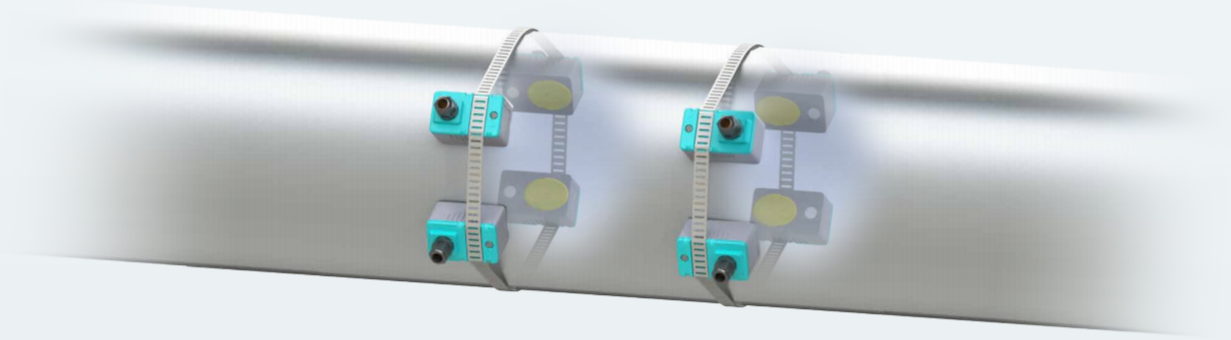


selection sample

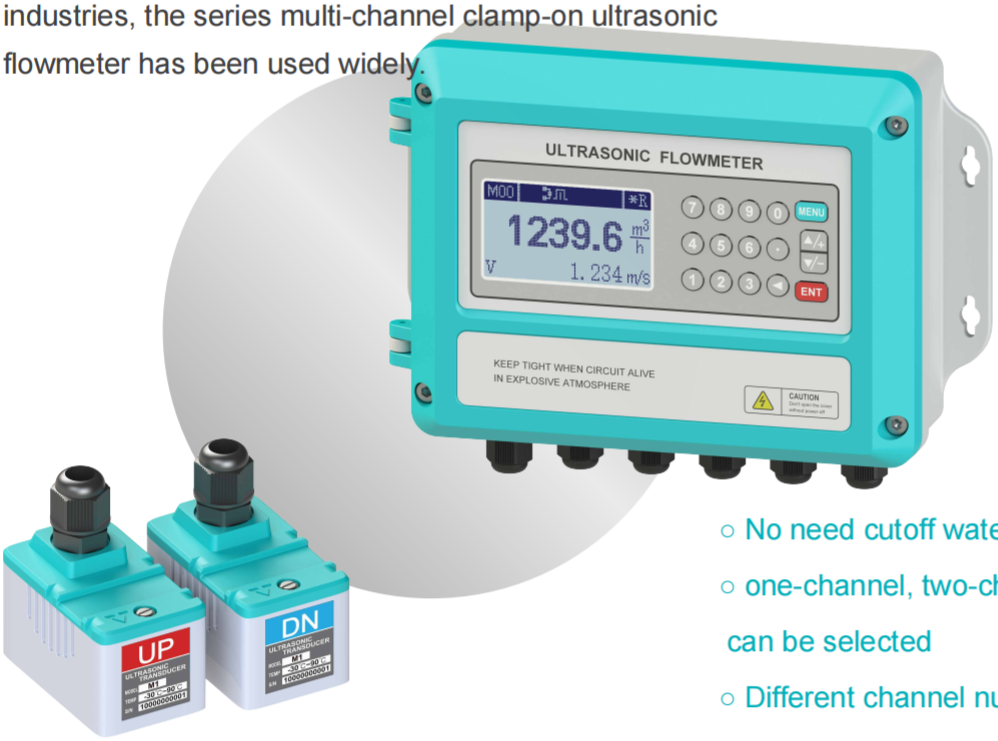
2023 edition

Multi-channel

clamp-on ultrasonic flowmeter

The series multi-channel clamp-on ultrasonic flowmeter is based on intelligence and integrative mixed signal processing technology launched a series of high precision ultrasonic flowmeters.

