

Main Specifications

1) Size

- Probe: The diameter of the cylindrical part is 11.2 mm, and the protruding part is 4 mm (excluding the electromagnetic wave shielding case).
- Calculation box: 35mmx55mmx26mm (including 860mAh capacity battery).

2) Recommended environment for use

- Skin temperature and ambient temperature: 0-60 °C.
- Relative humidity: ~ 80%. As it is, it cannot be used in the bath and water.
- Do not apply a load of 500g or more to the protrusion.

3) Power consumption

- Data transmission by Bluetooth

At the time of measurement: 610 mW. Battery-powered at 860mAh for approximately 5 hours of continuous measurement time.

- When saving to SD memory (optional)

Battery life of 860mAh, continuous measurement time of about 5.5 hours

- Approximately 22 hours of continuous measurement time with a battery capacity of 3500 mAh (3.7 V).

4)USB charging

- Voltage 4~5.2V。 Current 0.25A~2A。
- Bluetooth transmission is possible while the green LED is lit up to 50% duty blinking.

5) Cable

- FPC length: 15 cm (option), 25 cm, 60 cm (option), width: 4 mm, thickness 0.5 mm or less, electromagnetic shield tape, electromagnetic shield sleeve (option).

6) Actuator drive (optional)

- 7) Various parameters can be set.

- 8) Analog signal extraction lead wire for contact pressure and blood flow (optional)

Detailed specifications

A) The resolution of blood flow signal: 0.02 seconds (0.002 seconds is possible as a option).

B) The resolution of contact pressure and temperature can be changed by the user in the parameter settings.

C) Laser oscillation current can be changed by the user in the case of experimental specifications. However, we still recommend that you do not change it yourself and use the preset values.

FlowView Software ※1

With this software (FlowView) of the blood flow sensor, basic data such as blood flow signals can be sent to a PC via Bluetooth, and the data can be displayed as a graph and saved on the PC.

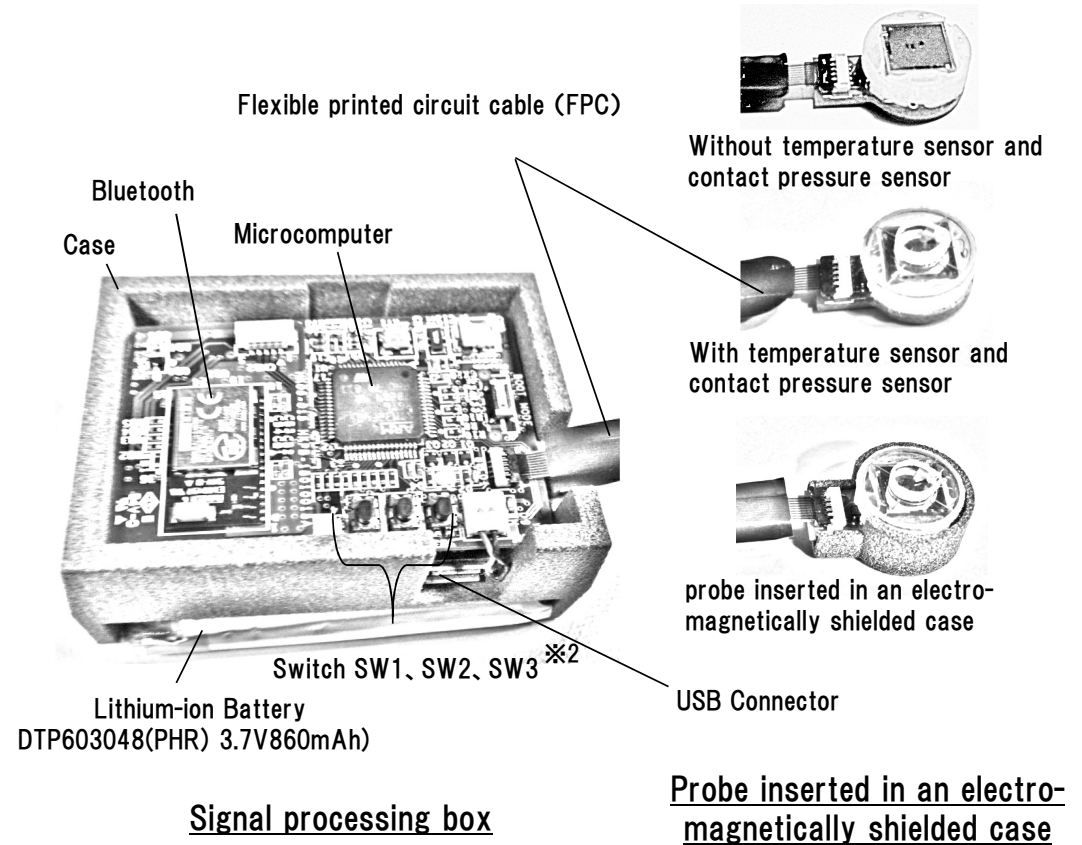
As an option, laser pulse drive, direct data storage in SD memory, and actuator drive command function can be added.

