



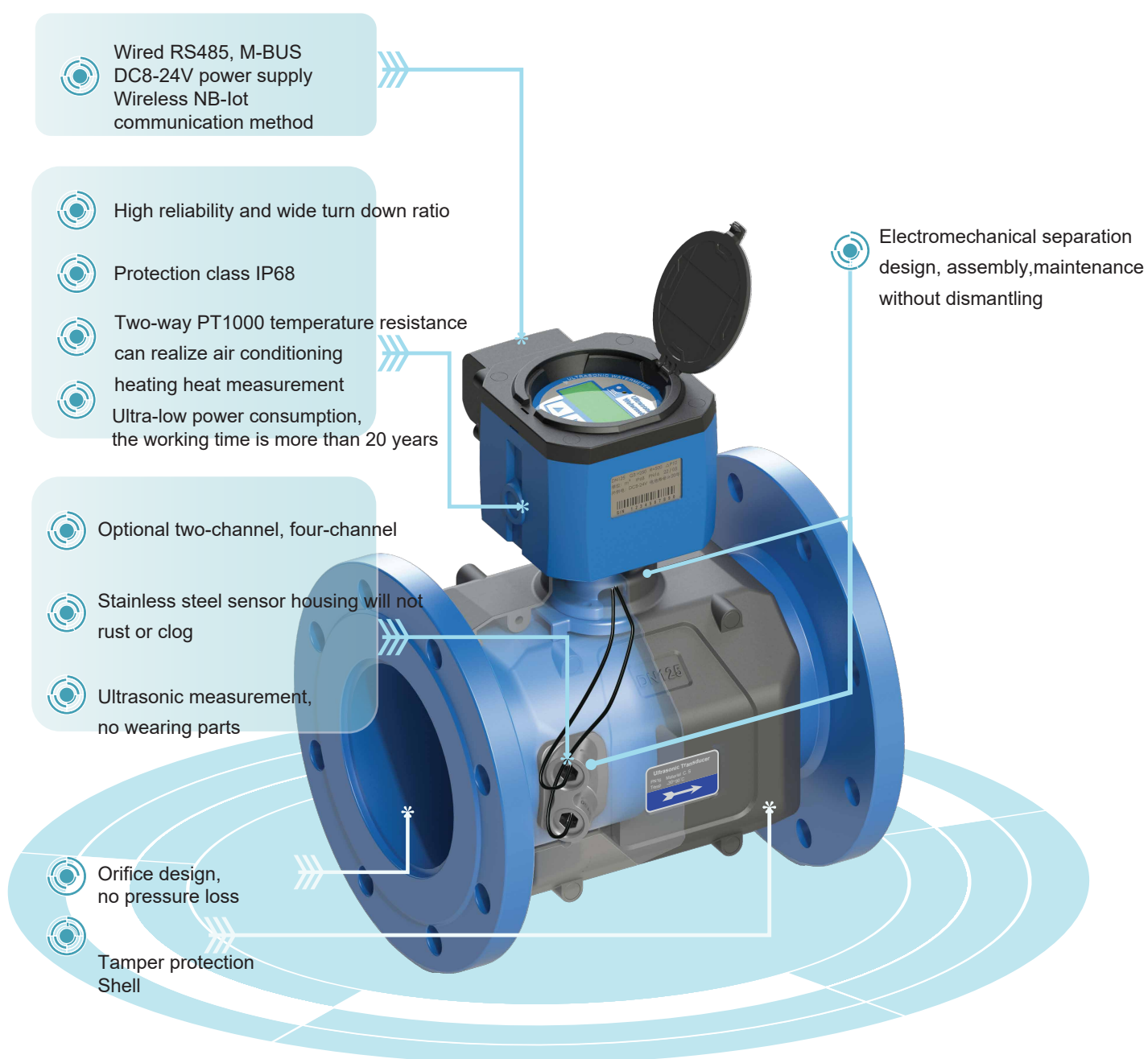
OASIS
INSTRUMENT CO., LTD.

