

Ultrasonic Flowmeter

ATZTA UX





High performance over a wide range

Measures the flow accurately at lower rate than ever. A wide range of 1:50 from min. to max. flow has been achieved.



Dust-proof, high durability

No filter is required.



Space saving with no straight pipe required

Measures the flow accurately even when attached to an elbow pipe, making the flowmeter suitable for installation at a small area.



Battery replaceable on site

Battery type (for five-year operation) is now available. The battery can be replaced on the site (with the dedicated lithium battery). AC power type (24VDC, 100VAC) is also available.



Various output modes

In addition to the unit pulse, 4-20mA and RS485 (Modbus/RTU compatible) are provided.

Application

- Measurement of low heat value (e.g. food) Small-sized furnace (e.g. melting pot)
- Flow monitoring of glass furnace (e.g. for ampoule, light bulb)
 Atmosphere control in furnace





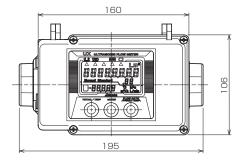
Specifications

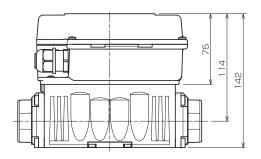
| | Model | UX15(25)-ODC | UX15(25)-OAC | UX15(25)-OBT | | | | |
|---------------------------------------|----------------------------------|---|---|------------------------------|--|--|--|--|
| F | ower supply | External power supply 24VDC | External power supply 100VAC | Dedicated lithium battery *1 | | | | |
| Cor | nection caliber | UX15:Rc1/2 UX25: Rc1 | | | | | | |
| Tar | get gas type *2 | City gas (13A), butane (butane 70% and propane 30%), propane (propane 98% and butane 2%), nitrogen | | | | | | |
| Liquid temperature | | -10 to +60 °C (no condensation) | | | | | | |
| Flow range | | 0.12 to 6 m ³ /h | | | | | | |
| Precision | Actual flow rate *3 | ±2%RD (6m³/h or less to 0.6m³/h or more), ±0.5%FS (6m³/h or less to 0.12m³/h or more) | | | | | | |
| FIECISION | Temperature | ±1.5 ℃ | | | | | | |
| | ow flow cut | 0.024m³/h (maximum flow rate/250) | | | | | | |
| Max | rimum pressure | 100 kPa | | | | | | |
| F | ressure loss | 200Pa or less (city gas 13A, standard atmospheric pressure +2.5kPa, maximum flow rate) | | | | | | |
| F | Rated voltage | 21.6 to 26.4 VDC | 85 to 115 VAC | | | | | |
| Pow | er consumption | 2W or less (@26.4V/22mA) | 10W or less (@22mA) | | | | | |
| Environ | mental temperature | -20 to +70 °C *No condensation | | | | | | |
| | Analog | 4 to 20mADC (load resistance 400Ω or less) Choose from instantaneous flow rate and temperature. | | | | | | |
| | Output 1 | Unit pulse (Choose from 1, 10, 100, 1000, 10000L/P, default 1000L/P), duty 20 to 80% | | | | | | |
| Output | (flow rate pulse) | Nch open drain output (maximum load 24VDC, 50mA) | | | | | | |
| | Output 2 (alarm) | Choose from upper and lower limit alarm | Choose from low battery voltage and upper and lower limit alarm | | | | | |
| Cor | nmunication *4 | RS485 Modbus/RTU compati | | | | | | |
| Measurement interval *5 | | 0.5 | 2 sec | | | | | |
| | Main | Integrated flow amount: 8-digit integer with 2 decimal places, integrated trip flow amount: 7-digit integer with 2 decimal places | | | | | | |
| Display | IVIdIII | Ultrasonic measurement error, temperature measurement error, battery voltage error (built-in battery only) | | | | | | |
| | Sub | Instantaneous flow rate display: 5 digits, temperature display: 3 digits, pressure display: 4 digits | | | | | | |
| F | low direction | Left to right or right to left facing the display *Choose upon order. | | | | | | |
| Installation position | | Horizontal or vertical (installation not available with display facing down and cable entry part facing up) | | | | | | |
| Conversion | Simple standard *6 | Flow rate converted from actual flow rate at conversion reference temperature and 1 atmospheric pressure (with arbitrary fixed pressured entered) | | | | | | |
| function | Simple normal *6 | Flow rate converted from actual flow rate at 0°C and 1 atmospheric pressure (with arbitrary fixed pressured entered) | | | | | | |
| Main materials of gas connection part | | Aluminum allow, PPS | | | | | | |
| Protection structure | | Indoor and outdoor IP64 (JIS C 0920) Direct sunlight should be avoided. | | | | | | |
| | Weight | 1.6 kg | 1.7 kg | 1.8 kg | | | | |
| *1 The bettery life | in five veers (at average envire | amontal tamparature 20°C), and the battery can be | replaced on the site *2 The gas type can be chang | and on the cite | | | | |

^{*1} The battery life is five years (at average environmental temperature 20 °C), and the battery can be replaced on the site. *2 The gas type can be changed on the site. *3 The actual flow rate refers to the volume flow rate (flow rate before compensation). *4 The communications specifications are available on our web site. *5 The moving average can be selected from 1 to 16 times (default: 4 times). *6 The term "simple" here means that the pressure value is compensated by an arbitrary value (fixed value).

External dimensions

Unit: mm





Model code

| Basic model | Caliber | - | Pressure sensor | Power supply | - | Flow direction | - | Gas type | Description |
|-------------|---------|---|-----------------|--------------|---|----------------|---------|----------|-------------------------|
| UX | | | | | | | | | UX |
| | 15 | | | | | | | | 15A |
| | 25 | | | | | | | | 25A |
| | | | 0 | | | | | | Without pressure sensor |
| | | | | BT | | | | | Battery driven |
| | | | | DC | | | | | DC power |
| | | | | AC | | | | | AC power |
| | | | | | | L | | | Left to right |
| | | | | | | R | | | Right to left |
| | | | | | | | | 13A | 13A |
| | | | | | | PRO | Propane | | |
| | | | | | | | | BTN | Butane |
| | | | | | | | | N2 | Nitrogen |

Technical specifications in this catalog are up-to-date as of February 2019.

Manufactured and Distributed by



URL: https://www.aichitokei.net/ 1-2-70 Chitose, Atsuta-ku, Nagoya, 456-8691, Japan

For inquires, please contact us. Overseas Business Division TEL +81-(0)52-661-5150

To Our Customers

Please understand that product specifications may be changed without notice in order to improve performance. We are always happy to provide the latest catalogs and brochures, and respond to inquiries made to our offices. 201902-UX15-005

