

Ultrasonic water meter



Features

- Intelligent management: detect leak or crack of the water pipe and switch the valve remotely and automatically
- Extremely high accuracy without missing even a drop flow, low starting flow down to 0.002m³/h
- Anti-interference of electricity power
- Design for working Underwater up to 30m in accordance with wet-dial water meter
- Full inspection in enclosure protection. Inspection level reach to detect leak of vehicle tire, which make us different from others
- All seals are made of imported silicone rubber
- 6mm tempered-glass as meter cover, 2.5mm plastic as meter case for anti-aging and anti-ultraviolet
- Four sets of batteries with capacity up to 14400mAh and the unique management technique of multiple battery ensure the lifespan for 15 years

Main technical specification

Nominal diameter		DN15		DN15				DN15	
Overload flow rate	m³/h	3.125	3.125	3.125	3.125	5	5	5	5
Permanent flow rate	m³/h	2.5	2.5	2.5	2.5	4	4	4	4
Transitional flow rate	m³/h	0.025	0.016	0.016	0.025	0.04	0.0256	0.0256	0.04
Minimum flow rate	m³/h	0.015	0.01	0.01	0.015	0.025	0.016	0.016	0.025
Starting flow rate	m³/h	0.002							
Size	mm	130×117×77		130×117×77				160×117×77	
Connecting thread	Inch	G¾B		G1B				G1¼B	
Pressure loss at Q3		ΔP40							
Dynamic range		R160,R250(optional)							
Water pressure rating		MAP10, MAP16(optional)							
Medium temperature range	℃	1~50							
Accuracy class		2							
Ambient class		Class C							
Protection class		IP68							
Measurement cycle	S	0.25							
Battery		4 sets of lithium batteries(ER18505),3800mAh capacity for each,voltage3.6V							
Battery lifespan	Year	6,10,15(optional)							
Display content		Accumulation flow(m³); Instantaneous flow(m³/h); Medium temperature(℃)							
Maximum reading	m³	999999.999							
Minimum reading	m³	0.00001							
Instantaneous flow display	m³/h	0 ~ 5.000							
Communication mode		Far infrared, M-bus, LoRa wireless(optional)							

Wireless remote control valve



Features

- Far infrared transmission or wireless transmission can be optional
- Opening and closing of the valve could be controlled remotely
- Two batteries are set in, 10 years lifespan
- Ingress protection class reach to IP68

Main technical specification

Nominal diameter		DN15	DN20	DN25
Size	mm	110×78×97	110×78×99	110×78×135
Connecting thread		G ³ / ₄ B	G1B	G1 ¹ / ₄ B
Hole circle diameter	mm	15	20	20
Nominal pressure	Mpa	1.6		
Protection class		IP68		
Battery		2 sets of lithium batteries(ER18505)		
Battery lifespan	Year	10		
Type of valve		Ball valve,Stainless steel valve core		
Material		Brass		
Switching reaction time	S	< 15		
Communication mode		Far infrared, LoRa wireless(optional)		



Ultrasonic flow meter



Features

- Without mechanical moving parts, ultrasonic technology is not affected by poor water quality
- Easy installation and maintenance with the features of dust-proof, moisture-proof, water-proof, preventing man-made damage and others
- Low pressure loss
- High accuracy, Large range of measurement
- Long lifetime&stable measurement
- Operation is simple and easy
- High level of protection to work well under any circumstance

Main technical specification

Accuracy class		1.0
Repeatability		≤0.5%
Medium temperature range	℃	Normal temperature type: 4~95 High temperature type: 4~180
Dynamic range		1:20
Protection class		IP68
Operating pressure	Mpa	Normal pressure type: 1.0 High pressure type: 1.6
Ambient operating temperature	℃	5~55℃
Power supply		AC100~230 V
Communication mode		4 ~ 20mA,RS485 communication



Main technical specification

Model	Flow range(m ³ /h)			Size(mm) length × width × height	Connection diameter	Connection thread on meter
	Minimum flow rate	Transitional flow rate	Maximum flow rate			
PCL20	0.25	0.5	5.0	147x135x202	DN20	G1B
PCL25	0.3	0.6	6.0	160x135x205	DN25	G1¼B
PCL32	0.6	1.2	12	180x135x210	DN32	G1¼B
PCL40	1.0	2.0	20	200x135x220	DN40	G2B
PCL50	1.5	3.0	30	300x150x243	DN50	Flange coupling
PCL65	3.0	6.0	60	300x170x256	DN65	
PCL80	4.5	9.0	90	350x200x296	DN80	
PCL100	7.0	14	140	350x220x303	DN100	
PCL125	11	22	220	350x250x334	DN125	
PCL150	16	32	320	300x285x357	DN150	
PCL200	28	56	560	350x340x438	DN200	
PCL250	45	90	900	400x395x482	DN250	
PCL300	60	120	1200	430x445x543	DN300	

