HUI ZHONG

SCL-61H

LoRaWAN

Ultrasonic Water Meter

Scope of application

Designed for residential area with household metering and billing system, reached the demand of precise measurement and settlement on End-User for water utilities.

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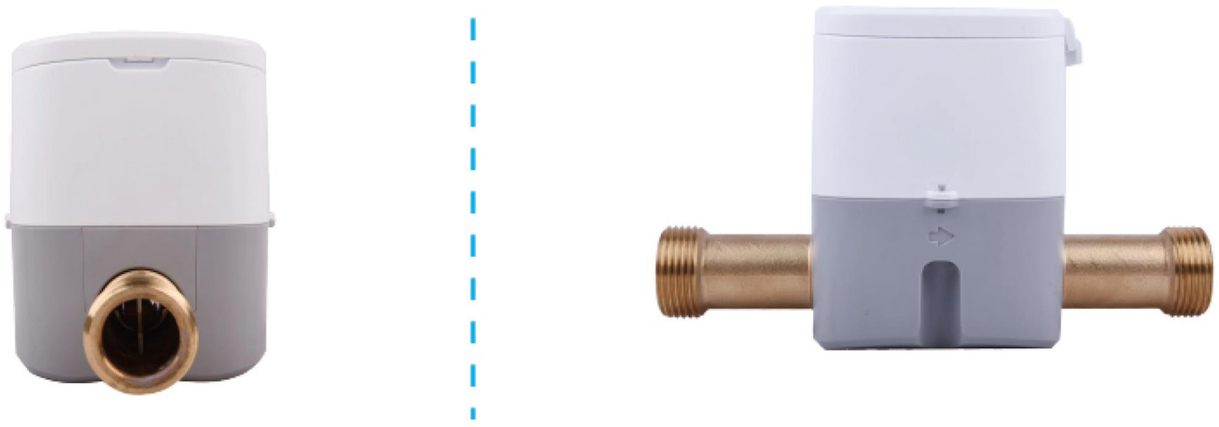


Features

- Large dynamic range to 400:1.
- Integrated mechanical design with protection class of IP68, able to work in long-term water immersion.
- Ultrasonic measuring technology with no mechanical moving parts and pressure loss, improves device serving time.
- Micro-power consumption technology, battery-powered with lifetime over 10 years.
- Low starting flowrate, as low as 0.0015m^3/h.
- Utilize LoRaWAN to communicate between device side and platform side, which achieves long transmission distance, ultra-low power consumption, low latency, anti-interference, reliable performance, high security with data multiple encryption, and easy to install.
- Apply Big Data and Cloud computing technology to further discover water supply information and resources.

Technical Parameters

Item	Parameter
Accuracy Class	Class 2
Nominal Diameter	DN15~DN25
Dynamic range	R250 | R400
Max. Permissible Working Pressure	1.6MPa
Working Environment	-25℃~+55℃, ≤100%RH(If exceed this range, please specify when ordering)
Temperature Class	T30
Class of Upstream Flow Field Sensitivity	U10
Class of Downstream Flow Field Sensitivity	D5
Category of Climate & Mechanical Environment Conditions	Class O
Class of Electromagnetic Compatibility	E2
Operation	Photosensitive key
Display	LCD, 10 digits + prompting characters
Contents of Display	Cumulative flowrate(m^3), Instantaneous flowrate(m^3/h), Water temperature (℃), Cumulative effective running time(h), Date(Y/M/D), Time(H/M/S), Meter ID, Software version, LoRaWAN reporting parameter(s)
Display Resolution	Cumulative flowrate 0.001m^3, Instantaneous flowrate 0.001m^3/h, Water temperature 0.01℃
Range of Display	Cumulative flowrate: 0m3～1999999.999m3
Data Communication	LoRaWAN
Data Storage	1. Current 24 months of monthly accumulated flowrate, cumulative running time. 2. Current 183 days of daily cumulative quantity, cumulative running time and diagnostic code.
Power Supply	Battery powered DC3.6V (battery can continuously work for over 10 years)
Protection Class	IP68
Storage Temperature	-25℃～+55℃
Meter Mounting Position	Water supply pipe