A variety of liquids can be completed the measurement by affixing the clamp-on transducers to the pipe surface simply. Compared with traditional flowmeters, it doesn’ t need to break the pipe flow, quick installation, truly realize the lossless installation. The ultrasonic flowmeter have been widely used in process control, production measurement, trade settlement and other territories. In water supply and drainage, metallurgy, petrochemical, water benefit engineering, energy monitoring industries, the series multi-channel clamp-on ultrasonic flowmeter has been used widely.



- No need cutoff water with installation
- one-channel, two-channel, four-channel transducer can be selected
- Different channel number, measurement accuracy range 0.5-1%
- Measurement pipe diameter from DN15-DN6000
- Big LCD, displaying abundant information
- -30~160℃ fluid temperature
- Connecting three-wire or four-wire temperature transducer can finish the heat/cooling energy measurement

Multi-channel clamp-on ultrasonic flowmeter is constituted as converter and clamp-on transducers, the converter and clamp-on transducers can be arbitrary combined, which can realize one-channel, two-channel, four-channel flow measurement to meet different precision and measurement occasions.

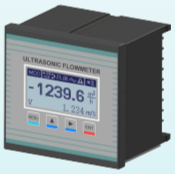
• Optional Converters

Fixed mount converter

Wall mount converter

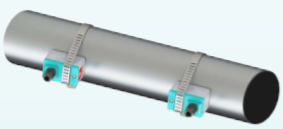
Module converter

Explosion proof converter

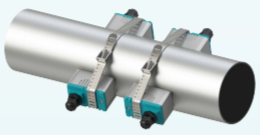


Panel mount converter

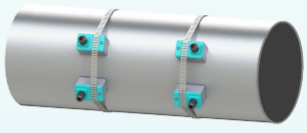
• Optional Transducer



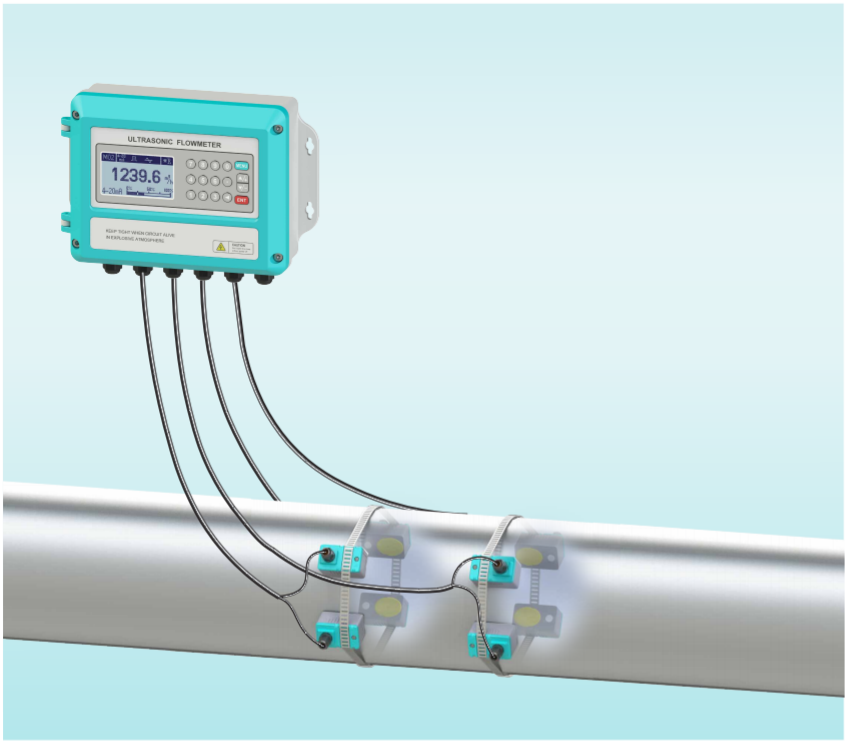
One-channel transducer

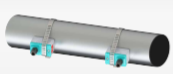


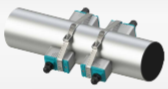
Two-channel transducer

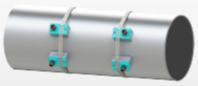


Four-channel transducer




One-channel transducer


Two-channel transducer


Four-channel transducer

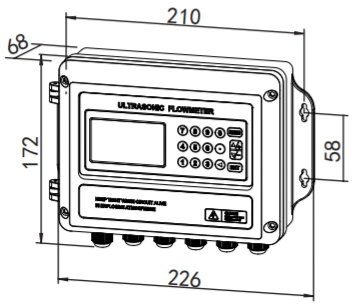
Liquid crystal display

- Converter can be mounted on walls, instrument boxes
- Big LCD displaying, abundant information
- One-channel, two-channel, four-channel can be selected
- Navigation menu + sixteen-digit key operation
- Die casting aluminum converter, strong durability
- Connecting three-wire or four-wire temperature transducer Pt100 can finish heat/cooling energy measurement

