

# Ultrasonic Water Meter

Version: 2018-10-11

## 1. Main Features

- ◇ Dynamic Range: R250, R400;
- ◇ Starting Flow rate: 0.0015 m<sup>3</sup>/h;
- ◇ Communication Interface: M-BUS, RF or NB-IoT;
- ◇ Protection Class: IP68;
- ◇ Maximum Sampling rate: 32Hz(GP30)/4Hz(GP22);
- ◇ Self-checking: Overflow, Pipe Empty, The aging of Transducer and so on.

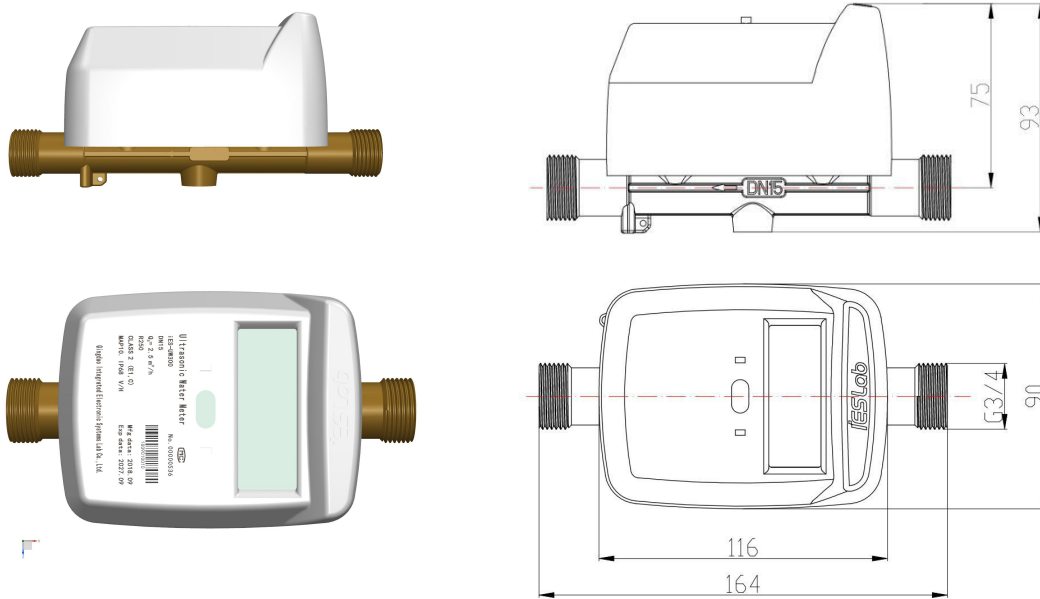
## 2. Performance Characteristics

Items		Parameters				
Diameter		15	20	25	32	40
Starting Flow (m <sup>3</sup> /h)		0.0015	0.002	0.003	0.004	0.005
Minimum Flow Rate Q <sub>1</sub> (m <sup>3</sup> /h)		0.010	0.016	0.025	0.040	0.064
Transitional Flow Rate Q <sub>2</sub> (m <sup>3</sup> /h)		0.016	0.025	0.040	0.064	0.100
Permanent Flow Rate Q <sub>3</sub> (m <sup>3</sup> /h)		2.5	4.0	6.3	10.0	16.0
Overload Flow Rate Q <sub>4</sub> (m <sup>3</sup> /h)		3.125	5.0	7.875	12.5	20.0
Flow Range Ratio (Q <sub>3</sub> /Q <sub>1</sub> )		400 <sup>①</sup> , 250 (default)				
Accuracy Class		Class 2				
Temperature Class		T30,T50 <sup>②</sup>				
Sample Rate		0.5Hz~4Hz(GP22) Self-adaption default		8Hz~32Hz(GP30) 8Hz default		
Maximum Admissible Pressure		1.0MPa				
Pressure Loss Range		<63kPa, <40kPa				
Input Voltage		3.15V~4.2V typ. 3.6V				
Current	Static	GP22	<40uA@ Self-adaption mode			
		GP30	<40uA@8Hz			
	Receive(NB-IoT)		<58mA			
	Transmission(NB-IoT)		<250mA			
Battery Life		10 years				
Display Indication		LCD				
Display Items		Accumulated Flow Rate(m <sup>3</sup> ), Instantaneous Flow Rate(m <sup>3</sup> /h), Accumulated Running Time (h) and other items.				
Range of Display		0~99999.999 m <sup>3</sup>				
Operation		Magnetic Switch				
Data Storage		Recent 90 Daily Accumulative Data Recent 24 Monthly Accumulative Data.				
Frequency of Data Reporting		Once a Day				