ULTRASONIC WATER METER

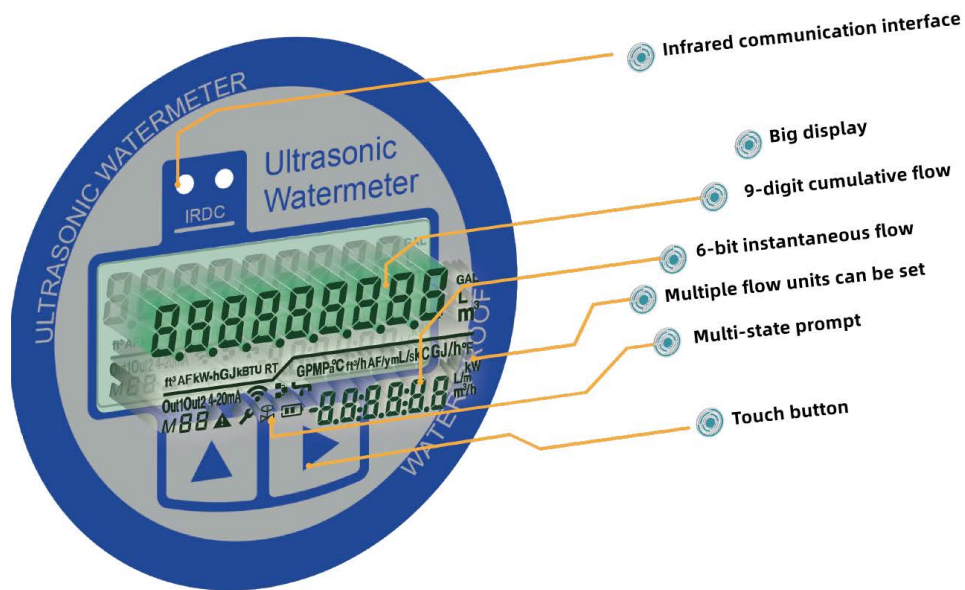


Introduction

OIUWM-2000 series ultrasonic water meter is a highly integrated two-channel, four-channel ultrasonic water meter newly launched according to ISO4064-2014 and GB/T778-2018. This series of ultrasonic water meters has the advantages of high range ratio, ultra-low power consumption, stable and reliable operation, etc. Every part of the water meter has IP68 protection level, which can be used in various harsh working environments, and is widely used in urban water supply, water resources management, agricultural irrigation, landscaping, industrial production and other industries. It is a major innovation in water metering technology.