Working environment

	converter	transducer
Protection class	IP67	IP68
Humidity	≤85%RH	IP68
Temperature	-20~60℃	-30℃~160℃

Installation dimension

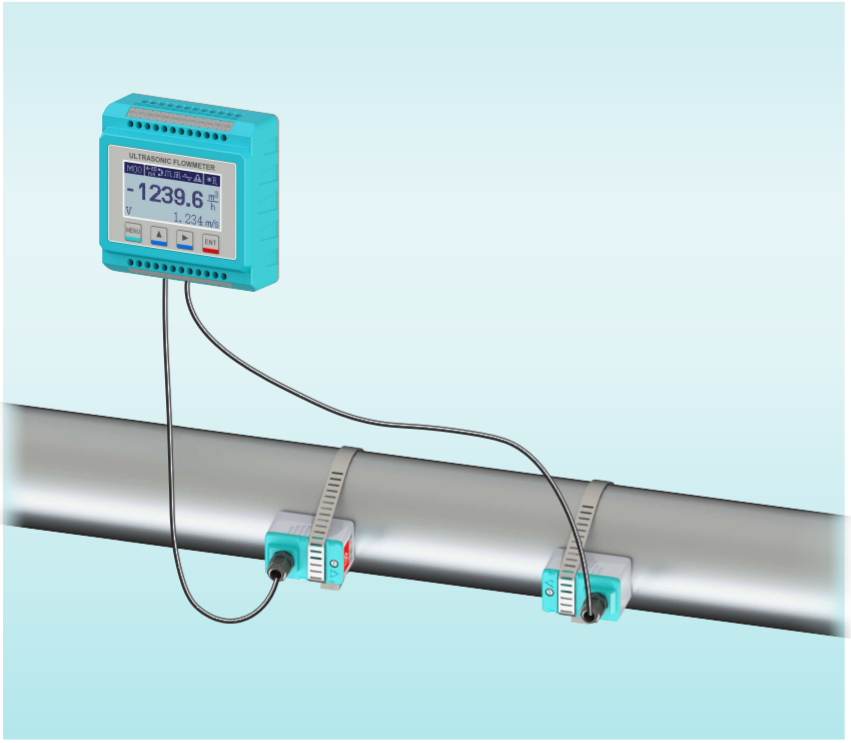


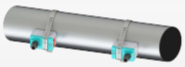
Essential parameter

	One-channel	Two-channel	Four-channel
Accuracy	±1%	±0.5%	±0.5%
Flow rate	≥0.3m/s	≥0.3m/s	≥0.1m/s
Pipe diameter	DN15~DN6000mm		
Liquid temperature	-30℃~160℃		
Type of liquid	Water, sea water, sewage, Acid-alkali solution, ethyl alcohol, beer, single and even liquid which can transmit sound wave,such as oil, etc.		
Signal output	1 way 4-20mA output, electric resistance 0-1K(DC24V power supply), accuracy 0.1% 1 way OCT pulse output , pulse width 6-1000ms 1 way relay output or frequency output		
Signal input	3 way 4-20mA input, can be a data collector Connect three wire/four wire PT100 temperature transducer to realize heat/cooling energy measurement		
Data interface	Insulate RS485 serial interface, support the MODBUS		
Power supply	DC8-36V;AC0-30V;AC85-264V		

05 multi-channel clamp-on ultrasonic flowmeter

Module





One-channel transducer

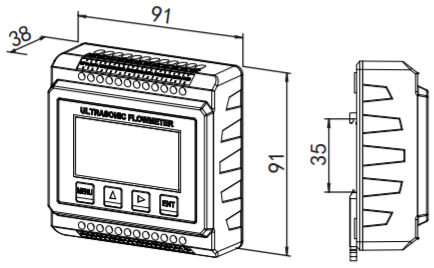
Liquid crystal display

- DIN-rail mounting, batch installation in instrument box or distribution cabinet
- Big LCD displaying, abundant information
- One-channel can be selected
- Navigatin menu + four-digit key operation
- Built-in 32 megabytes of memory, can store 2000 rows of data
- Equip with stainless steel probe and probe column
- Small size, cost-effective
- Connecting three-wire temperature transducer Pt100 can finish heat/cooling energy measurement

