

LoRaWAN Smart water meter

(Model: LXSY-15~ LXSY-300)

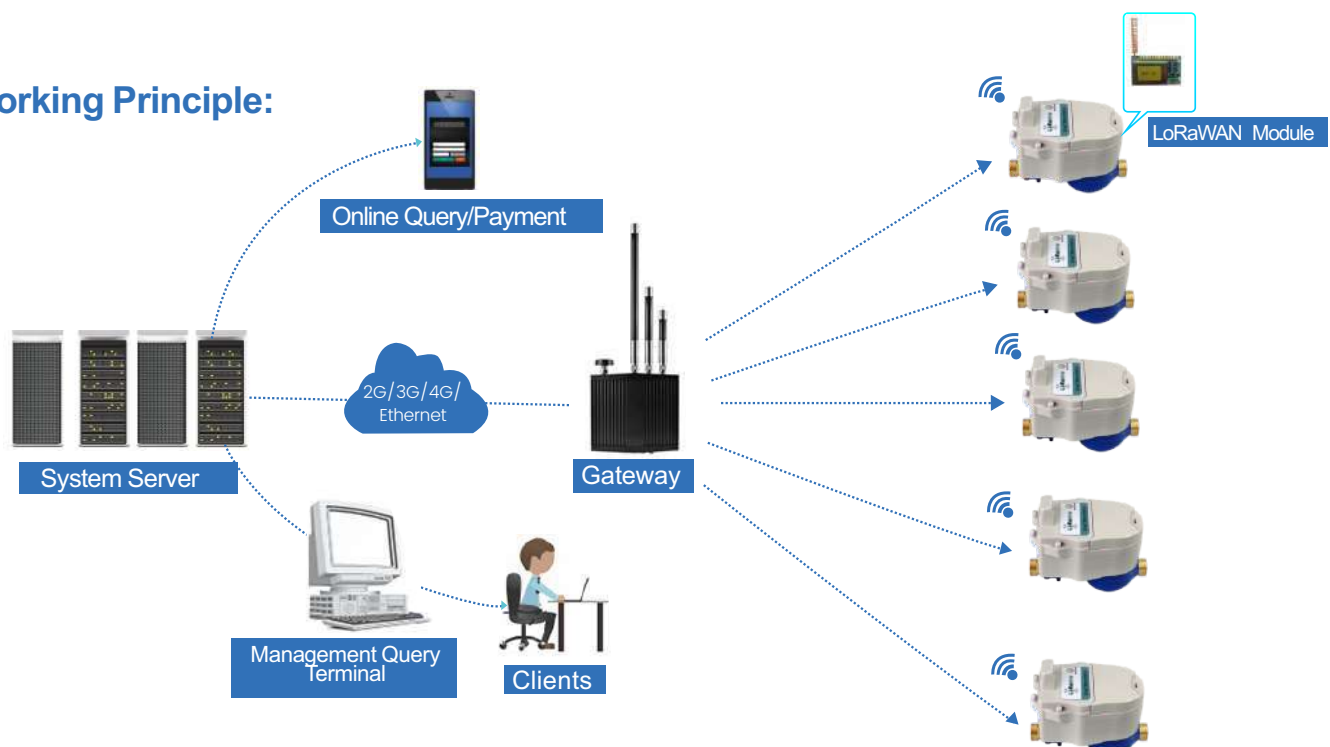
The LoRaWAN water meter integrates measurement, bidirectional communication and valve control etc, and it conforms to the LoRaWAN standard protocol which is formulated by LoRa Alliance. The system contains LoRaWAN water meter, LoRaWAN gateway, LoRaWAN water meter reading charging system (management software system)

Supply condition:

1. Size: DN15-DN300
2. Body: Brass (with valve), iron (without valve) or plastic with valve
3. Max work pressure: PN16.
4. Protection class: IP68
5. Protocol: LoRaWAN
6. Frequency: 433 to 923 MHz
7. Battery: ER18505M @ 3600mAh can last up to 8-10 years.
8. Pressure loss: ≤ 0.063 Mpa
9. Water temperature: T30, T90
10. Standards: ISO4064.
11. Certificate: MID
12. Working mode: Class A
13. Software: free for clients
14. Composition: LoRaWAN water meter, Gateway, Network servrt.