Display Operating

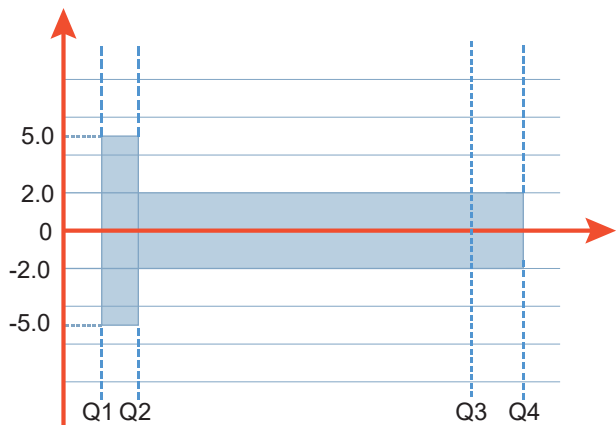


Technical Parameter

Item	Parameter
Executive standard	ISO4064-2014、GBT778-2018
Measuring fluid	Water, sewage, seawater (other liquids need to be customized), and filled with pipes
Fluid temperature	0.1-30℃
Working environment	Temperature: -30-45℃; Humidity100%(RH)
Pressure resistance	1.6MPa, Optinal 2.5MPa.
Pressure loss	DN15-DN40 ΔP40;≥DN50 ΔP10
Upstream flow field sensitivity level	U3
Downstream flow field sensitivity level	D0
Climatic&mechanical environment safety class	C class
Electromagnetic Compatibility Level	E2 class
Communication interface	RS485/USART/infrared, Optional M-BUS; NB-iot Wireless transmission
Output signal	Optinal OCT
Power supply	2 built-in lithium batteries (3.6V, 8Ah)/external DC8-24V DC power supply
Protection class	IP68
Local display	Two-line display includes 9-digit totalizer, 6-digit instantaneous flow, and various status prompts and units
Data storage	Using ferroelectric storage parameters, automatically record the cumulative flow of the first 31 days of the first 32 months
Current measurement cycle	Measurement status: 1 time/s (can be set); Verification status: 4 times/s
Power consumption	Standard status < 30uA, can work continuously for more than 20 years
Material	Measuring tube body: carbon steel (stainless steel at the sensor); sensor: PEEK; protective cover: nylon + glass fiber

Error curve

Pressure loss



- DN15-40 pressure loss ΔP_{40}
- > DN50 Pressure loss ΔP_{10} (Diameter)

Communication & networking

Equipped with waterproof junction box, suitable for wired communication or wireless communication



Complete specifications

Industrial Grade Small Diameter Ultrasonic Water Meter (DN15-DN40)

Body material: copper, optional stainless steel 304, stainless steel



DN15-DN40
Copper Pipe



DN15-DN40
Stainless Steel

Two-channel ultrasonic water meter (DN50-DN800)

Body material: carbon steel (the probe part is stainless steel 304)
optional stainless steel 304, stainless steel 316



DN50-DN150



DN200-DN800



DN200-DN800

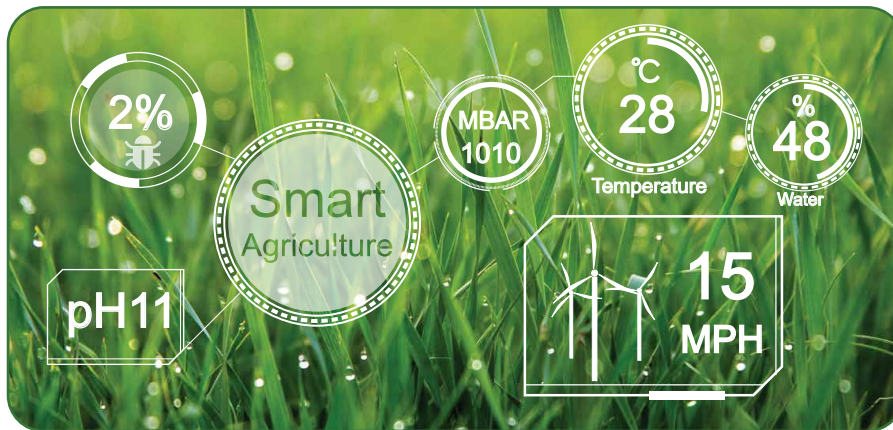


DN80-DN150

Four-channel ultrasonic water meter (DN80-DN800)

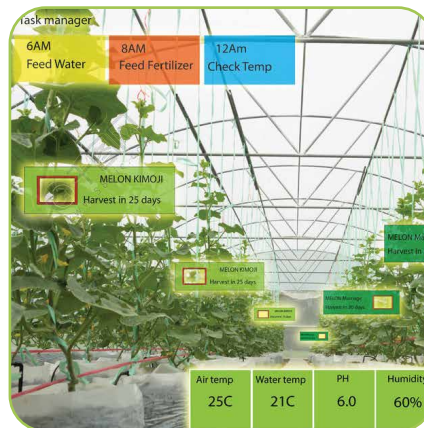
Body material: carbon steel (the probe part is stainless steel 304),
optional stainless steel 304, stainless steel 316

Typical application



- Agricultural irrigation and landscaping
Smart Agriculture System
Provide quantitative irrigation information for smart agricultural systems and landscaping.