Working environment

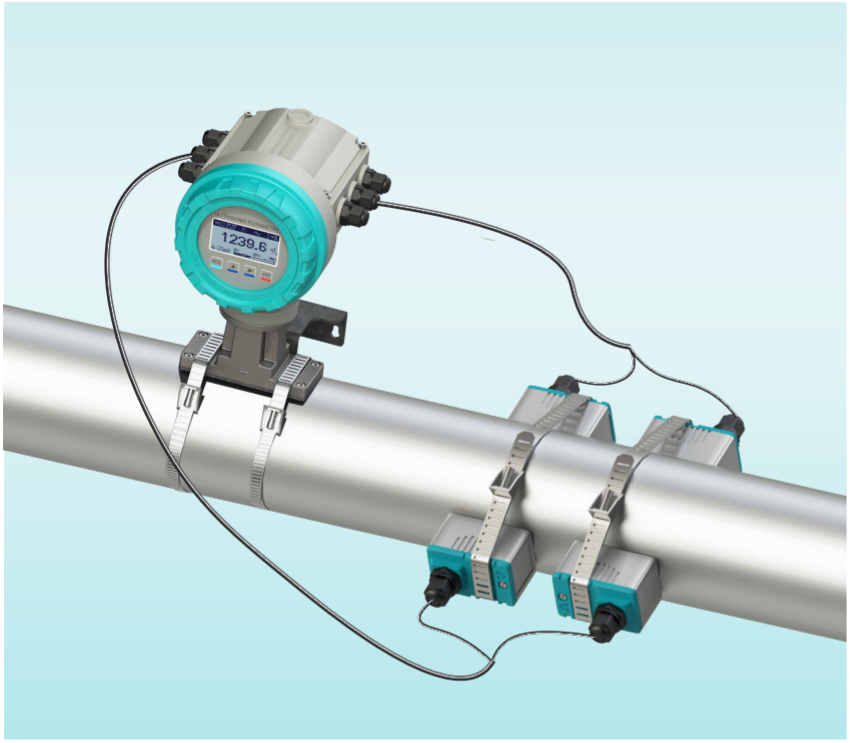
	converter	transducer
Protection class	IP30	IP68
Humidity	≤80%RH	IP68
Temperature	-20~60℃	-30℃~160℃

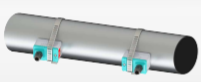
Installation dimension



Essential parameter

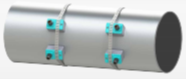
	One-channel
Accuracy	±1%
Flow rate	≥0.3m/s
Pipe diameter	DN15~DN6000mm
Liquid temperature	-30℃~160℃
Type of liquid	Water, sea water, sewage, Acid-alkali solution, ethyl alcohol, beer, single and even liquid which can transmit sound wave,such as oil, etc.
Signal output	1 way 4-20mA output, electric resistance 0-1K (DC24V power supply), accuracy 0.1% 1 way OCT pulse output , pulse width 6-1000ms 1 way relay output or frequency output
Signal input	3 way 4-20mA input, can be a data collector Connect three wire/four wire PT100 temperature transducer to realize heat/cooling energy measurement
Data interface	Insulate RS485 serial interface, support the MODBUS
Power supply	DC8-36V;AC10-30V





