

## GENERAL

**ALIASONIC** The AUF200 Series measure flow or energy of water running in heating / cooling pipe by temperature sensor based on ultrasonic flowmeter. It's simple, easy to install and battery powered, no need of external power. It can display flow rate, total flow, total heat, total cool, heat power and supply / return temperature etc.

## FEATURES

- ❑ Display flow rate, total flow, heating and cooling energy
- ❑ 3.6V battery power, continuous working for 6 years
- ❑ Auto turn off LCD if no operation within 3 minutes, saving power
- ❑ Supply or return alternatively for mounting
- ❑ Displayer 270° rotational
- ❑ Medium temperature up to 105 °C, ΔT 0-80 °C
- ❑ Threaded connection, easy for installation
- ❑ M-BUS communication, easy for remote control and reading
- ❑ Response time < 15 s

## STANDARD SPECIFICATION

- |                       |  |                     |   |
|-----------------------|--|---------------------|---|
| ● Measuring Principle | : Ultrasonic, Time difference W path         | ● Velocity          | : 0.01-5 m/s                              |
| ● Size                | : 15 mm, 20 mm, 25 mm, 32 mm, 40 mm          | ● Connection        | : Thread                                  |
| ● Material            |  | ● Working Pressure  | : 25 kgf/cm <sup>2</sup> Maximum          |
|                       | Sensor : Stainless Steel 304                 | ● Mounting Position | : Supply or Return pipe                   |
|                       | Coupling : Brass                             | ● Displayer         | : Compact, 270 ° rotational               |
|                       | Ball Valve : Brass                           | ● Ambient Temp.     | : -10~55 °C                               |
|                       | Display Housing : PC                         | ● Ambient Humidity  | : ≤95% RH                                 |
| ● Turndown Ratio      | : 50:1-100:1                                 | ● Power Supply      | : Battery Power                           |
| ● Accuracy            | : +/-2% Qt-Qmax                              | ● Battery Life      | : >6 years (3800 mA)                      |
| ● Repeatability       | : +/-0.3% of reading                         | ● Record Cycle      | : 18 Months                               |
| ● Sensor Type         | : PT1000 2 wire, Class B                     | ● Record Data       | : Monthly Flow & Energy Totalizer         |
| ● Medium Temp. Range  | : 0-105 °C                                   | ● Communication     | : M-BUS (optional)                        |
| ● Temp. Resolution    | : 0.1 °C                                     | ● Keyboard          | : One touch-control key (read only)       |
| ● Temp. Difference    | : 3-80 °C                                    | ● Response Time     | : <15 Second                              |
| ● Temp. Error         | : <0.1 °C                                    | ● Dimensions        | : Page 3                                  |
| ● Temp. Cable Length  | : 1.5 m                                      | ● Protection Class  | : IP65                                    |
| ● Display             | : 2 lines LCD                                | ● Communicator      | : M-BUS private communicator              |
|                       | Temperature : °C (Supply and Return), DT     | ● Accessory         | : Coupling * 1 Pair                       |
|                       | Totalizer : kW-h (Standard), GJ (Optional)   |                     | : Ball Valve with temperature sensor hole |
|                       | : m <sup>3</sup> , Hour, 8 Digit             |                     | : M-BUS private communicator              |
|                       | Rate : m <sup>3</sup> /hr, kW, 4 Digit       |                     |   |
| ● Pressure Drop       | Less than 0.2 kgf/cm <sup>2</sup> (at Qn/Q3) |                     |   |