Water saving, time saving, labor saving, scientific irrigation.



- Water supply and drainage
Bus and branch line flow measurement - scheduling and management
Household metering master meter - used for settlement of water volume in buildings and units



- water resource management
- Water resource fee settlement
- Water flow monitoring



- Industrial water supply and drainage metering
- External water supply settlement
- Internal water accounting
- Drainage fee settlement

Flow range

● Mono industrial grade small diameter water meter (R=200)

Nominal diameter (mm)	Turndown ratio R	Flow (m³/h)				
		starting flow	Minimum flow Q1	Demarcation flow Q2	Common Flow Q3	Overload flow Q4
DN15	200	0.0031	0.0125	0.0200	2.5	3.125
DN20	200	0.0050	0.0200	0.0320	4.0	5.000
DN25	200	0.0079	0.0315	0.0504	6.3	7.875
DN32	200	0.0200	0.0800	0.1280	16	20.000
DN40	200	0.0313	0.1250	0.2000	25	31.250

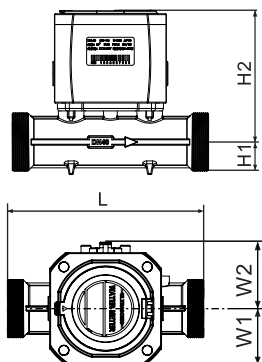
● Two-channel large-diameter water meter (R=100)

Nominal diameter (mm)	Turndown ratio R	Flow (m³/h)				
		starting flow	Minimum flow Q1	Demarcation flow Q2	Common Flow Q3	Overload flow Q4
DN50	100	0.100	0.400	0.640	40	50.00
DN65	100	0.158	0.630	1.008	63	78.75
DN80	100	0.250	1.000	1.600	100	125.00
DN100	100	0.400	1.600	2.560	160	200.00
DN125	100	0.625	2.500	4.000	250	312.50
DN150	100	1.000	4.000	6.400	400	500.00
DN200	100	1.575	6.300	10.080	630	787.50
DN250	100	2.500	10.000	16.000	1000	1250.00
DN300	100	4.000	16.000	25.600	1600	2000.00
DN350	100	4.000	16.000	25.600	1600	2000.00
DN400	100	6.250	25.000	40.000	2500	3125.00
DN450	100	6.250	25.000	40.000	2500	3125.00
DN500	100	10.000	40.000	64.000	4000	5000.00

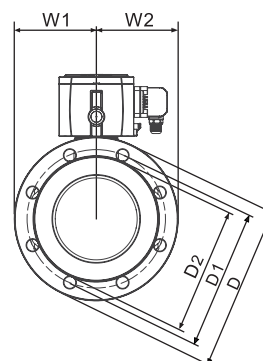
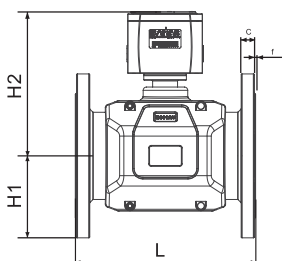
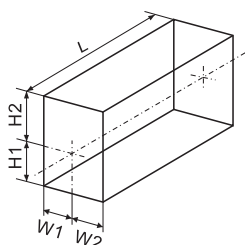
● Four-channel large-diameter water meter (R=200)

Nominal diameter (mm)	Turndown ratio R	Flow (m³/h)				
		starting flow	Minimum flow Q1	Demarcation flow Q2	Common Flow Q3	Overload flow Q4
DN80	200	0.125	0.500	0.800	100	125.00
DN100	200	0.200	0.800	1.280	160	200.00
DN125	200	0.313	1.250	2.000	250	312.50
DN150	200	0.500	2.000	3.200	400	500.00
DN200	200	0.788	3.150	5.040	630	787.50
DN250	200	1.250	5.000	8.000	1000	1250.00
DN300	200	2.000	8.000	12.800	1600	2000.00
DN350	200	2.000	8.000	12.800	1600	2000.00
DN400	200	3.125	12.500	20.000	2500	3125.00
DN450	200	3.125	12.500	20.000	2500	3125.00
DN500	200	5.000	20.000	32.000	4000	5000.00