Ultrasonic heat meter



Features

- To ensure high accuracy and stability of ultrasonic heat meter by using high quality transducer and advanced electronic measuring techniques
- Used for cold measuring as well
- Meter lifespan designed for 20 years and battery lifespan for 6 years(replaced easily)
- Dynamic range up to 100
- Ingress protection class reach to IP68

Main technical specification

Nominal diameter		DN15	DN15	DN15	DN15	DN15
Minimum flow rate	m³/h	0.015	0.025	0.035	0.06	0.10
Permanent flow rate	m³/h	1.5	2.5	3.5	6.0	10
Maximum flow rate	m³/h	3.0	5.0	7.0	12.0	20
Size	mm	110×91×88	130×91×96	160×91×96	180×91×110	200×96×111
Maximum reading of flow rate	m³	999999.99				
Maximum reading of heat	kw·h	99999999				
Accuracy class		2.0				
Pressure loss	kPa	<20				
Maximum Operating pressure	Mpa	1.6				
Heat loss calculation		Start from 0.2k				
Temperature range heat meter	℃	4~95				
Temperature difference range	K	2~80				
Temperature resolution	℃	0.01				
Ambient class		Class A				
Battery lifespan	Year	≥6				
Installation method		Horizontal or vertical				
Heating medium		Water				
Temperature sensor type		Pt 1000 with 2-wire leads				
Display indication		LCD 8Digits				

Smart water networks



Remote reading and payment system



Intelligent system

The five major functions



User's file editing



Expenses inquiry and payment



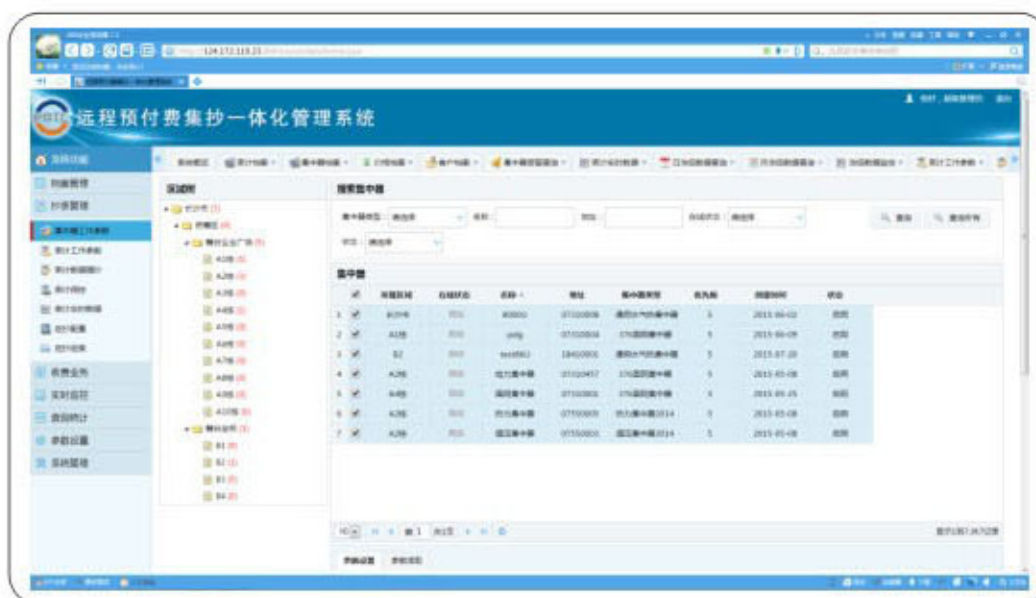
Statics and analysis of water consumption



