sensemi
SOLUTIONS

smart metering
solutions.

SWM303 P/B

Ultrasonic
Smart Chilled/Heat Meter
With Valve Control



Various valve adjustment modes are available:

1. Set instantaneous flow regulation
2. Set instantaneous power regulation
3. Set return water temperature regulation
4. Set the average temperature of the inlet and return water regulation
5. Adjustment of the valve opening according to the acquired room temperature
6. System strength set open degree, forced open/close valve

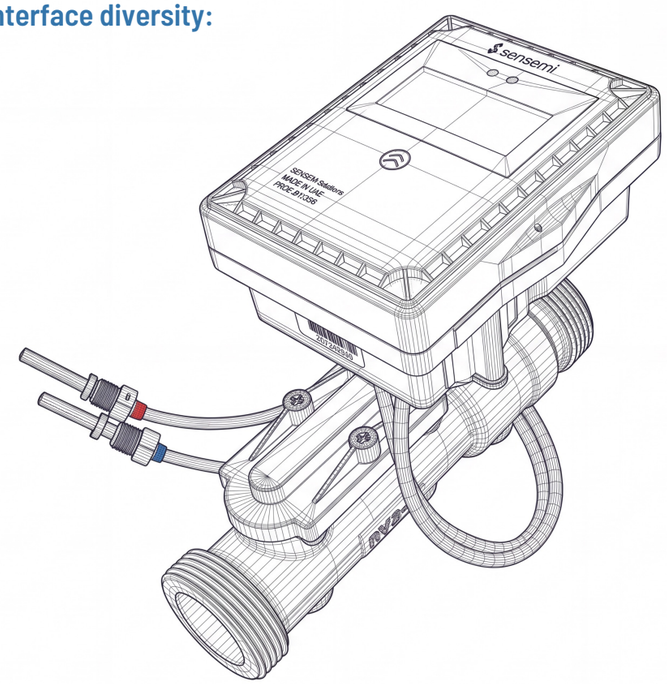
Communication Technologies:

NB-IoT · LoRaWAN · M-Bus · M-Bus wireless · LTE-M

PRODUCT FEATURES

- Products are applied to heating metering, multi-mode heating balance regulation and control, remote control.
- Pipe material: copper
- Range ratio: R50/100/125/160
- Replaceable battery design
- Temperature range: (4~95)°C
- Accuracy level: Class 2
- Difference range: (2~90)K
- Compliance with standards: EN1434
- Consistent with conventional heat meters and directly replaceable.
- Communication interface diversity:

wMBUS
RS485
Pulse
4G
LoRawan
Zigbee
NB-IoT



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APPLICATIONS

- Residential and commercial hot/cold water metering
- Smart city water management systems
- Remote monitoring and billing applications
- Water conservation and leakage detection initiatives

FLOW RATE PARAMETERS

Diameter	Min. Flow qmin (m^3/h)	Nominal Flow qp (m^3/h)	Max. Flow qmax (m^3/h)	Length (mm)
DN15	0.015	1.5	3	130
DN20	0.05	2.5	5	130
DN25	0.07	3.5	7	160
DN32	0.12	6	12	180
DN40	0.2	10	20	200

EXTERNAL DIMENSIONS

Nominal Diameter	DN15	DN20	DN25	DN32	DN40
Thread	G¾B	G1B	G1 ¼B	G1 ½B	G2B
L (mm)	130	130	160	180	200
W (mm)	88	88	88	88	88
H (mm)	125	129	136	139	149

TECHNICAL PARAMETER

Performance	Parameter
Accuracy	Class 2
Connection type	Threaded connection
Pressure loss	≤ 0.02MPa
Max. working pressure	1.6MPa
Temperature sensor	1.5m standard two-wire PT1000 paired temperature sensor (Wire length can be reserved)
Data Storage	Continuous storage of the previous 24 month of history
Communication	Optical/MBUS/RS-485/LoRaWAN/NB-IoT/Zigbee/wMBUS
Power supply	3.6V Lithium battery/External DC24V
Protection grade	IP65/IP67
Environmental	Class A
Temperature range	(4~95)°C
Temperature difference range	(2~90)K
Installation Method	Water inlet or water return (default water inlet, water return installation should be specified when ordering)
Installation position	Horizontal or Vertical
Battery life	Life Period ≥ 10 years
Display	8-bit LCD liquid crystal display
Anti-magnetic interference	Exposure to magnetic fields with an intensity of up to 100 kA/m does not affect the metering or remote-transmission performance of the heat meter