FlowView software has a Japanese version and an English version.



※1 Software for blood flow sensor created by Hiko Laboratory

Sensor appearance



※1 Cable lengths are 150mm, 250mm, 600mm.

※2 SW3 switch is not normally used.

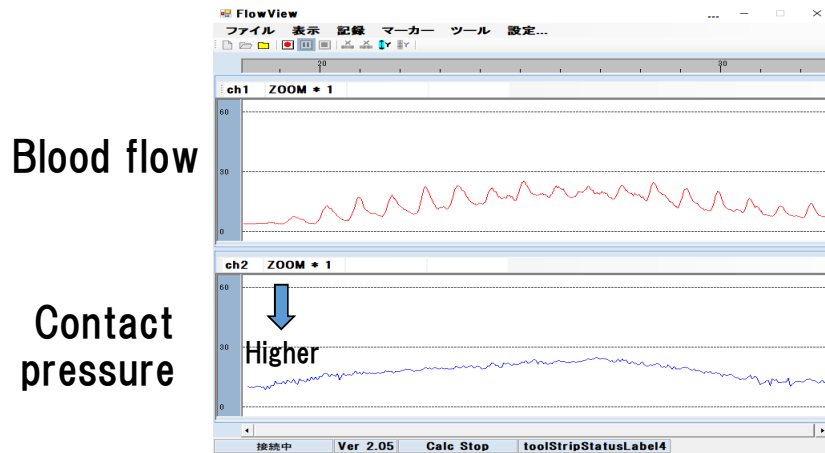
Precautions when using the blood flow sensor with a built-in contact pressure sensor

The significance of contact pressure measurement is to make sure that the change in the blood flow at the measurement site is not based on the change in the contact pressure. When handling a blood flow sensor with a built-in contact pressure sensor, please pay attention to the following two points.

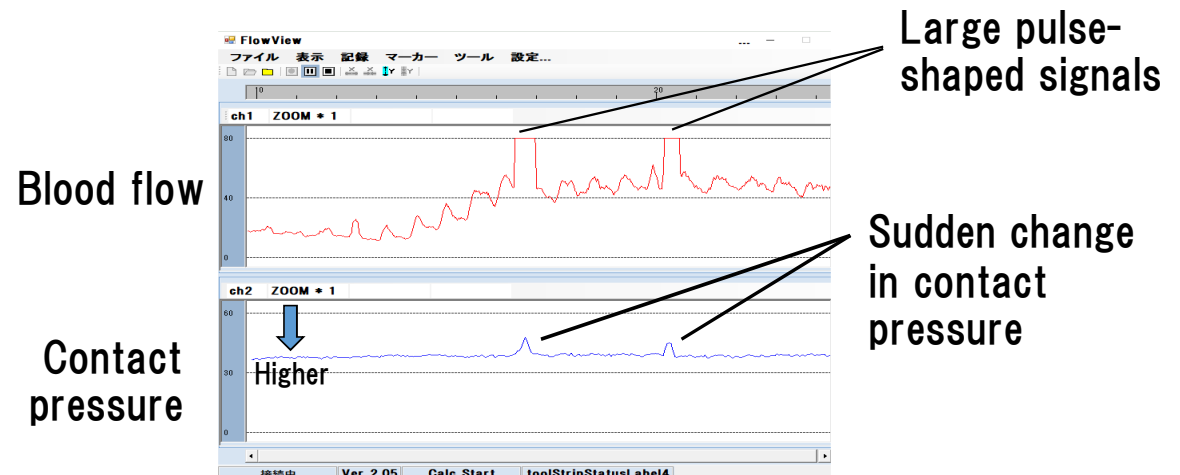
1. In order to perform control such as making contact pressure constant, it is necessary to fix the sensor or install it.

2. When the contact pressure changes rapidly, a large pulse-shaped signal is output as a blood flow signal.

When using a blood flow sensor with built-in contact pressure sensor, please be aware that a large pulse-shaped signal is generated in the blood flow in response to a sudden change in contact pressure, as shown in figure b. As shown in Fig. a, this does not occur when the contact pressure changes slowly.



a



b