Statics and analysis of water fee



Report generation

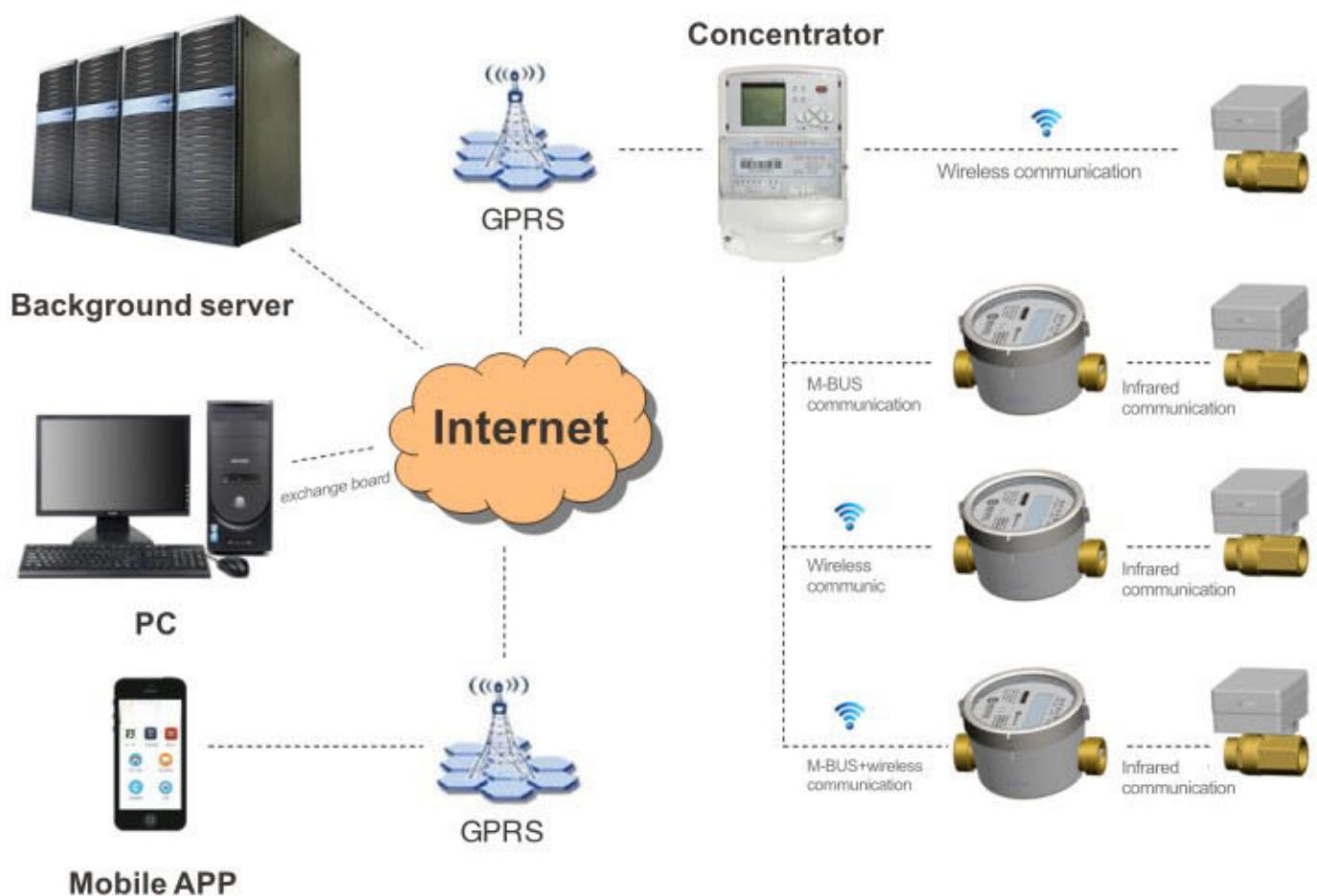


Features

- Instead of manually documenting the readings by human meter readers, intelligent system read and report the data to the Internet automatically
- By mobile that users can inquiry and pay the water fee easily
- Monitor the pipeline automatically, alert the subscriber by SMS and switch the valve in case of pipe leakage
- LoRa wireless communication technology, one concentrator covers 2Km distance

System component

- Ultrasonic meter water; Wireless remote control valve
- Concentrator; Collector; Repeater
- Background server system



Installation method

Step 1

Connect the ultrasonic water meter with the wireless remote control valve by screw thread, make sure the two infrared communication windows are matched, tie the threaded connection with PTFE tape.

Step 2

Connect the ultrasonic water meter with concentrator through M-BUS or wireless communications (LoRa).

※ M-BUS: No positive cathode for two communication thread, one concentrator connects 400 ultrasonic water meter through M-BUS

※ Wireless communications: One concentrator covers 2Km distance

Step 3

Background program of the meter reading system is installed on the server(server could be rent or set up, which are accomplished by us). Concentrator is equipped with phone used GSM card and connected with Internet through GPRS of the GSM card, then transmit and receive the data with the server.

Operation:

There are 2 terminals of the meter reading system as operation interface: PC and mobile phone

PC: input the IP address on the browser to access to the login page. To read all the meter data and switch the valve remotely, input user's name and password.

Mobile phone: by installing the APP program of reading the meter data, users can pay on line.