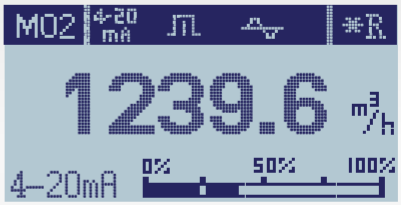
One-channel transducer

Two-channel transducer



Four-channel transducer

Liquid crystal display

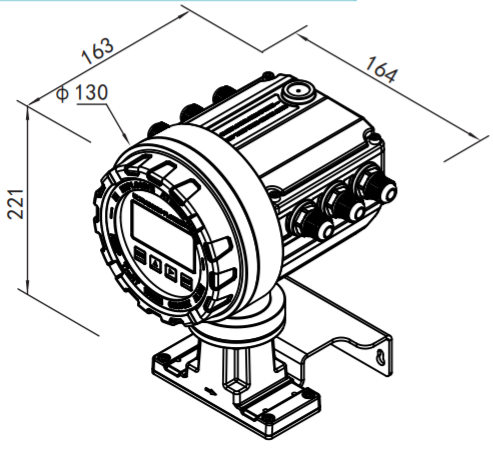


- Converters can be installed on wall surface or on pipes
- Big LCD displaying, abundant information
- One-channel, two-channel, four-channel can be selected
- Navigation menu + four-digit capacitor key operation
- Die casting aluminum converter, strong durability
- Equip with stainless steel probe and probe column
- Connecting three-wire or four-wire temperature transducer Pt100 can finish heat/cooling energy measurement

Working environment

	converter	transducer
Protection class	IP68	IP68
Temperature	-20~60℃	-30℃~160℃

Installation dimension

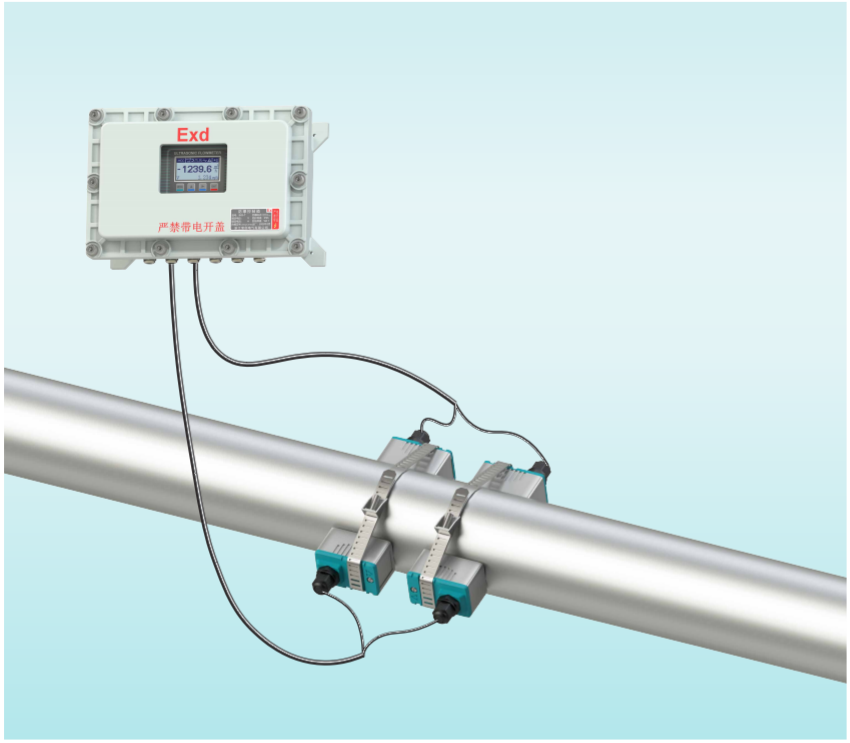


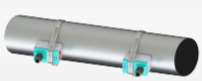
Essential parameter

	One-channel	Two-channel	Four-channel
Accuracy	±1%	±0.5%	±0.5%
Flow rate	≥0.3m/s	≥0.3m/s	≥0.1m/s
Pipe diameter	DN15~DN6000mm		
Liquid temperature	-30℃~160℃		
Type of liquid	Water, sea water, sewage, Acid-alkali solution, ethyl alcohol, beer, single and even liquid which can transmit sound wave,such as oil, etc.		
Signal output	1 way 4-20mA output, electric resistance 0-1K (DC24V power supply), accuracy 0.1% 1 way OCT pulse output , pulse width 6-1000ms 1 way relay output or frequency output		
Signal input	3 way 4-20mA input, can be a data collector Connect three wire/four wire PT100 temperature transducer to realize heat/cooling energy measurement		
Data interface	Insulate RS485 serial interface, support the MODBUS		
Power supply	DC8-36V; AC10-30V; AC85-264V (Optional waterproof power adapter)		