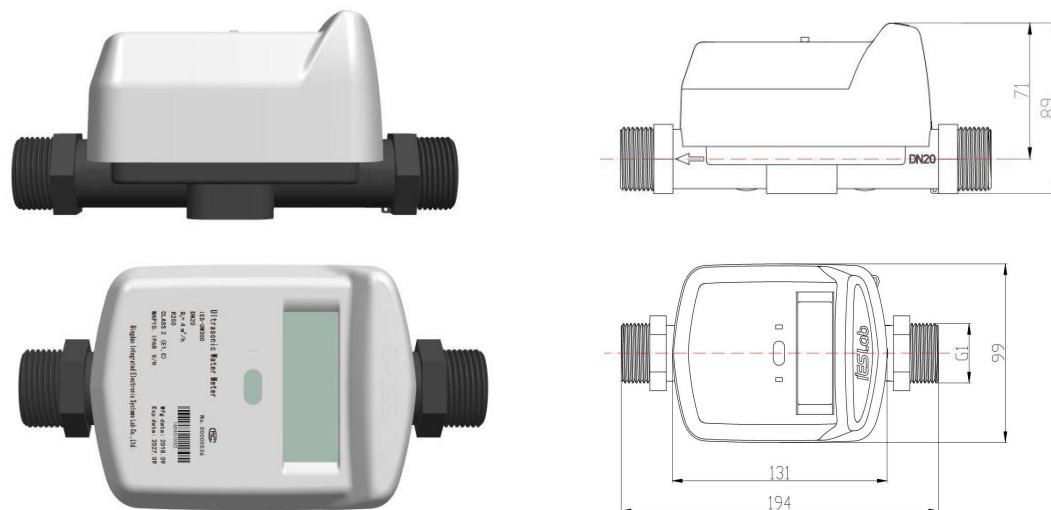
Frequency Range	B1(2100MHz) ,B3(1800MHz) B5(850MHz), B8(900MHz)
Maximum Transmitting Power	23 ± 2dBm
Receiving Sensitivity	-128dBm
Protection Class	IP68
EMC Class	E1
Operating Temperature	-25°C ~ 55°C

### 3. Mechanical Assembly

#### Small diameter meter(DN15 Brass Pipe)



#### Small diameter meter(DN20 Composite Material)



## 4. Ordering information

Water Meter Type	Part number	Markup information
Micro-Power Wireless	iES-UW100-xxxx	iES-UW100-xxxx-YYMMDD-SSSS
Meter-Bus	iES-UW200-xxxx	iES-UW200-xxxx-YYMMDD-SSSS
NB-IoT	iES-UW300-xxxx	iES-UW300-xxxx-YYMMDD-SSSS

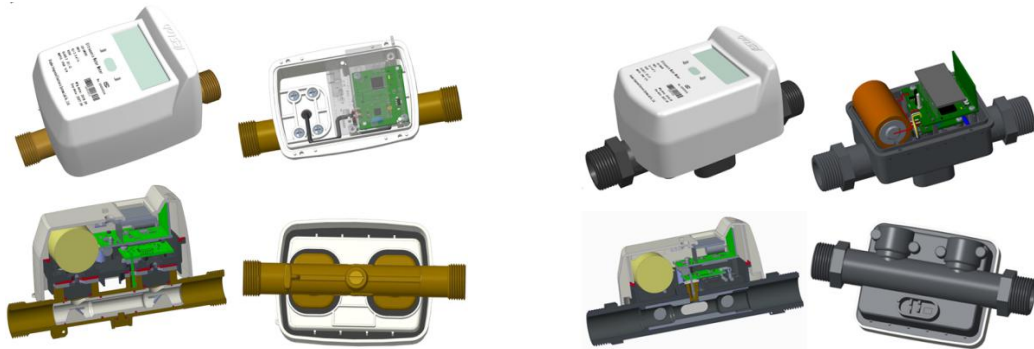
xxxx = **type number**, YY = **year**, MM = **month**, DD = **day**, SSSS = **product serial number that day**

For example: iES-UW300-0001- 180915-1234<sup>®</sup>

0001 = DN15,CHINA TELECOM,Without Valve,brass,T30,Class B,△P63

### Remarks

- ① Please contact iESLab if you select other flow range ratio.
- ② Please contact iESLab if you select T50 temperature class.
- ③ Samples as below.



- ④ Ultrasonic water meter calibration table as below.

