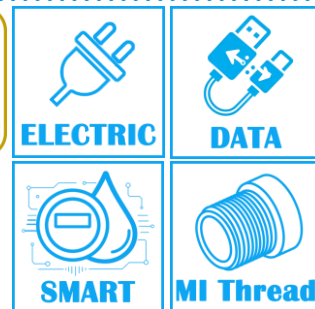
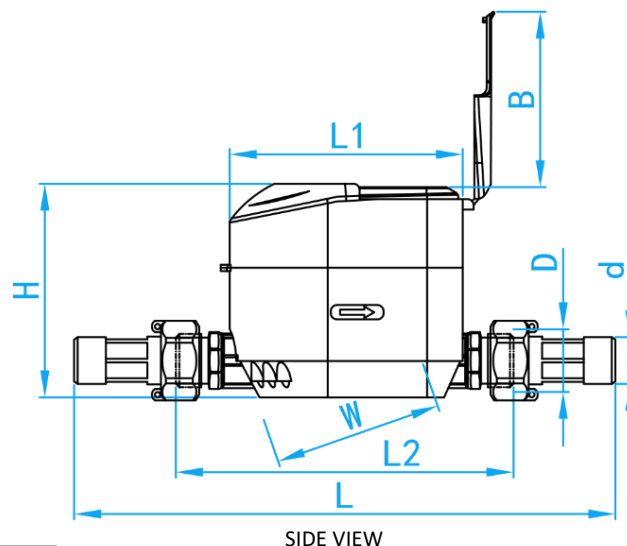


# ULTRASONIC DRY-DIAL WATER METER WITH MODBUS RTU VIA 4-CORE RS485 INTERFACE (R250)

COMPLIES WITH ISO 4064: 2014



**Communication Protocol: Modbus RTU**  
**Communication Interface: 4-core RS-485**  
**Transmission Rate: 9600 bit/s**



## STANDARD SPECIFICATIONS

|                                        |                     |
|----------------------------------------|---------------------|
| Water Temperature                      | 0°C ≤ t ≤ 30°C      |
| Operating Pressure                     | ≤ 1.6 Mpa           |
| Operating Voltage                      | 12 V DC             |
| Quiescent Current                      | ≤ 0.006 mA          |
| Meter-reading Current                  | ≤ 4 mA              |
| Battery Lifespan                       | 6 Years (Estimated) |
| Communication transmission rate        | 9600 bit/s          |
| Accuracy Class / Performance ratio (R) | R250                |

## COMPONENT PARTS

| ITEM | PARTS           | MATERIAL                         |
|------|-----------------|----------------------------------|
| 1    | Lid             | ABS+PC                           |
| 2    | Sealed Register | PC+ABS+POM                       |
| 3    | Communications  | Epoxy Resin Copper<br>Silicon PA |
| 4    | Body            | ABS+PC+Brass                     |
| 5    | Impeller        | ABS                              |

## FLOW RATE SPECIFICATIONS

| SKU      | SIZE<br>(mm) | R [Q <sub>3</sub> / Q <sub>1</sub> ] |          | Q <sub>1</sub> Minimum<br>flow rate [m <sup>3</sup> / h] | Q <sub>2</sub> Transitional flow<br>rate [m <sup>3</sup> / h] | Q <sub>3</sub> Nominal<br>flow rate [m <sup>3</sup> / h] | Q <sub>4</sub> Maximum<br>flow rate [m <sup>3</sup> / h] |
|----------|--------------|--------------------------------------|----------|----------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|
|          |              | Horizontal                           | Vertical |                                                          |                                                               |                                                          |                                                          |
| WMSUN015 | 15           | R250                                 |          | 0.010                                                    | 0.016                                                         | 2.5                                                      | 3.125                                                    |
| WMSUN020 | 20           |                                      |          | 0.016                                                    | 0.026                                                         | 4.0                                                      | 5.000                                                    |
| WMSUN025 | 25           |                                      |          | 0.025                                                    | 0.040                                                         | 6.3                                                      | 7.875                                                    |
| WMSUN035 | 32           |                                      |          | 0.040                                                    | 0.064                                                         | 10.0                                                     | 12.500                                                   |
| WMSUN042 | 40           |                                      |          | 0.064                                                    | 0.102                                                         | 16.0                                                     | 20.000                                                   |

## DIMENSIONS

| SKU      | L(mm) | L1(mm) | L2(mm) | W(mm) | D(mm)  | d(mm)  | H(mm) | B(mm) | WEIGHT(kg) | PCS/CTN |
|----------|-------|--------|--------|-------|--------|--------|-------|-------|------------|---------|
| WMSUN015 | 262   | 114    | 165    | 96    | G ¾"   | R ½"   | 106   | 85    | 0.93       | 12      |
| WMSUN020 | 300   | 114    | 195    | 96    | G 1"   | R ¾"   | 106   | 85    | 1.20       | 5       |
| WMSUN025 | 347   | 114    | 225    | 96    | G 1 ¼" | R 1"   | 110   | 85    | 1.65       | 8       |
| WMSUN035 | 307   | 114    | 180    | 96    | G 1 ½" | R 1 ¼" | 135   | 85    | 1.91       | 5       |
| WMSUN042 | 329   | 114    | 200    | 96    | G 2"   | R 1 ½" | 137   | 85    | 2.60       | 10      |

\*1] Ensure the water meter is installed in the correct water flow direction.

\*Note: Weight tolerance is ±5%.

