



Product Profile

CRL-H Residential Ultrasonic Heat Meter

Scope of Application

Suitable for heat (cold) metering of unit residential buildings to meet the demands for accurate metering and settlement of end users, and widely used in houses, buildings, district heating stations, central air-conditioning and related systems.

- > Anti-interference
- > Micro power consumption technology
- > Low pressure loss
- > High accuracy class
- > High stability
- > No wear
- > Heating/cooling metering



Features

- > No mechanical moving parts and abrasion for long lifetime.
- > Not effect by poor water quality and low maintenance fee.
- > Use of ultrasonic flow measurement technology, be installed in different angles without affecting measurement accuracy, low pressure loss.
- > Suitable for any installation situation, whether for an inlet or outlet position, horizontally, vertically or wall-mounted.
- > Rich daily historical data and log record.

Advantages

- > Utilize quality transducer and advanced measuring technology, high measuring accuracy.
- > Micro power consumption technology, one battery can work continuously over 12 years.
- > Heating/cooling system.
- > Photoelectric interface, RS-485, M-Bus and NB-IoT interface to achieve remote meter reading for easier centralized management.



Product Profile

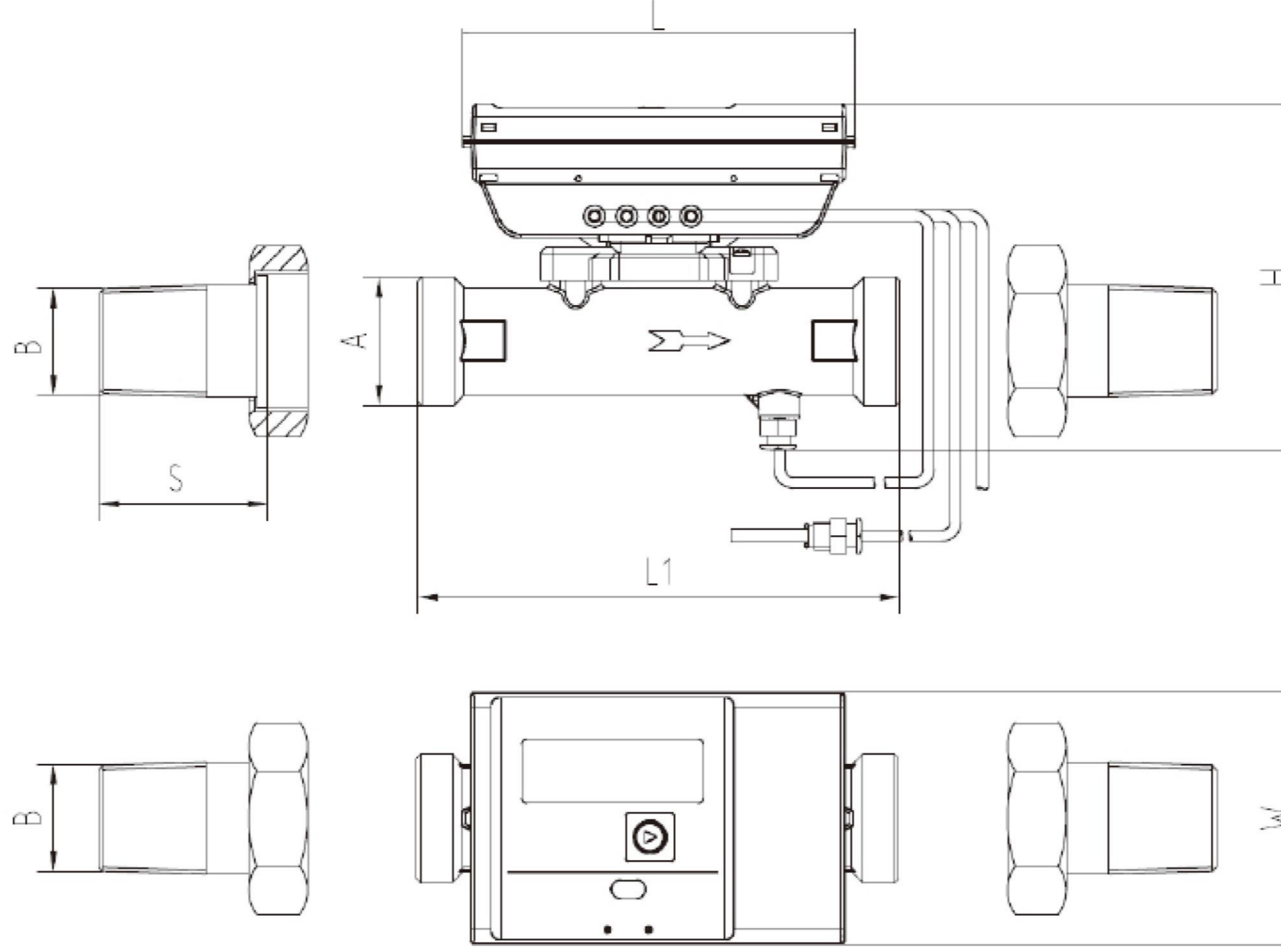
Technical Parameters:

