

PORTABLE TYPE ULTRASONIC FLOWMETER **Portaflow-C**

**Compact and
handy**

**The measurement data
can be stored in a SD memory
card for a long time**

**Consumed heat quantity
can be measured**



Flow transmitter type: FSC

Detectors according
to application



Detector type: FSS

**Pulse Doppler method
is selected to observe flow
velocity profile
(option)**

**Designed for 12
hours of continuous
operation with its own
built-in battery**

**A useful USB port
given for connecting
with a PC**

**Provided with a
printer (option)**

**Wide range
measurement**

- Measurement fluid: Water, hot-water, distilled water, alcohol, milk, ethanol or other uniform liquid in which ultrasonic waves can propagate.
- Pipe size: $\phi 13\text{mm}$ to $\phi 6000\text{mm}$
- Fluid temperature: -40 to $+200^{\circ}\text{C}$
- Flow velocity range: 0 to $\pm 32\text{m/s}$ ($\pm 0.3\text{m/s}$ min.)

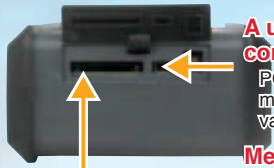
Vastly improved Portaflow-C



Flow transmitter type (FSC)



Provided with printer for screen hard copy

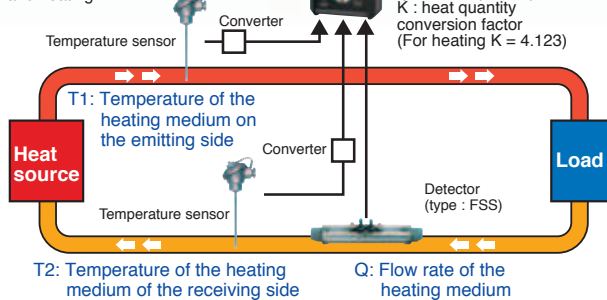


A useful USB port given for connecting with a PC
Sends the data stored in a SD memory card such as instantaneous value, total value, etc to a PC

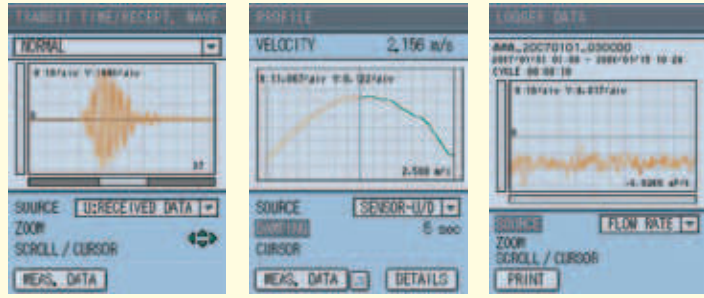
Measurement data can be stored in a SD memory card
Saves instantaneous value, total value, error information

Computation function of consumed heat quantity:

This function calculates the heat quantity received and sent with liquid (water) in cooling and heating.



Large easy-to-read LCD display



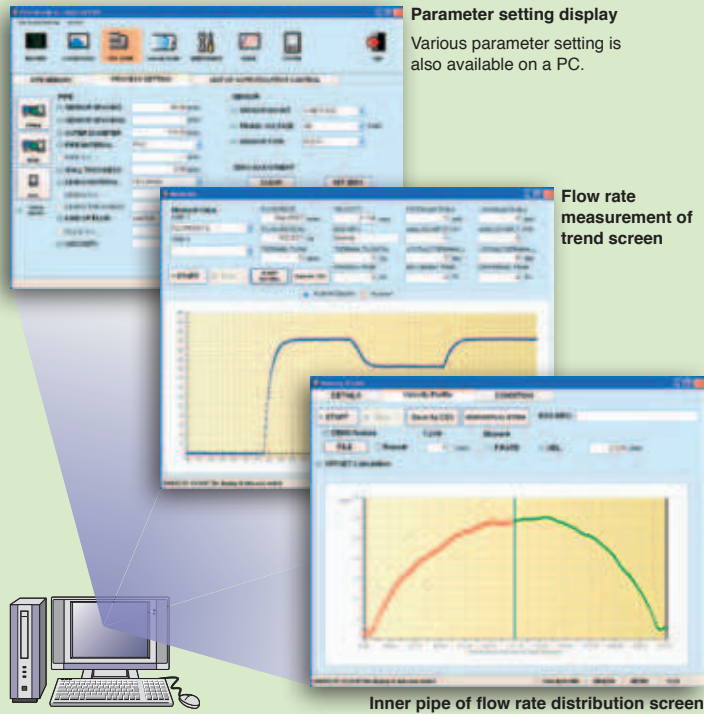
TRANSIT TIME/RECEPT

PROFILE

LOGGER DATA

SD card archive data is playable on a PC

[Attached standard loader software]



Parameter setting display

Various parameter setting is also available on a PC.

Flow rate measurement of trend screen

Inner pipe of flow rate distribution screen

Specifications

Application	Uniform liquid in which ultrasonic waves can propagate Water, hot-water, distilled water, alcohol, milk, ethanol, etc
Inner pipe diameter	13mm to $\phi 6000$ mm (depending on the detector)
Fluid temperature	-40 to +200°C (depending on the detector)
Flow velocity range	0 to ± 32 m/s (± 0.3 m/s min.)
Measurement accuracy	$\pm 1.0\%$ of rate (depending on the flow velocity)
Response time	1 sec.
Path	Transit time method (1 Path)
Display	Color graphic LCD with back light
Analog output signal	4 to 20mA DC (1 point)
Analog input signal	4 to 20mA DC / 1 to 5V DC (2 points)
Supply voltage	Built-in battery (In the fully charged condition, 12 hours of continuous operation is possible.)
Structure	Waterproof (IP64)
Size	210X120X65mm (without printer)
Weight	Approx. 1kg

SD memory card	It can be saved almost a year date by attached date standards (512MB)
Serial communication	Transmission data (data stored in a SD memory card such as instantaneous value, total value, etc) <ul style="list-style-type: none"> • USB port is used • Transmission distance: 3 m max.
Function	<ul style="list-style-type: none"> • Damping time constant variable within 0 to 100 sec • Instantaneous value display (10 digits) Various flow rate unit settable • Total value display (10 digits) Various flow rate unit settable • Consumed heat quantity computation • Self diagnosis (diagnoses battery voltage drop and received waveform from the sensor) • Flash memory (measurement parameter for pipe, fluid, sensor, etc) • A number of registered sites: 32 • Zero point adjustment (Set zero/Clear available) • Bi-directional flow measurement • Low flow cut (0 to 5m/s)
Option	<p>With printer: Display hard copy, periodic printing and logged data printing</p> <p>Flow velocity profile (Pulse Doppler method): Displays flow velocity profile of instantaneous value and average value</p>

