

Introduction

FI-51P is a full function handle transfer time ultrasonic flow meter. No matter you want to quickly verify the flow reading of another meter or to data log flow system values over an extended time period, the **Fiskal FI-51P** is the suitable tool.

The **FI-51P** portable meter has the clamp on transducers no tapping or cutting is required, just clamp outside of the pipe. The meter can be easily moved and installed in different pipe and convenient to carry site to site. Its portability makes it an excellent choice for measuring flows throughout the plumbing infrastructure to verify sensor, pump and valve performance.

FI-51P could add the RTD model and temperature sensor become an energy meter to monitoring the energy use help to save the energy.



Feature



1. Easy to install, reduced installation time and cost.
2. No pressure head loss, No moving parts to maintain or replace.
3. BTU function is an option. FT221 could be used as a portable ultrasonic energy meter.
4. Powerful data storage and also support the data sheet analysis software.

Specification

Performance

Flow range	± 0.03 ft/s ~ ± 40 ft/s (± 0.01 m/s ~ ± 12 m/s)
Accuracy	$\pm 1\%$ of measured value
Repeatability	0.2% of measured value
Pipe material	$\pm 1\%$
Pipe size	Carbon steel, stainless steel, PVC and other compact material pipe
Fluid	Single medium liquid

Function

Outputs	Analog output: 4~20mA, Max 750 Ω . Modbus: RS485
SD card	16G
Interval	1 ~ 99999seconds
Key broad	Digital keys
Display	240*128 back lit LCD
Temperature	Transmitter: -40°C ~ 60°C Transducer: -40°C ~ 80°C (-40°C ~ 80°C is standard; -40°C ~ 130°C is an option)
Humidity	Up to 99% RH, non-condensing

Physical

Transmitter	NEMA13, IP54.
Transducer	Encapsulated design
Transducer cable	Standard cable length: 5m (16ft).

Product photo

or



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**Accessories**

1. Carrying Case*1pc.
2. Transmitter (Electronic)*1pc.
3. Transducer (Sensor) *1 pair.
4. Mounting track*1 set, ST or DT
5. Pipe straps *2 pairs.
6. Coupling compound (Grease)*1 pc, Battery charge*1pc, Output cable*1pc and Tapeline*1



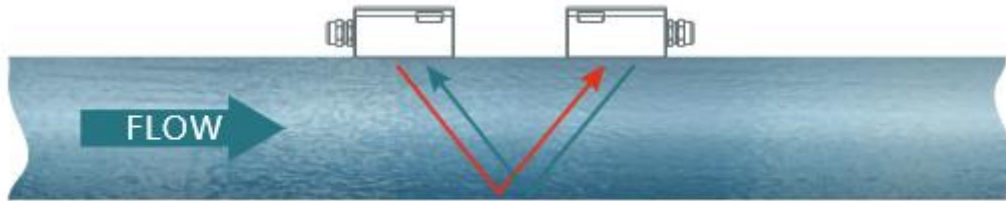
Single guide mounting type bracket (Code ST)



Dual guides mounting type bracket (Code DT)

Measuring principle

Transfer time technical means the ultrasonic signal from the transducer is transmitted and received through the moving liquid, there will be a difference between the upstream and downstream transit time, which can be used to calculate flow and velocity.



An ultrasonic meter equipped with heat flow capabilities measures the rate and quantity of heat delivered or removed from devices such as heat exchangers. By measuring the volumetric flow rate of the heat exchanger liquid, the temperature at the inlet pipe and the temperature at the outlet pipe, the energy usage can be calculated.



Ordering Confirmation

Model	Transmitter
FI-51P	Portable Ultrasonic Flow Meter Installation method: Handheld Flow Range: ± 0.03 ft/s ~ ± 40 ft/s (± 0.01 m/s ~ ± 12 m/s) Accuracy: $\pm 1\%$ of measured value Repeatability: 0.2% Output: 4-20mA, RS485 Internal lithium power supply: 3000mAh Pipe size range: 1"~48"(25mm~1200mm) Transducer: IP68, D series transducer, 5m cable with mounting kits.
Code	Output
1	OCT, Relay, RS232/RS485, 4-20mA
2	Ultrasonic Energy/Btu Meter function(RTD)
Code	Transducer
D1	Clamp-on, IP68. Operating temperature: $-40^{\circ}\text{F} \sim +176^{\circ}\text{F}$ ($-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$)
D1U	Clamp-on, IP68. Operating temperature: $-40^{\circ}\text{F} \sim +266^{\circ}\text{F}$ ($-40^{\circ}\text{C} \sim +130^{\circ}\text{C}$)
Code	Type of mounting track
ST	Single guide mounting type bracket
DT	Dual guides mounting type bracket
Code	Transducers cable length
P5	D series type of cable Standard 5m (16ft) with mounting track.
PXX	XX is the length you need for cables, Maximum lengthen to 30m.
Code	Temperature sensor
PT1000	A pair of clamp on PT1000 sensor 9m

Flow meter model (example):

FI-51P-1-D1-ST-P5

Portable Ultrasonic Flow Meter FT221, D1 type transducer 5m cables with single guide mounting track.

Energy/ Btu meter model(example):

FI-51P-2-D1-ST-P5-PT1000

Portable Ultrasonic Energy/Btu Meter FT221, D1 type transducer 5m cables with single guide type mounting track. A pair of PT1000 clamp on temperature sensor, 9m cables.

***You could choose the mounting track as the application need and your use habit.**