Performance		Parameters					
Accuracy		Class 2					
Flow Sensor	Nominal Diameter(mm)	DN15		DN20		DN25	
	Range Ratio	100		100		100	
	Common Flow $q_p(m^3/h)$	1.0	1.5	1.5	2.5	2.5	3.5
	Minimum Flow $q_i(m^3/h)$	0.010	0.015	0.015	0.025	0.025	0.035
	Maximum Flow $q_s(m^3/h)$	3.0	3.0	5.0	5.0	7.0	7.0
Temperature Sensor	Temperature Sensor Type	Pt1000, DIN/IEC751B					
	Temperature Range (°C)	2~105					
	Temperature Difference Range (K)	2~95					
	Initial Temperature Difference (°C)	0.2K					
Maximum Permissible Working Pressure (MPa)		1.6					
Protection Level		IP66 / IP68, the default is IP66 (IP68 is proposed when ordering)					
Power Supply		3.6V lithium battery, one battery can work continuously for more than 12 years					
Mechanical Installation Level		M1					
Environmental Class		Class A / B					
Values Displayed		LCD, 10 digits + prompt Heat quantity (kW·h or MJ), Thermal power(kW), Instantaneous flowrate (m^3/h), Cumulative flowrate(m^3), Supply water temperature(°C), Return water temperature(°C), Temperature difference (K), Cumulative effective running time(h), Date (year/month/day), Time (hour / minute / second)					
Display Resolution		Heat quantity 0.1kW·h or 1MJ, Cumulative flowrate 0.001 m^3 ; Instantaneous flowrate: 0.001 m^3/h ; Temperature 0.01°C; Temperature difference 0.01K					
Data Communication	Optical Interface	Baud rate 2400bps, even parity, EN13757 protocol					
	Wireless Interface	Narrow Band Internet of Things (NB-IoT)					
	M-Bus/RS-485	Baud rate: 2400bps, 4800bps, 9600bps optional, the default is 2400bps, Transmission distance≤1200m; EN13757(GB/T26831)protocol, CJ-T188 protocol、Modbus protocol are optional, the default is EN13757protocol					
Data Storage (EEPROM)	NB-IoT	Heat quantity, cumulative flowrate and corresponding time and the max. heat power of the current month can be stored by month. Latest 24 month's data can be stored. Latest 100 daily cumulative heat quantity; Latest 4800 cyclic heat consumption; Latest 100 supply and return water temperature; Latest 100 daily max. heat power; Latest 100 alarm records.					
	M-Bus/RS-485	Monthly and daily heat quantity, cumulative flowrate and corresponding time and the max. heat power of the current month/ day can be stored. Latest 24 month's data can be stored.					
Storage Temperature (°C)		-25~+55					
Pressure Loss (kPa)		<25					
Cable Length of Temperature Sensor (m)		≥1.3					
Meter Mounting Position		On supply/return water pipe (selectable)					



Product Profile

Dimension (mm)



Nominal Diameter (mm)	DN15	DN20	DN25
A without Connections	G $\frac{3}{4}$ B	G1B	G1 $\frac{1}{4}$ B
B with Connections	R $\frac{1}{2}$ B	R $\frac{3}{4}$ B	R1B
L (mm)	147	147	147
L1 (mm)	110	130	160
H (mm)	110	115	120
W (mm)	94	94	94
S Connection Length (mm)	45	51	59

