

SEPARATE CONVERTER TYPE ULTRASONIC FLOWMETER

IP 67

 Water and Dust Resistant

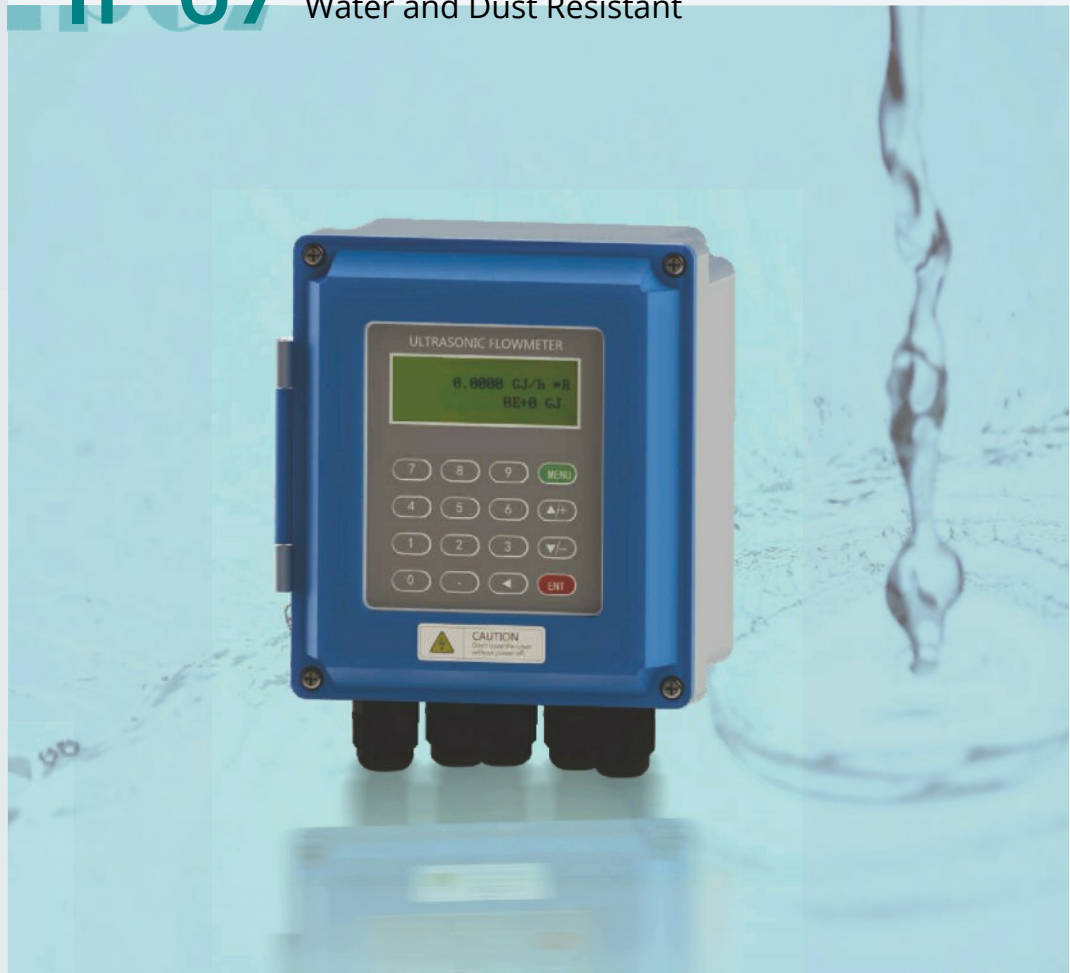
Clamp-On



Insertion



Pipe Inline/Full Bore



| Features |

- Measurement accuracy of 1%.
- Converter protection class IP67, Transducer protection class IP68.
- Wide measurement range, pipe size range from DN 15 to DN 6000.
- 3 installation method for the converter: wall mounted, DIN-rail mounted, explosion-proof box mounted.
- Converter capable to calculate heat/energy (BTU) when Install with two PT100 temperature transducer.

| Introduction |

UFH-200 series flowmeter can be used and applied in a wide range of long-term inline measurement of flow and heat energy (BTU). With converter protection class of IP 67 and ultrasonic transducer of protection class IP 68. Can be used in a wide variety of liquid media applications like ultra-pure liquids, portable water, chemicals, raw sewage, reclaimed water, cooling or chilled water, river water, plant affluent and etc.

| Flow Sensor Types | Measurement Types |

	Flow Measurement	Heat Measurement	Features
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Clamp-On



- No pipe cut off needed, no pressure loss.
- BTU function when used with 2 clamp-on or others types of temperature transducers.
- Easy installation.

Insertion



- No pipe cut off needed, no pressure loss.
- Stable and reliable for long term operation.
- BTU function when used with 2 insertion or others types of temperature transducers.




Inline Pipe



- Pipe cut off needed for installation.
- High accuracy and high stability.
- BTU function when used with 2 insertion or others types of temperature transducers.



