

# PORTABLE TYPE ULTRASONIC FLOWMETER **Portaflow-C**

**Compact and  
handy**



Flow transmitter type: FSC

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

**Consumed heat quantity  
can be measured**

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

Detectors according  
to application



Detector type: FLD

**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.)

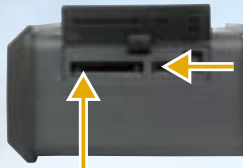
# Vastly improved **Portaflow-C**



Flow transmitter type (FSC)



Provided with printer for screen hard copy

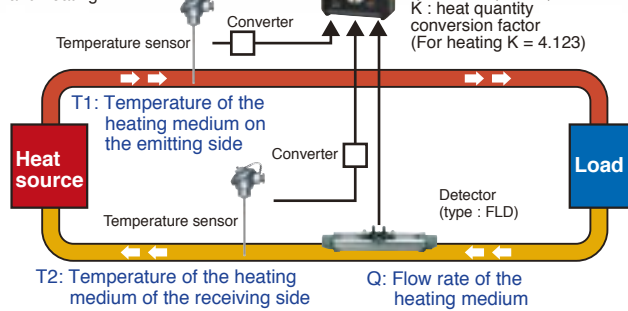


**A useful USB port given for connecting with a PC**  
Sends the data stored in a SD memory card such as instantaneous value, total value, etc to a PC

**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.



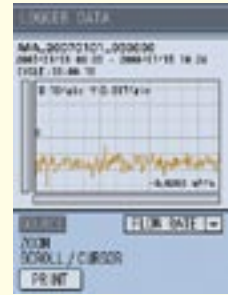
## Large easy-to-read LCD display



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 φ6000mm (depending on the detector)
Fluid temperature	-40 to +200°C (depending on the detector)
Flow velocity range	0 to ±32m/s (±0.3m/s min.)
Measurement accuracy	±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 (256MB)
Serial communication	Transmission data (data stored in a SD memory card such as instantaneous value, total value, etc) • USB port is used • Transmission distance: 3 m max.
Function	<ul style="list-style-type: none"> <li>• Damping time constant variable within 0 to 100 sec</li> <li>• Instantaneous value display (10 digits) Various flow rate unit settable</li> <li>• Total value display (10 digits) Various flow rate unit settable</li> <li>• Consumed heat quantity computation</li> <li>• Self diagnosis (diagnoses battery voltage drop and received waveform from the sensor)</li> <li>• Flash memory (measurement parameter for pipe, fluid, sensor, etc)</li> <li>• A number of registered sites: 32</li> <li>• Zero point adjustment (Set zero/Clear available)</li> <li>• Bi-directional flow measurement</li> <li>• Low flow cut (0 to 5m/s)</li> </ul>
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>

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