**FLOW RANGE**

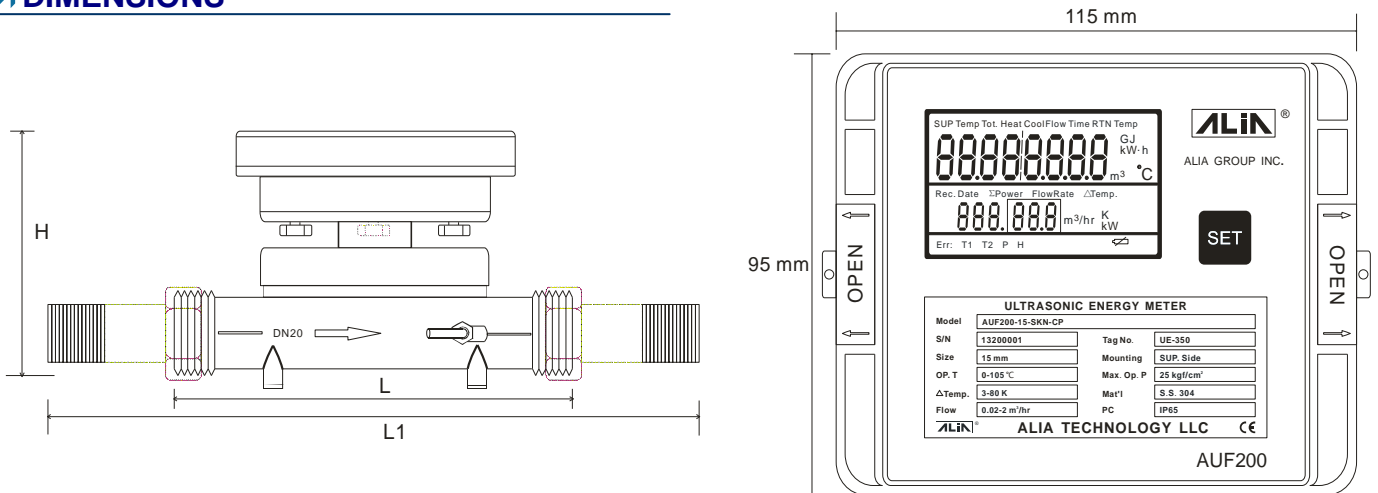
Normal Diameter	15			20			25			32			40		
Range Code	L	N	H	L	N	H	L	N	H	L	N	H	L	N	H
Start Flow Qs L/hr	3	3	5	3	5	8	5	8	10	8	10	20	10	20	30
Minimum Flow Rate Qmin L/hr	12	20	30	20	30	35	30	35	40	25	35	60	35	60	100
Transitional Flow Rate Qt L/hr	19	32	48	32	48	56	48	56	64	40	56	96	56	96	160
Normal Flow Rate Qn m <sup>3</sup> /hr	0.6	1	1.5	1	1.5	2.5	1.5	2.5	3.5	2.5	3.5	6	3.5	6	10
Maximum Flow Rate Qmax m <sup>3</sup> /hr	1.2	2	3	2	3	5	3	5	7	5	7	12	7	12	20

Accuracy in Range Qmin-Qt: +/-5%, Qt-Qmax: +/-2%, Class B (According to EEC, Based on ISO 4064:1993)

Normal Diameter	15			20			25			32			40		
Range Code	L	N	H	L	N	H	L	N	H	L	N	H	L	N	H
Start Flow Qs L/hr	3	3	5	3	5	8	5	8	10	8	10	20	10	20	30
Minimum Flow Rate Q1 L/hr	12	20	30	20	30	35	30	35	40	25	35	60	35	60	100
Transitional Flow Rate Q2 L/hr	19	32	48	32	48	56	48	56	64	40	56	96	56	96	160
Normal Flow Rate Q3 m <sup>3</sup> /hr	0.6	1	1.5	1	1.5	2.5	1.5	2.5	3.5	2.5	3.5	6	3.5	6	10
Maximum Flow Rate Q4 m <sup>3</sup> /hr	1.2	2	3	2	3	5	3	5	7	5	7	12	7	12	20

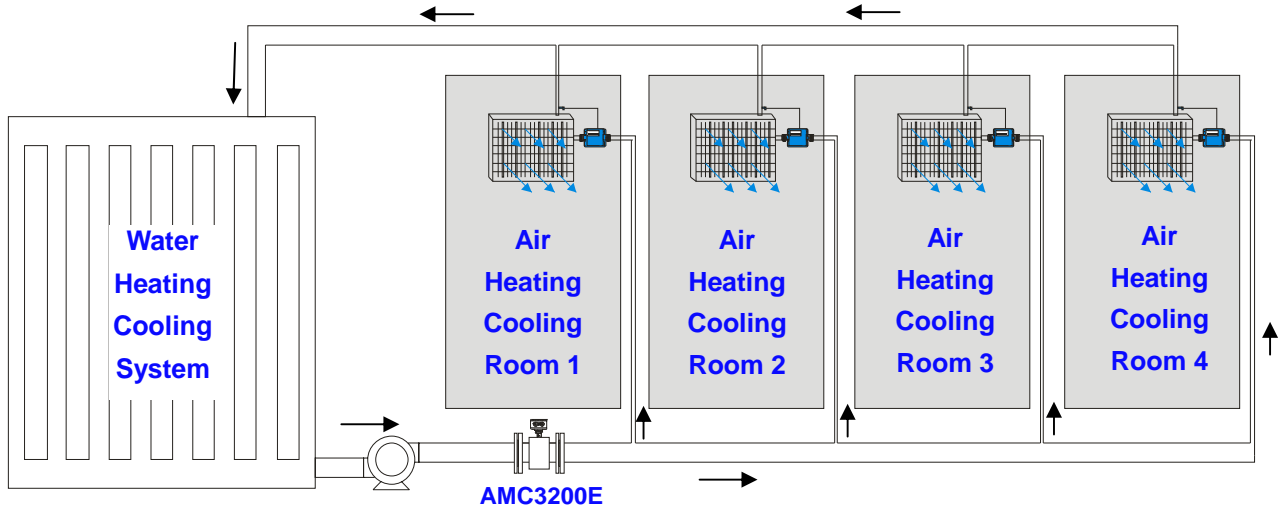
Accuracy in Range Q1-Q2 : +/-5%, Q2-Q4: +/-2%, Class 2, Base on OIML R49 (EN 14154 and ISO 4064:2005)