Flow Parameters: R250

(m^3/h)

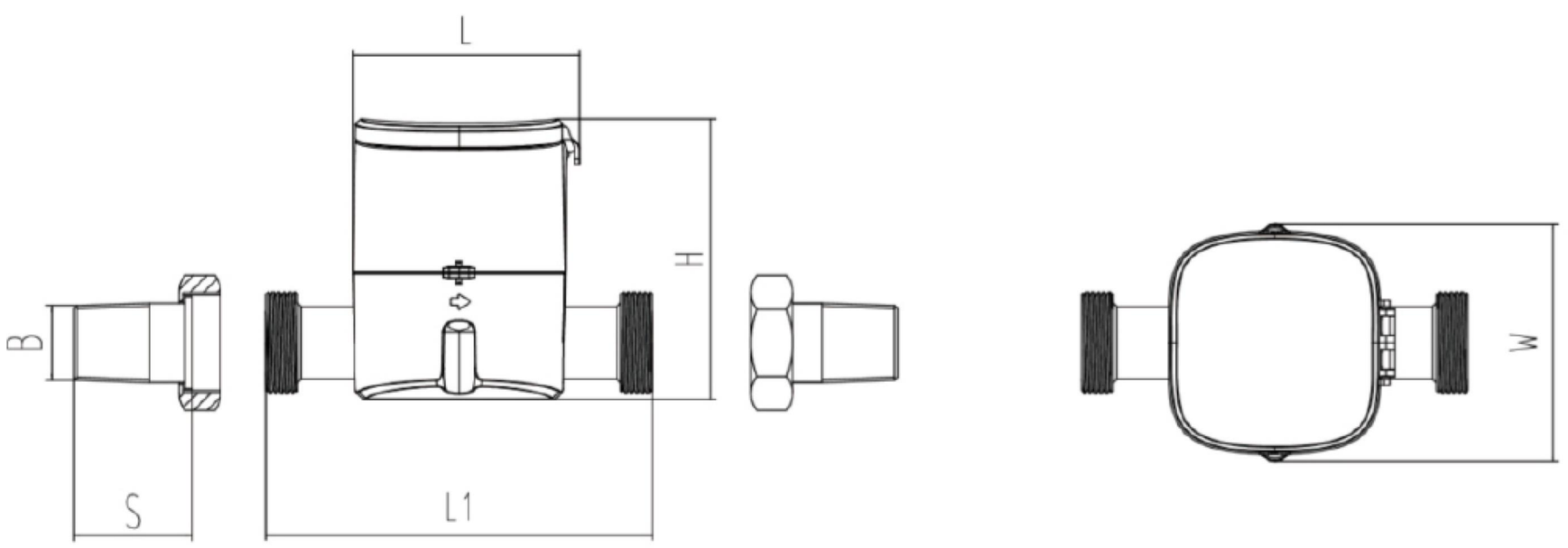
Nominal diameter (mm)	DN15	DN20	DN25
Minimum Flowrate Q1	0.010	0.016	0.025
Transitional Flowrate Q2	0.016	0.025	0.040
Permanent Flowrate Q3	2.5	4.0	6.3
Overload Flowrate Q4	3.125	5.0	7.875
Q3/Q1	250	250	250
Pressure Loss	Δp63	Δp63	Δp63

Flow Parameters: R400

(m³/h)

Nominal diameter (mm)	DN15	DN20	DN25
Minimum Flowrate Q1	0.006	0.010	0.016
Transitional Flowrate Q2	0.010	0.016	0.025
Permanent Flowrate Q3	2.5	4.0	6.3
Overload Flowrate Q4	3.125	5.0	7.875
Q3/Q1	400	400	400
Pressure Loss	Δp63	Δp63	Δp63

Dimensions



Nominal Diameter (mm)	DN15	DN20	DN25
A without Connections	$G\frac{3}{4}B$	G1B	$G1\frac{1}{4}B$
B with Connections	$R\frac{1}{2}$	$R\frac{3}{4}$	R1
L（mm）	97	97	97
L1（mm）	165	190/195	160
H（mm）	119	119	119
W (mm)	98	98	98
Connection Length S (mm)	45	51	59