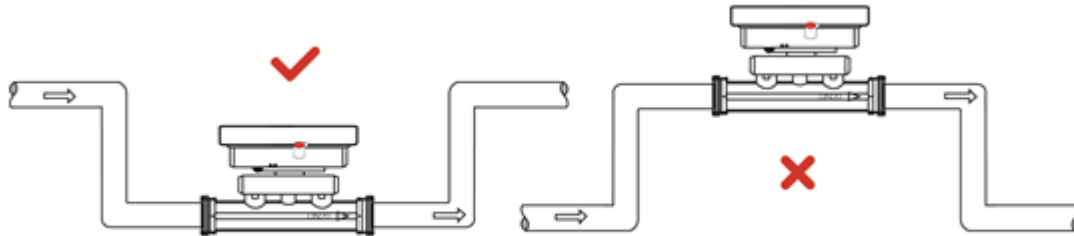
2] Always select the correct size and specification for the meter.

3] These water meters can be installed in either horizontal or vertical positions, but the correct installation guidelines must be strictly followed. Failure to comply will result in damage to the meter and void the warranty.

4) For indoor installation only.

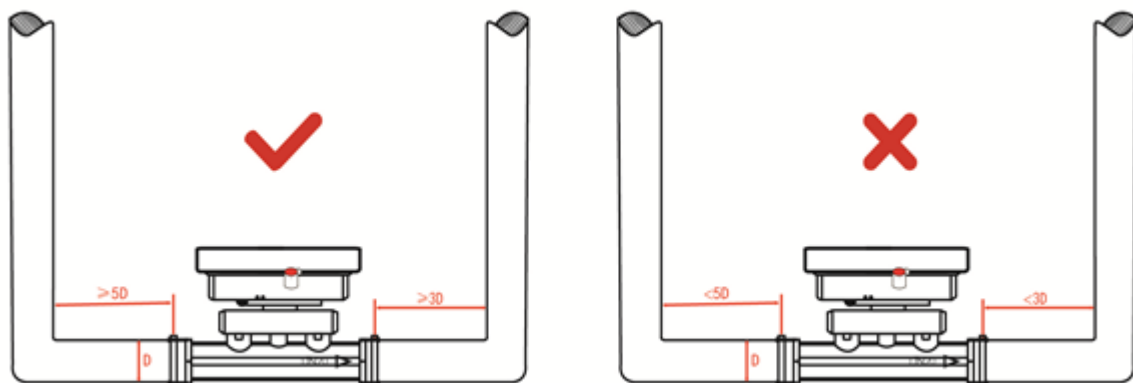
## Guideline for correct installations of ultrasonic modbus water meter (Threaded End)

Figure 1 – Horizontal Installation



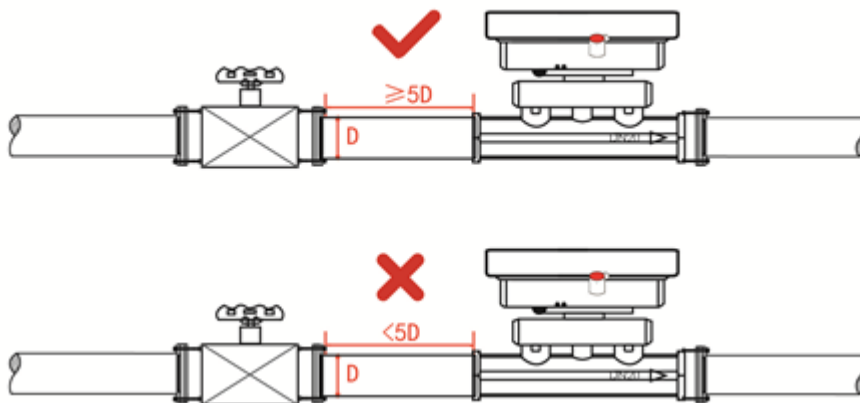
When installing on a U-shaped pipe, place the meter at the lowest point. Air can accumulate at higher points in the pipeline, leading to inaccurate or unmeasurable readings.

Figure 2 - Horizontal Installation



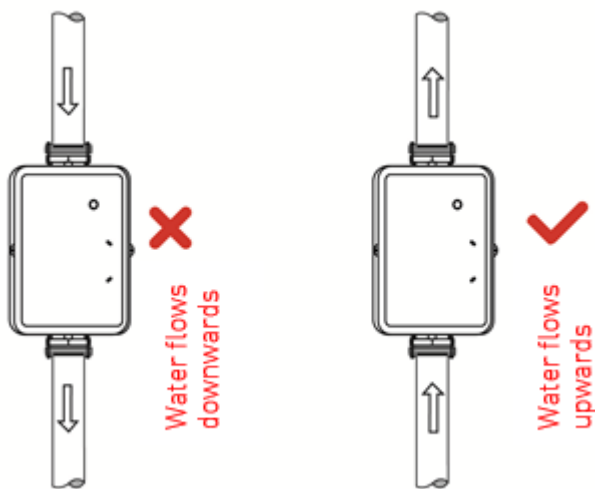
When installing the meter at a bend, ensure that the straight pipe upstream is at least 5 times the pipe diameter, and the straight pipe downstream is at least 3 times the pipe diameter. Failure to do so may result in inaccurate meter readings.

Figure 3 - Horizontal Installation



When installing valves or other objects upstream of the meter, ensure there is a distance of at least 5 times the pipe diameter between the meter and the object. Failure to maintain this distance can result in inaccurate meter readings.

Figure 4 – Vertical Installation



When installing the meter vertically, ensure it is placed on a straight pipeline with water flowing upwards. Installing it on a pipeline with water flowing downwards can result in inaccurate or failed measurements due to the influence of gravity, which may prevent the pipeline from filling completely with water.