



## TYPE LXSY-TW IoT Ultrasonic Water Meter

LORAWAN  NB-IoT  CAT1

### Product Selection Table

Model	On-off	NB-IoT	LoRaWAN	CAT1
Functional version	K	NB+Operator	LR+frequency band	CAT
IoT Ultrasonic Water Meter	○	○	○	○

○ is Optional Features

### Product Overview

The ultrasonic water meter adopts the design of integrated meter and valve. Combining metering and control valves, the meter has a compact structure. It can realize the remote prepayment of the system platform, which greatly facilitates the statistics and management of the user's water use behavior by the management department. The water meter has a built-in IoT module, supports IoT applications, and can regularly upload data such as water consumption and status information to the IoT platform.

The product implements the standard of "GB/T 778-2018 Measurement of Water Flow in Closed Full Pipeline Drinking Cold Water Meter and Hot Water Meter" and the verification regulation of "JJG 162-2019 Drinking Cold Water Meter".

### Functions and Features

1. Integrated meter and valve, fully wrapped structure, anti-vandalism;
2. It has self-diagnosis function: flow sensor failure alarm, temperature sensor failure alarm, measurement over-range alarm, battery under-voltage alarm, valve failure alarm;
3. The product applies the company's patented flow measurement method (authorized by the invention patent) and intelligent data error correction technology, with high measurement accuracy and stability;
4. The combination of lithium battery and SPC can meet the current demand when the valve operates;
5. With photoelectric interface, it supports on-site reading of handheld infrared meter reading tools;
6. Built-in LoraWan IoT communication module, supporting IoT applications;
7. Support positive and negative two-way metering;

### Technical Parameters

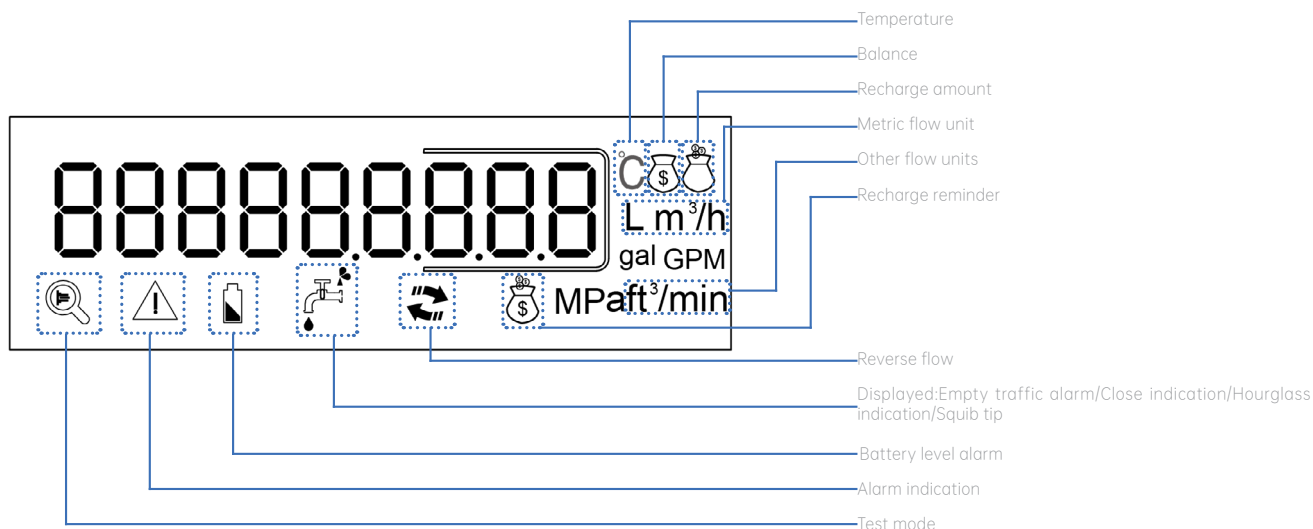
Caliber range	DN15 DN20 DN25
Common flow $Q_3$	DN15: 2.5 m <sup>3</sup> /h DN20: 4.0 m <sup>3</sup> /h DN25: 6.3 m <sup>3</sup> /h
Turndown ratio $Q_3/Q_1$	125, 160, 200, 250, 400, 500
Cumulative volume resolution	0.0001m <sup>3</sup> (user mode) 0.001L (test mode)
Current flow resolution	0.001 m <sup>3</sup> /h (user mode) 0.001 m <sup>3</sup> /h (test mode)
Battery life	> (6+1) year
LCD screen digits	9 bits
Temperature level	T30, T50
Pressure level	MAP16
Pressure loss level	Δ p25
Environmental level	Level 0
Protection level	IP68
Accuracy level	Level 2
Electromagnetic environment level	E1, E2
Installation method	Horizontal or vertical
Upstream/downstream flow field sensitivity level	U5/D3

Key Components

Component name	Specifications	Technical parameters	Remarks
Measurement module	HM1058	/	/
Flow sensor	TD0001	Center frequency: 1MHz	
Flow pipe section	DN15 DN20 DN25	Copper	
Battery	ER26500+SPC1520	3.6V 9000mAh	

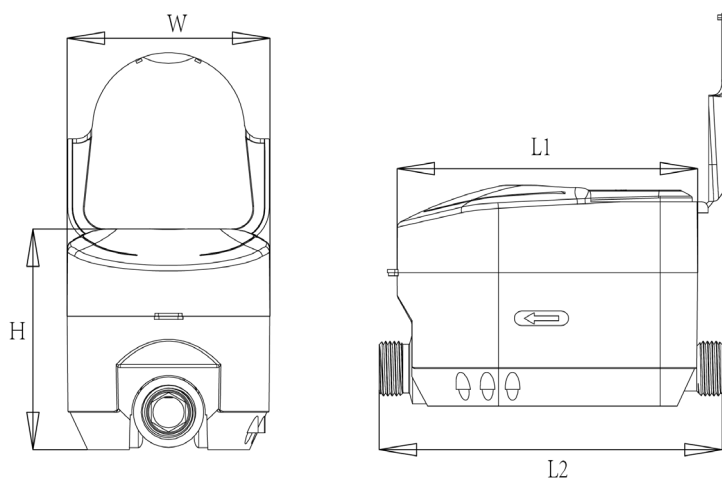
### Display Description

This meter adopts a digital and graphic LCD screen to present the measurement parameters and working status information to the user, as shown below:



You can use the matching magnetic stick to lightly touch the magnetic induction area on the shell to switch different function menus.

### Overall dimension



Nominal diameter DN(mm)		15	20	25
Size	Shell length L1(mm)	142	148	148
	Overall length L2 (mm)	165	195	225
	Width W(mm)	96	96	96
	Height H(mm)	106	108	110
	Weight(kg)	1.03	1.11	1.39
Flow pipe section interface size	Thread specification	G 3/4B	G1B	G1 1/4B
	Thread length(mm)	12	12	12
Pipe joint size	Pipe joint length(mm)	43	50	58
	Thread specification	R1/2	R3/4	R1
	Thread length(mm)	15	16	18