**DIMENSIONS**

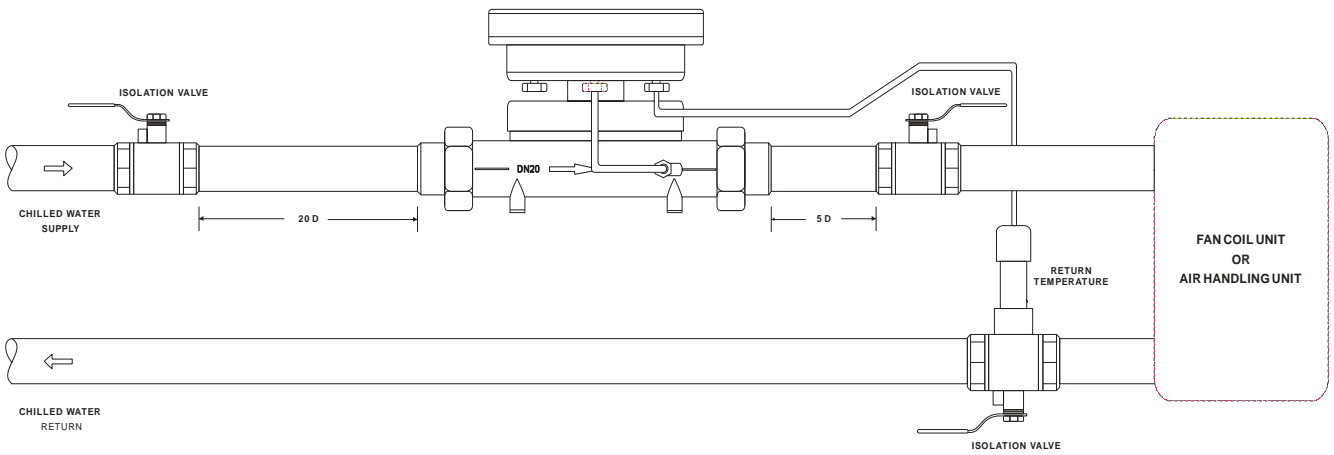


Size (mm)	15	20	25	32	40
L (mm)	130	130	160	180	200
L1 (mm)	210	230	268	282	332
H (mm)	90	96	101	108	114
Thread on meter	3/4" BSP	1" BSP	1-1/4" BSP	1-1/2" BSP	2" BSP
Thread of coupling	R 1/2"	R 3/4"	R 1"	R 1-1/4"	R 1-1/2"
Weight (kg)	0.7	0.8	1	1.1	1.4
Weight of coupling (kg)	0.14	0.2	0.4	0.5	0.8