Ultrasonic flow sensor types

Various types of ultrasonic flow sensors can be chosen to match with the converter to form a complete set of ultrasonic flow meter. Different options of ultrasonic flow sensors are available to match different pipe size, medium type, pipe condition and installation method.

Types	Picture	Spec		Model	Measurement Range
Clamp-on		TS-2-HT	Small size transducer	DN15-100mm	-30~160°C
		TM-2-HT	Medium size transducer	DN50-700mm	
		TL-2-HT	Large size transducer	DN300-6000mm	
		HS-HT	Small size bracket mounting transducer	DN15-100mm	
		HM-HT	Medium size bracket mounting transducer	DN50-300mm	
		EB-1-HT	Extended bracket mounting transducer	DN300-700mm	
Insertion		TC-1	Standard insertion	DN50-6000mm	
		TC-2	Lengthened insertion	DN50-6000mm	
Pipe		G2	Standard flange pipe	DN50-1000mm	

Temperature sensor types

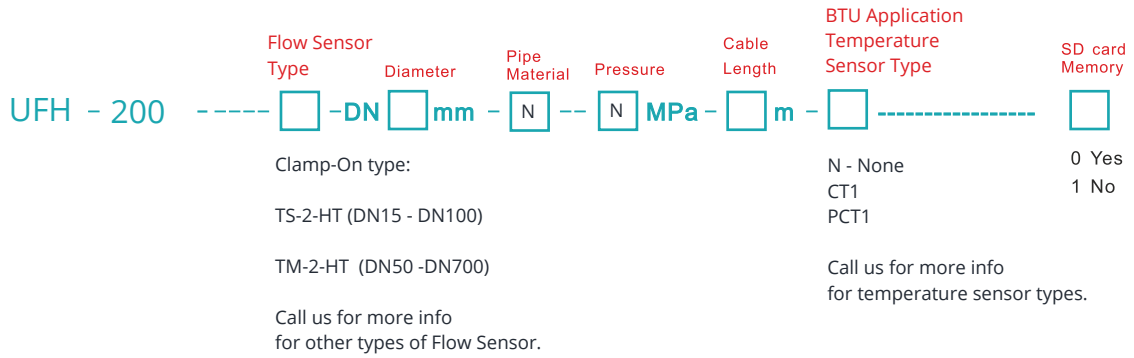
The ultrasonic flow meter can be converted to ultrasonic heat meter by adding additional temperature sensors. Connect the temperature transducer for energy/heat measurement

Picture	Model	Specification	Temperature
	CT-1	Clamp-on PT100	-30~160°C
	PCT-1	Insertion PT100 Temperature transducer Installation with pressure	

Specification

Items		Performance & Parameter	
Converter	Principle	Transit-time ultrasonic flowmeter	
	Accuracy	± 1%	
	Display	2×20 character LCD with backlight, support the language of English or other languages	
	Signal Output	1 way 4~20mA output, electric resistance 0~1K, accuracy 0.1%	
		1 way OCT pulse output (Pulse width ~1000ms, default is 200ms)	
		1 way Relay output	
	Signal Input	3 way 4~20mA input, accuracy 0.1%, acquisition signal such as temperature, pressure and liquid level	
Option to calculate heat energy when install with 2 temperature sensors			
Data Interface	Insulate Rs485 serial interface, upgrade the flowmeter software by computer, support the MODBUS		
Special Cable	Twisted-pair cable, generally, the length under 50 meters; Select the RS485, transmission distance can over 1000m		
Pipe Installation Type	Pipe Material	Steel, Stainless steel, Cast iron, Copper, Cement pipe, PVC, Aluminum, Glass steel product, liner is allowed	
	Pipe Diameter	25~6000mm	
	Straight Pipe	Transducer installation should be satisfied: upstream 10D, downstream 5D, 30D from the pump	
Measurement Parameters	Type of Liquid	Any liquid that can transmit sound wave, such as Water (hot water, chilled water, city water, sea water, waste water, etc.); Sewage with small particle content; Oil (crude oil, lubricating oil, diesel oil, fuel oil, etc.); Chemicals (alcohol, etc.); Plant effluent; Beverage; Ultra-pure liquids, etc.	
	Temperature	-30~160°C	
	Turbidity	No more than 10000ppm and less bubble	
	Flowrate	0~±7m/s	
Working Environment		Converter: -20~60°C; Flow Transducer: -30~160°C	
	Humidity	Converter: 85%RH; Flow Transducer: can measure under water, water depth ≤2m (transducer sealed glue)	
Power supply	Dc8~36V or Ac85~264V (optional)		
Power Consumption	1.5W		
Dimension	132 mm X 150 mm X 85 mm (Converter dimension)		

| Ordering Information |



Example: UFH-200-TS-2-HT-DN50-N-N-25-CT1-1 is uFlow ultrasonic type flowmeter with clamp on ultrasonic flow sensor for size DN50 pipe with heat energy measurement come with two type CT-1 temperature probe.

