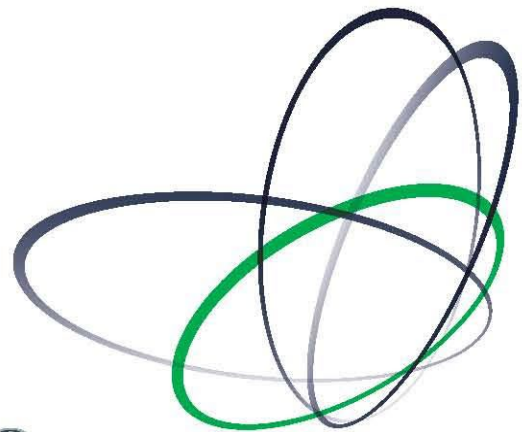


# I-METER FLOWMETER PRODUCT SHEET



 **i-meter**<sup>®</sup>  
*Innovative Metering Solutions*

## Product Features

- Easily and friendly for installation and operation. It only takes a few minutes, from the start of installation to using the flow meter.
- FT211 adopts a new external clamp design, which could get the flow rate without touch the measurement medium. Compared with other traditional flow meter, this could avoid pressure loss or media contamination problems.
- As the advantage of a clamp on flow meter, no need to cut off the pipe or long time stop the equipment, save the cost of time and labor costs.

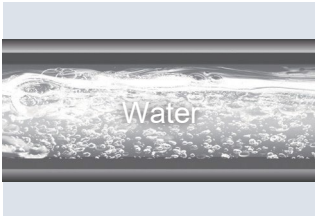
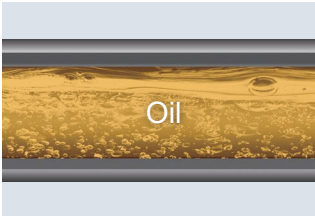
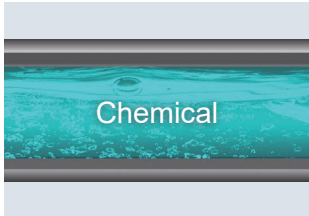


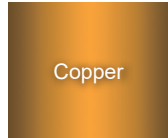

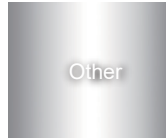
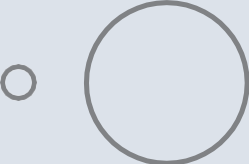


A variety of modes are available for setting and flexibility. One set is universal for all pipe size in the working range, and suitable for many kinds of metal and resin pipes.

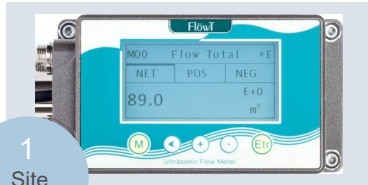
128 LCD display. Display a variety of information.

Optional to become an ultrasonic cooling (heat) meter/ btu meter/ energy meter to realize the saving and measurement of energy.

Compatible for various liquids and compatible with various pipeline materials and sizes:

<p>1 Applicable fluid</p>	 <p>Water</p>	 <p>Oil</p>	 <p>Chemical</p>		
<p>2 Compatible piping material</p>	<p>Metal pipe Stainless steel, Carbon steel, Copper</p>		<p>Resin pipe PVC, Other</p>		
	 <p>Stainless steel</p>	 <p>Carbon steel</p>	 <p>Copper</p>	 <p>PVC</p>	 <p>Other</p>
<p>3 Compatible pipe line size</p>	<p>DN15~DN40 (Inner diameter 12mm~ Outer diameter 50mm)</p> 				

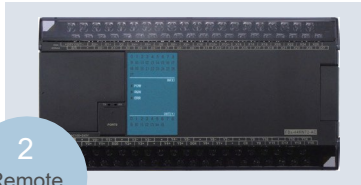
Provide many aspects of help for different flow measurement application requirements:



1

Site display

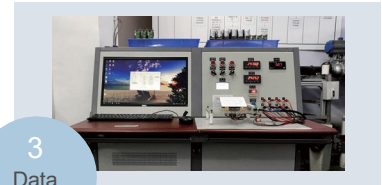
Monitor the flow rate reading directly on the device.



2

Remote monitoring

With the help of output, could send the information to PLC, central control room etc.



3






Data analysis

Record the data to improve.