Working Principle:



Fuction:

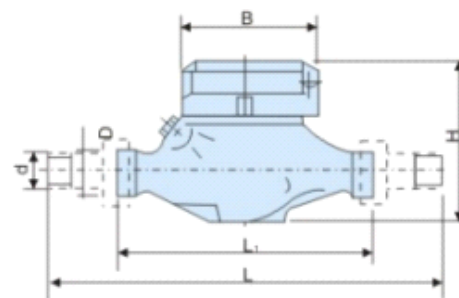
1. There are two data reporting methods. Magnetic trigger to report data: The magnet triggers the hall components of the meter module, and the trigger time must be greater than 2S.
Timed and active reporting: the reporting time slice is automatically allocated according to the Device Eui of the meter module, and the data is reported every 24 hours.
2. It will detect voltages of various states of metering module in real-time and report.
3. Support dual reed switch, dual hall metering mode.
4. Support power-down storage function, there is no need to re-initialize the measurement value after power-off
5. Support magnetic attack detection, it will generate alarm sign when malicious magnetic attack is detected
6. It can save 10 years of annual frozen data and monthly frozen data of the last 128 months, and the cloud platform can query historical data.
7. Support wireless near and remote parameter settings. The remote parameter setting is realized through the cloud platform, and the near parameter setting is realized through the production test tool.
8. Valve type can be set to support remote valve control and valve fault detection (which is optional)
9. When the power is down, the valve will be closed and reported.

Technical Parameters:

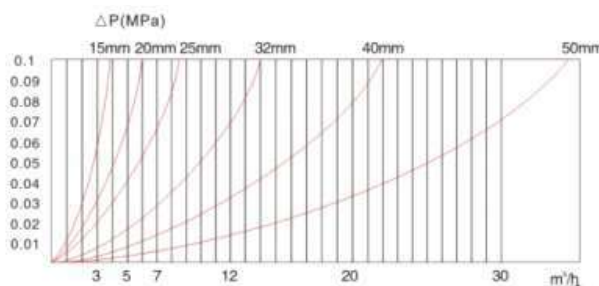
Model-DN	Flow range		Q3	Q4	Q2	Q1	Min. Reading	Max. Reading
	Q3/Q1	Q2/Q1	m ³ /h				m ³	
LXSY-15E	80	1.6	2.5	3.125	0.05	0.03125	0.0001	99999
LXSY-20E	80	1.6	4.0	5.0	0.08	0.05	0.0001	99999
LXSY-25E	80	1.6	6.3	7.875	0.126	0.07875	0.0001	99999

Dimension and Weight:

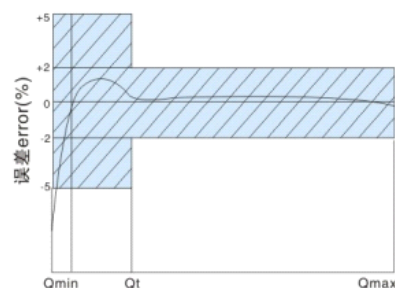
Model		Length(L)	Width(W)	Height(H)	Connect
LXSY-15E	Horizontal	165mm	99mm	140mm	GB
LXSY-20E	Horizontal	195mm	99mm	140mm	Screw G1B
LXSY-25E	Horizontal	225mm	99mm	140mm	Screw G1B



Data error curve:



Flow error curve:



- A. Slow flow ($Q_1 \leq Q < Q_2$), Max permissible errors: $\pm 5\%$
- B. Water temperature $\leq 30^\circ C$, Fast flow ($Q_2 \leq Q \leq Q_4$), Max permissible errors: $\pm 2\%$
Water temperature $> 30^\circ C$, Fast flow ($Q_2 \leq Q \leq Q_4$), Max permissible errors: $\pm 3\%$