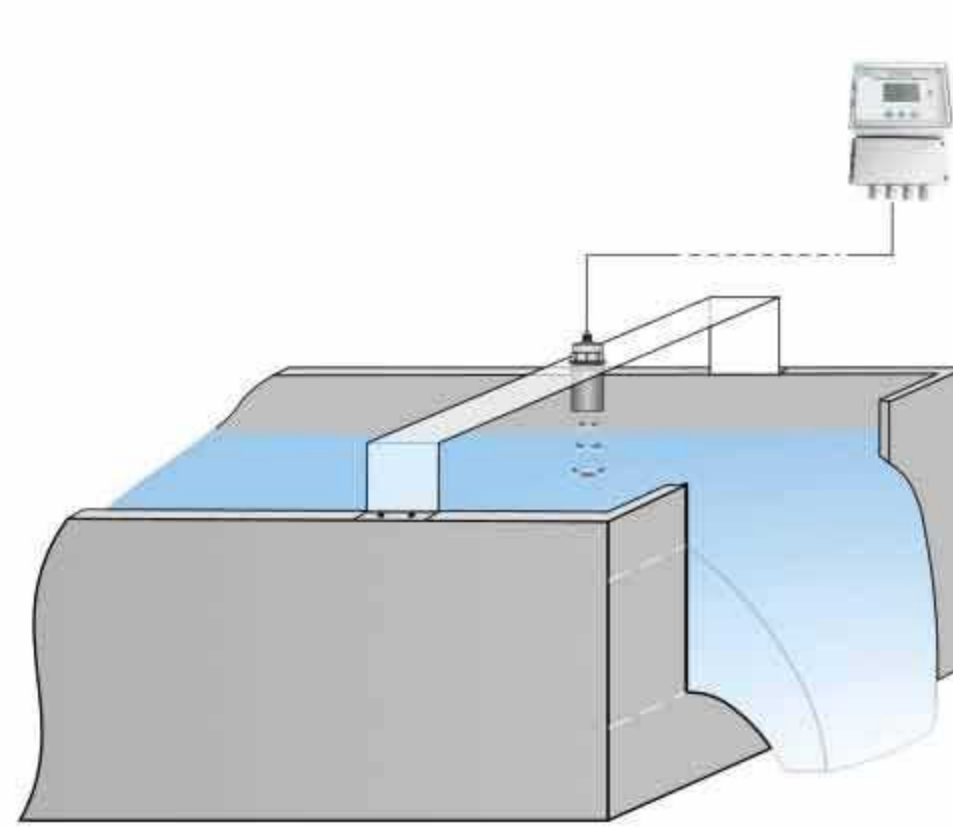
### Features:

- Not contact liquid measure, easy to maintain.
- High accuracy, 1mm for level measure.
- Match with various weir and flume, Parshall flume, Right-angle triangle weir, rectangular weir, groove, and throat channel slot.
- Large screen display, double line 14 bit LCD liquid crystal display (with backlight).
- Automatic temperature compensation, automatic filtering system, strong anti-jamming.
- 4-20mA, Hart, RS485(modbus) can be optional.
- High protection grade, transmitter is IP67, sensor is IP68.
- 6pcs relay, can be set high, low and fault alarms.

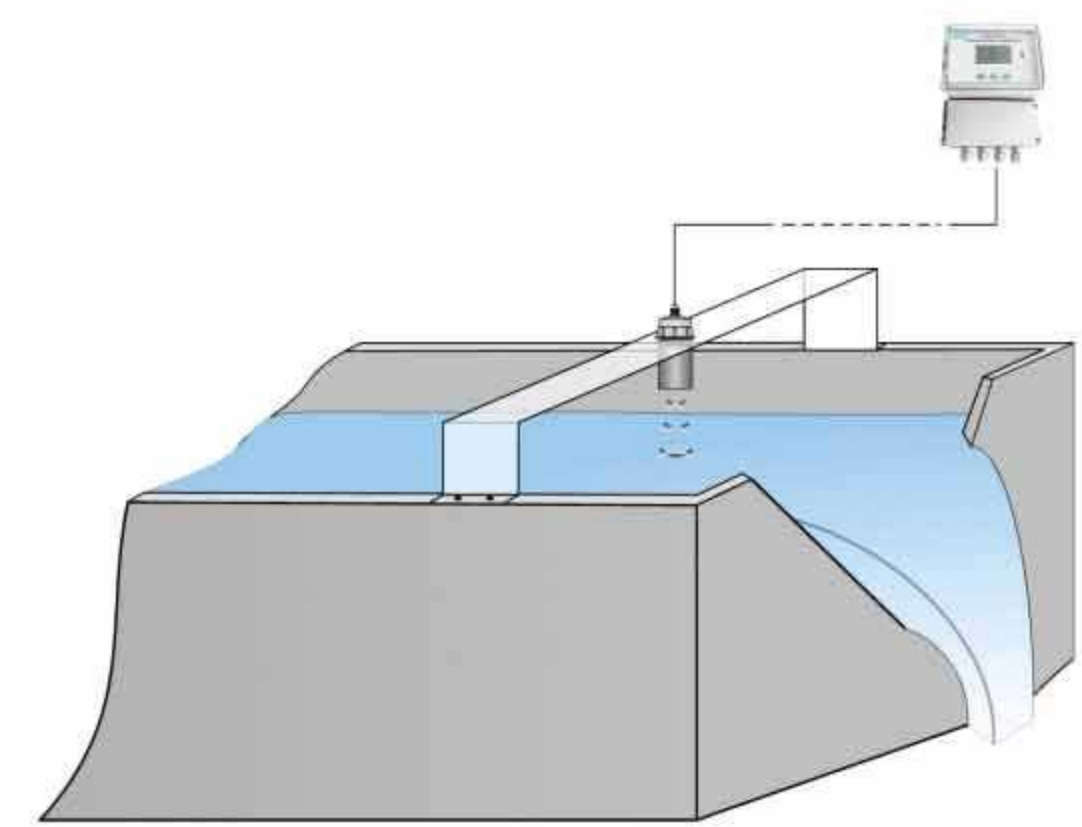
### Installation Drawing:



Parshall flume



Rectangular weir



Triangle weir



## Technical Data:

### Transmitter

|                       |  |
|-----------------------|--|
| Weir&Flume Match :    | Standard : Parshall Flume, Triangular Weir, Rectangular Weir and Non-throat Flume<br>USER Standard : Long-throat Flume(Rectangular Flume or Trapezoid Flume) |
| Display Resolution :  | 1mm  |
| Accuracy :            | 1mm or 0.2%FS ( in air )   |
| Display :             | 14 Digit LCD in 2 rows   |
| Button :              | 3pcs induction buttons   |
| Output :              | DC4~20mA/Hart Serial communication RS485(modbus standard protocol)   |
| Output Load :         | 0 ~ 500Ω   |
| Relays :              | 2pcs,4pcs,5pcs,6pcs can be optional(5A 250VAC/30VDC)   |
| Relay Specification : | 5A 250VAC/30VDC  |
| Power Supply :        | DC24V ( ±5% ) 0.2A or AC220V ( ±20% ) 0.1A   |
| Measure Cycle :       | 1.5second (tunable)  |
| Temp. Range :         | -20°C~ +70°C   |
| Case Material :       | ABS  |
| IP Class :            | Transmitter IP67   |
| Cable Connection :    | PG9/PG11/PG13.5  |
| Installation :        | Wall-mounted   |
| Size :                | 250*185*125mm  |

### Sensor

|                      |   |
|----------------------|---|
| Level Range :        | Standard 0.00-4.00m ( liquid), other level range can be optional. |
| Dead Zone :          | Standard 0.20m  |
| Temperature Range :  | -40°C ~ +70°C   |
| IP Class :           | IP68  |
| Sensor Material :    | ABS/PVC/PTFE  |
| Pressure :           | 0.2Mpa  |
| Cable Length :       | Standard 10m ( Max. 1000m )                                       |
| Beam Angle :         | 8°(3db)   |
| Process Connection : | G2"   |
| Installation:        | Screw or flange   |



## Configuration Code:

|     |                           |   |
|-----|---------------------------|---|
| UOL | Open Channel Flowmeter    |   |
|     | <b>Power supply</b>       |   |
| A   | AC220V                    |   |
| D   | DC24V                     |   |
| O   | Others                    |   |
|     | <b>Output</b>             |   |
| 1   | 4-20mA                    |   |
| 2   | 4-20mA & RS485-MODBUS     |   |
|     | <b>Relay output</b>       |   |
| R00 | Without relay             |   |
| R01 | 1 relay                   |   |
| R02 | 2 relays                  |   |
| R03 | 3 relays                  |   |
| R04 | 4 relays                  |   |
| R05 | 5 relays                  |   |
| R06 | 6 relays                  |   |
|     | <b>Level sensor</b>       |   |
| 4m  | 4m                        |   |
| 6m  | 6m                        |   |
| 8m  | 8m                        |   |
| 12m | 12m                       |   |
|     | <b>Sensor material</b>    |   |
| A   | ABS & PVC                 |   |
| P   | PTFE                      |   |
|     | <b>Sensor cable</b>       |   |
| 10m | 10m (standard)            |   |
| Xm  | Optional, up to 500m      |   |
|     | <b>Process connecting</b> |   |
| G   | G1/2 screw                |   |
| S   | G2 screw standard         |   |
| F   | DN65 flange               |   |
|     | <b>Weir/notch type</b>    |   |
| PN  | P1~P17 Parshall flume     |   |
| SN  | S1~S5 Triangular weir     |   |
| JN  | J1~J5 Rectangular weir    |   |
| UOL | -A                        | -1 -R00 /LA - 4m -A -10m -G -PN (example configuration) |