07 multi-channel clamp-on ultrasonic flowmeter

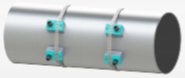
Explosion proof





One-channel transducer

Two-channel transducer



Four-channel transducer

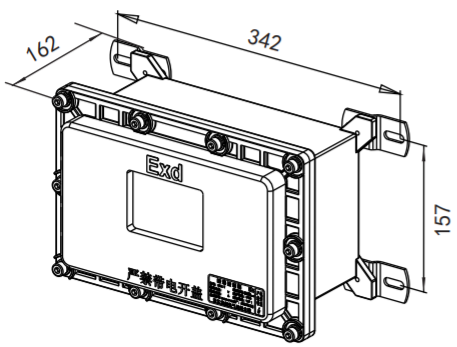
Liquid crystal display

- Isolation type explosion-proof, used in flammable and explosive occasions
- Explosion proof class: DIIBT5
- Big LCD displaying, abundant information
- One-channel, two-channel, four-channel can be selected
- Navigation menu + four-digit key operation
- Die casting aluminum converter, strong durability
- Equip with stainless steel probe and probe column
- Connecting three-wire or four-wire temperature transducer Pt100 can finish heat/cooling energy measurement

Working environment

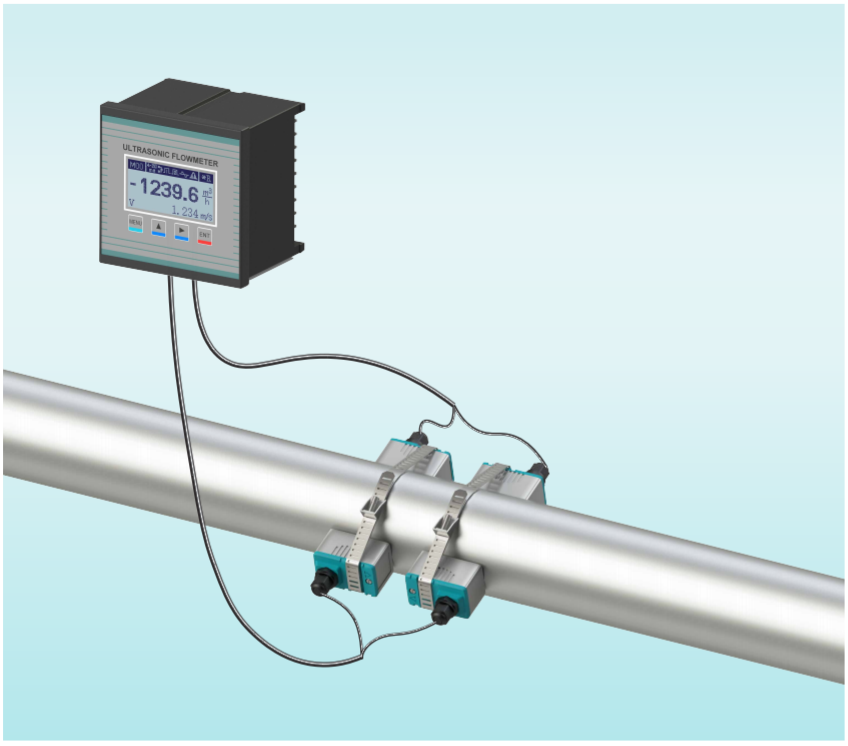
	converter	transducer
Protection class	IP65	IP68
Humidity	≤85%RH	IP68
Temperature	-20~60℃	-30℃~160℃

Installation dimension



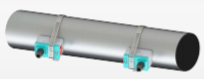
Essential parameter

	One-channel	Two-channel	Four-channel
Accuracy	±1%	±0.5%	±0.5%
Flow rate	≥0.3m/s	≥0.3m/s	≥0.1m/s
Pipe diameter	DN15~DN6000mm		
Liquid temperature	-30℃~160℃		
Type of liquid	Water, sea water, sewage, Acid-alkali solution, ethyl alcohol, beer, single and even liquid which can transmit sound wave,such as oil, etc.		
Signal output	1 way 4-20mA output, electric resistance 0-1K (DC24V power supply), accuracy 0.1% 1 way OCT pulse output , pulse width 6-1000ms 1 way relay output or frequency output		
Signal input	3 way 4-20mA input, can be a data collector Connect three wire/four wire PT100 temperature transducer to realize heat/cooling energy measurement		
Data interface	Insulate RS485 serial interface, support the MODBUS		
Power supply	DC8-36V;AC10-30V;AC85-264V		