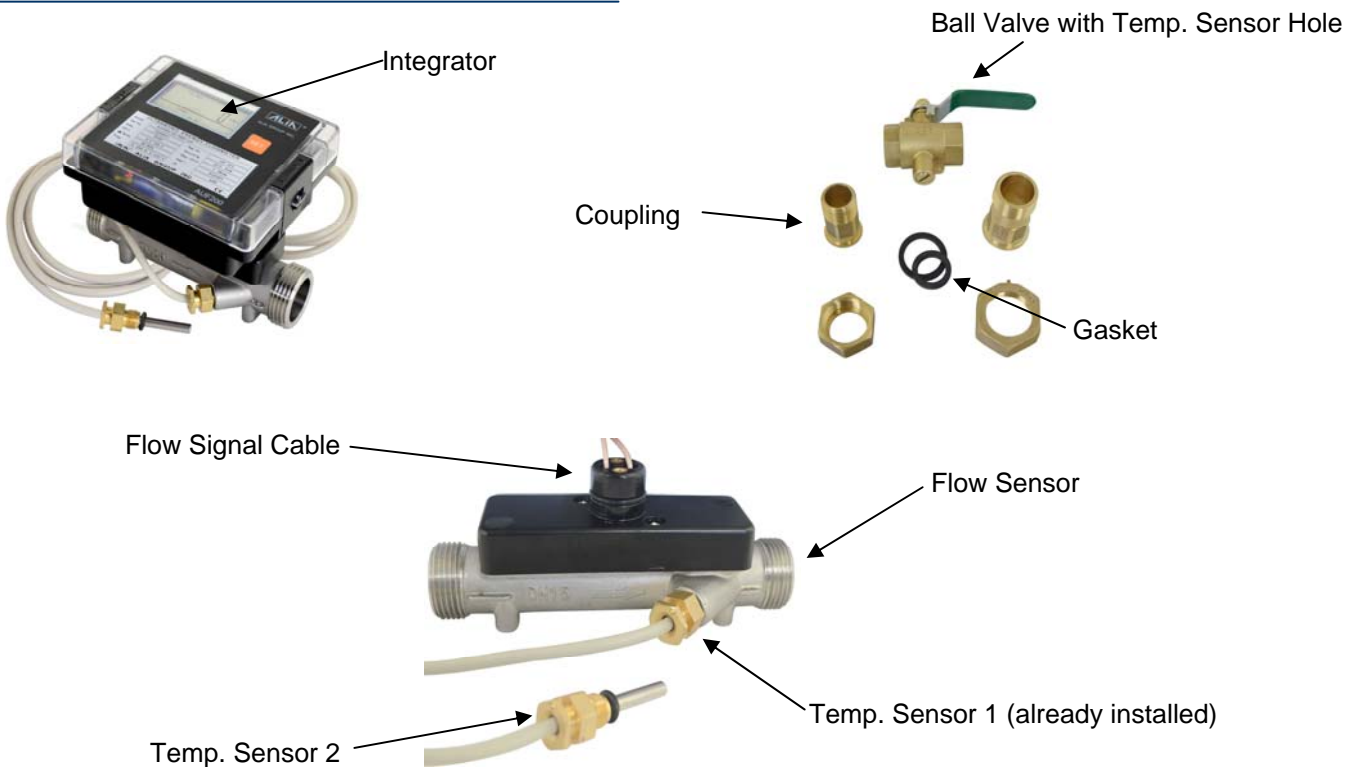
### TYPICAL APPLICATION



### INSTALLATION



### FLOWMETER COMPONENTS



**ACCESSORIES**



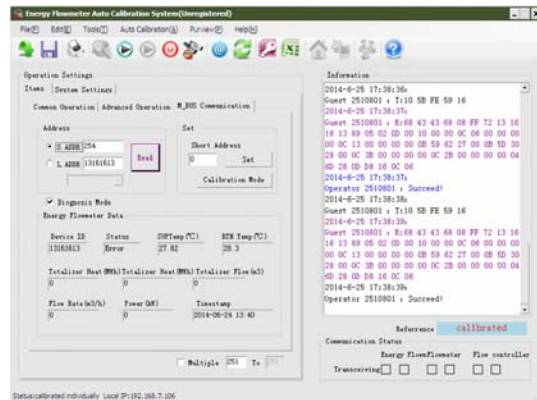
Ultrasonic energy meter



Coupling and Ball Valve (optional)



M-BUS Private Communicator (optional)



Calibration software (optional)

**MODEL SELECTION**

AUF200 Series							
Example: AUF200-25-SNKN-CP/BV							
AUF200-	XX	-X	X	X	X-	XX	Description
Size	15-40						15, 20, 25, 32, 40 mm
Install Position		-S					Supply Position
		-R					Return Position
Flow Range Code			N				Normal Flow Range
			H				High Flow Range
			L				Low Flow Range
Energy Unit				K			kW·h
				G			GJ
Communication					N-		None
					M-		M-BUS
Option						NN	None
						CP	Coupling * 1 pair
						BV	Ball Valve with Temperature Sensor Hole
						MB	M-BUS Private Communicator
						ZZ	Other

Note: M-BUS private communicator fits AUF200 M-BUS communication only.