Dimension



Nominal diameter (mm)	Dimension (mm)					Threaded connection		Effective thread length	Weight (Estimate) kg	Pressure Grade MPa
	L	H1	H2	W1	W2	pipe thread A	Takeover thread B			
DN15	165	14	123	57	130	G3/4B	G3/4B	10	1.5	1.6
DN20	195	18	125	57	130	G1B	G1B	12.5	1.5	1.6
DN25	160	22	127.5	57	130	G1 1/4B	G1 1/4B	13	1.5	1.6
DN32	180	25	130	57	130	G1 1/2B	G1 1/2B	14.5	2	1.6
DN40	200	33.5	134	57	130	G2B	G2B	16	2.2	1.6



Nominal diameter (mm)	Dimensions (mm)					Flange Dimensions (mm)						Pressure Glass	Weight (Estimate) kg
	L	H1	H2	W1	W2	outer diameter D	Bolt hole center circle diameter D1	Bolt Hole Diameter*Quantity ϕ^*n	Sealing surface D2	f	Flange Thickness C		
DN50	200	82.5	180	82.5	108	165	125	18*4	102	2	19	16	10
DN65	200	92.5	189	92.5	108	185	145	18*4	122	2	20	16	11.5
DN80	225	100	197	100	108	200	160	18*8	138	2	20	16	13.5
DN100	250	110	207	110	110	220	180	18*8	158	2	22	16	18.5
DN125	275	125	220	125	125	250	210	18*8	188	2	22	16	23.5
DN150	300	142.5	233	142.5	142.5	285	240	22*8	212	2	24	16	30

Nominal diameter (mm)	Dimensions (mm)					Flange Dimensions (mm)						Pressure Glass	Weight (Estimate) kg
	L	H1	H2	W1	W2	outer diameter D	Bolt hole center circle diameter D1	Bolt Hole Diameter*Quantity ϕ^*n	Sealing surface D2	f	Flange Thickness C		
DN200	350	170	257	170	170	340	295	22*12	268	2	26	16	35.5
DN250	450	200.5	284.5	200.5	200.5	405	355	26*12	320	2	29	16	58
DN300	500	230	310	230	230	460	410	26*12	378	2	32	16	76
DN350	550	260	350	260	260	520	470	26*16	438	4	35	16	108
DN400	600	290	380	290	290	580	525	30*16	490	4	38	16	145
DN450	700	320	410	320	320	640	585	30*20	550	4	46	16	185
DN500	800	357.5	447.5	357.5	357.5	715	650	33*20	610	4	46	16	232

Selection code

UWM-2000-1 - ^{A B C D E}

Letter	Item	Parameter	Note
A	Pipe	DN15-DN40 DN50-DN800	Please select the nominal diameter
B	Number of channels	1 Single channel 2 Double channels 4 Four channels	Single channel: DN15-DN40 Double channels: DN50 more Four channels: DN80more
C	Material	1 Carbon Steel (Stainless Steel 304 at the probe) 2 Copper 3 Stainless Steel 304 4 Stainless Steel 316	DN15-DN40 Optinal2,3,4 DN50 more Optinal1,3,4,
D	Pressure Glass	1.0 1.6 2.5	Standard Accessories1.6
E	Communication Interface Power supply	1 RS485 & DC8-24V 2 RS485 & M-BUS 3 NB-Iot 4 RS485 & OCT&DC8-24V	Standard Accessories1

For example: UWM-2000-1-DN100-4-3-1.6-1

Explaining: UWM-2000 Ultrasonic Water Meter, DN100 pipe size, 4 channels, Stainless304 material, 1.6MPa, with RS485Communication Interface DC8-24V Power Supply