Liquid crystal display

- Application for instrument panel mounting
- Big LCD displaying, abundant information
- One-channel, two-channel can be selected
- Navigation mune + four-digit key operation
- The shell is made of ABS Engineering Plastics
- Connecting three-wire or four-wire temperature transducer Pt100 can finish heat/cooling energy measurement



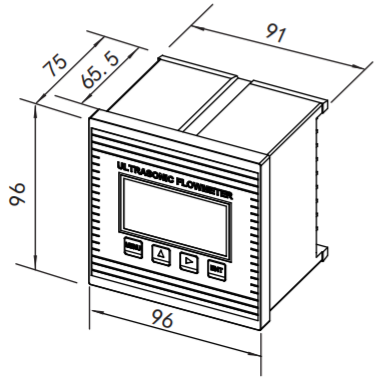
One-channel transducer

Two-channel transducer

Working environment

	converter	transducer
Protection class		IP68
Humidity	≤80%RH	IP68
Temperature	-20~60℃	-30℃~160℃

Installation dimension



Essential parameter

	One-channel	Two-channel
Accuracy	±1%	±0.5%
Flow rate	≥0.3m/s	≥0.3m/s
Pipe diameter	DN15~DN6000mm	
Liquid temperature	-30℃~160℃	
Type of liquid	Water, sea water, sewage, Acid-alkali solution, ethyl alcohol, beer, single and even liquid which can transmit sound wave,such as oil, etc.	
Signal output	1 way 4-20mA output, electric resistance 0-1K (DC24V power supply), accuracy 0.1% 1 way OCT pulse output , pulse width 6-1000ms 1 way relay output or frequency output	
Signal input	3 way 4-20mA input, can be a data collector Connect three wire/four wire PT100 temperature transducer to realize heat/cooling energy measurement	
Data interface	Insulate RS485 serial interface, support the MODBUS	
Power supply	DC8-36V;AC10-30V	

• Normal temperature clamp-on transducer

- Built-in magnet, can be directly affixed on pipes
- Protection class IP68 after gluing
- Complete in specifications, measurement diameter rangeDN15-DN6000
- Temperature range:-30~90℃

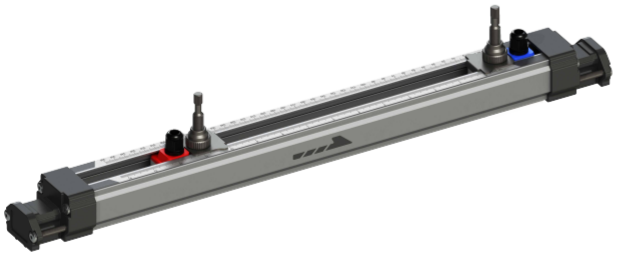
Transducer Name	Model	Measurement range	Temperature range	size
Standard small transducer	S1	DN15-100	-30~90℃	45×25×28mm
Standard medium transducer	M1	DN50-700	-30~90℃	45×25×28mm
Standard large transducer	L1	DN300-6000	-30~90℃	45×25×28mm

• High temperature clamp-on transducer

- Built-in magnet, can be directly affixed on pipes
- Protection class IP68 after gluing
- Complete in specifications, measurement diameter rangeDN15-DN6000
- Temperature range:-30~160℃

Transducer Name	Model	Measurement range	Temperature range	size
High temp. small transducer	HS1-HT	DN15-100	-30~160℃	45×25×28mm
High temp. medium transducer	HM1-HT	DN50-700	-30~160℃	45×25×28mm
High temp. large transducer	HL-1-HT	DN300-6000	-30~160℃	45×25×28mm

• Holder type clamp-on transducer



- Improve installation efficiency and accuracy
- Protection class IP68 after gluingIP68
- Measurement diameter rangeDN15~DN6000
- Temperature range: -30~160℃

Transducer Name	Model	Measurement range	Temperature range	size
Standard holder small transducer	HS1	DN15-100	-30~90℃	45×25×28mm
Standard holder medium transducer	HM1	DN50-300	-30~90℃	45×25×28mm
Standard extending holder transducer	EBX-M1	＞DN300	-30~90℃	45×25×28mm
High temp. holder small transducer	HS1-HT	DN15-100	-30~160℃	45×25×28mm
High temp. holder medium transducer	HM1-HT	DN50-300	-30~160℃	45×25×28mm
High temp. extending holder transducer	EBX-M1-HT	＞DN300	-30~160℃	45×25×28mm