## Specification

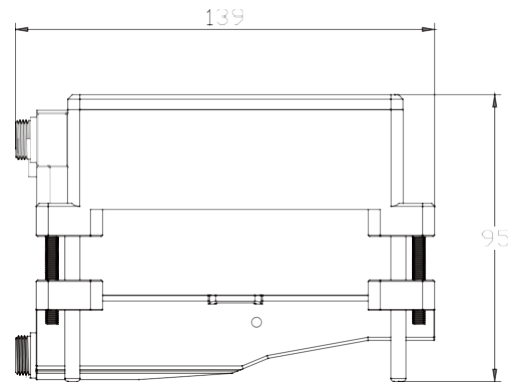
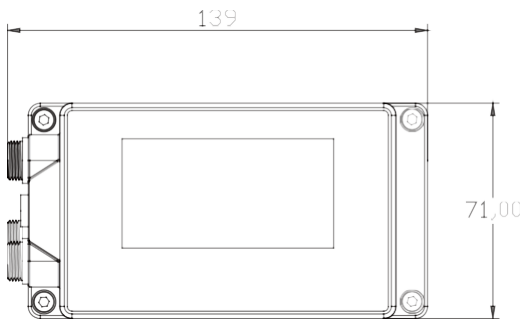
Pipe material	Metal /PVC, PP or PVDF rigid plastic pipe
Liquid type	Water/other liquid (Single liquid medium without solid particles or impurities)
Temperature range	0-75°C (No freezing on the surface)
Low velocity cut off value (Default by factory)	0.1m/s
Display	256*128, LCD
Response time	0.5~60s
Accuracy	±2%, (±1% after calibration)
Data Storage period	300ms
Memory for data backup	EEPROM (Data storage: over 10 years, data read/write frequency: over 1 million times)
Power and I/O connection	M12 type aviation plug
Output	4-20mA
Communication	Modbus RS485
(Options for output)	OCT (pulse output)/ One relay alarm (please contact the factory)
Power supply	10-24V VDC
Electric power	< 3W
Protective circuit	Power reverse connection protection, Power surge protection, Output short circuit protection, Output surge protection
Enclosure protection class	IP65
Environment temperature	-10 to 60°C (No freezing)
Relative humidity	35 to 85% RH (No condensation)
Vibration resistance	10 to 55 Hz double amplitude 1.5 mm, 2 hours in each XYZ axis
Impact resistant	100 m/s <sup>2</sup> 16 ms pulse, 1000 times each for X, Y and Z axis
Main material	Aluminum, Industrial Plastics
cable length	2m (standard ), PT1000 sensor standard cable length is 9m

## Flow Range

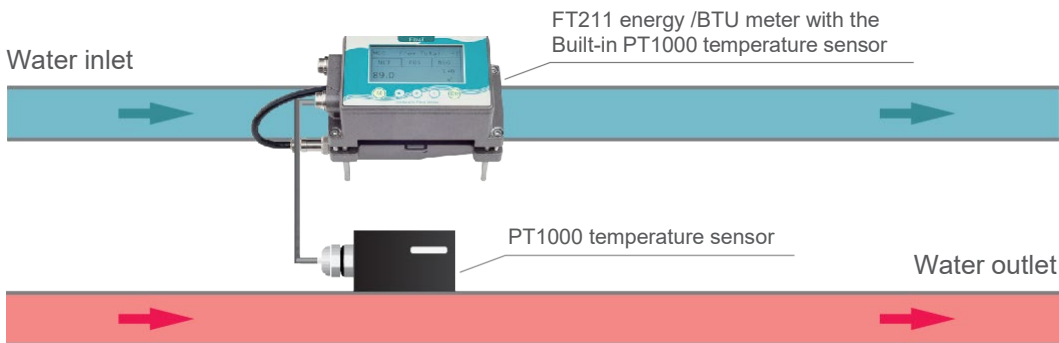
Pipe size (DN)	Upper flow value(L/min)
15	60 L/m 
20	100 L/m 
25	200 L/m 
32	300 L/m 
40	400 L/m 

Notice: The minimum measurable pipe size is the inner diameter  $\geq 12\text{mm}$

## Size Drawing (Unit: mm)



## Ultrasonic energy /BTU meter



## Ordering confirmation

Model	Description
FT211	Pipe size: DN15—DN40mm
	Velocity: 0.03m/s—10m/s;
	Accuracy: $\pm 2\%$ ( $\pm 1\%$ after calibration)
	Medium: water/ single medium liquid without solid impurities
	Power supporting 10~24VDC/1A
	Transducer temperature range: 0—75°C;
	Cable length: 2m
	For Energy/Btu meter including a pair of PT1000 temperature sensor, one side is with the transmitter and another side cable length for standard unit is 9m
Code	Transmitter type
1	Ultrasonic flow meter
2	Ultrasonic energy/ btu meter
Code	Output (choose 2 out of 4)
A	4-20mA
M	Modbus (RS485)
O	OCT (Frequency)
R	1 Relay
PT1000	Cable length of the PT1000
P	Another side cable length 9m
P (15)	Another side cable length 15m
P (25)	Another side cable length 25m

### Flow meter code (example)

FT211-1-AM

FT211 clamp on type ultrasonic flow meter with 4-20mA output and RS485 communication, cable length 2m.

### Energy/btu meter code (example)

FT211-2-AM-P

FT211 clamp on type ultrasonic energy/btu meter with 4-20mA output and RS485 communication, cable length 2m. Including a pair of PT1000 temperature sensor, one side is with the transmitter and another side cable length is 9m.