Series of products



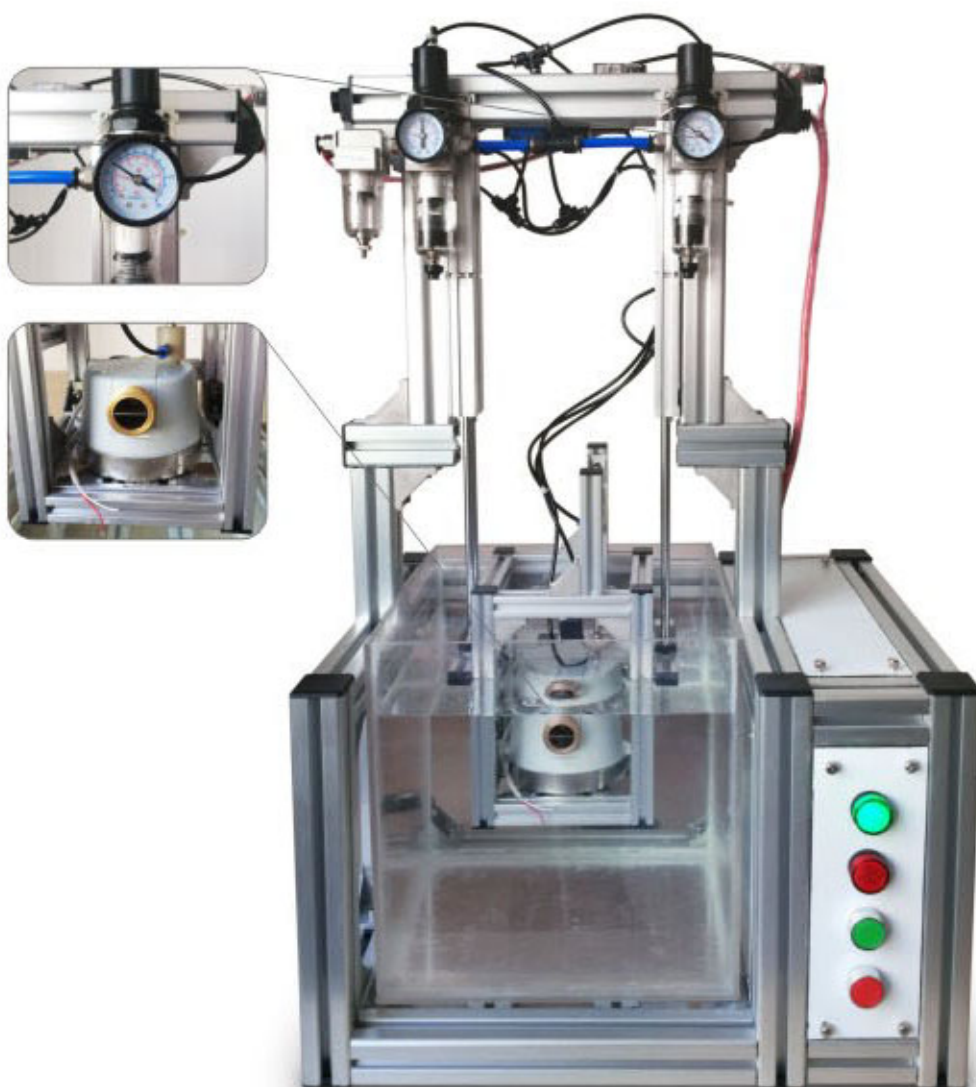
Three unique highlights make our product the most reliable of the industry

- **Water resistance**

Design for working underwater up to 30m in accordance with wet-dial water meter.

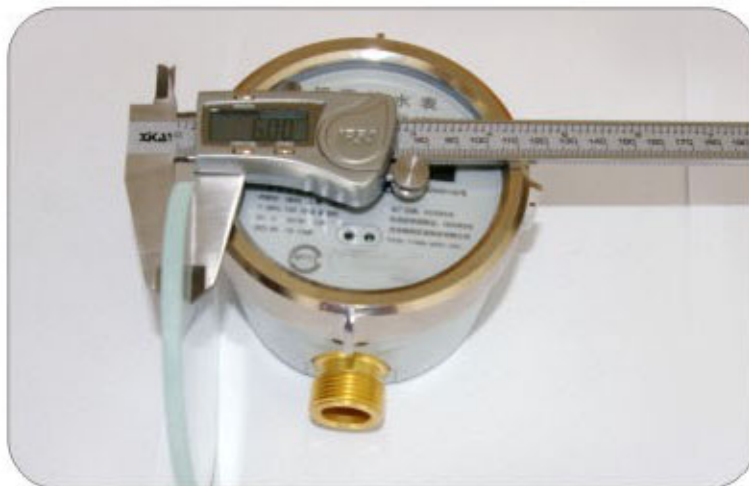
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- Durability**

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