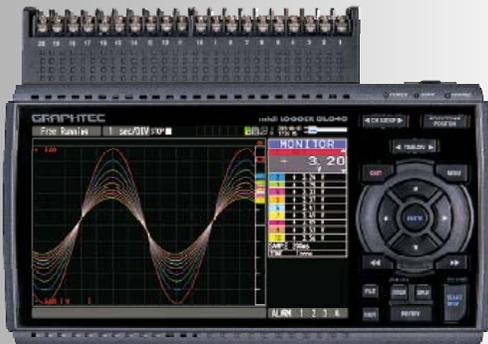


# Product Introduction for **midi LOGGER**

## GL840-WV

*- Typical applications of GL840-WV -*  
(vol. 1, rev. 1a)



# GRAPHTEC

## Graphtec Corporation

Overseas Sales and Marketing Division

# Temp measurement accuracy of the GL840-WV & GL840-M

## GL840-WV is recommended for the High-precision temperature measurement

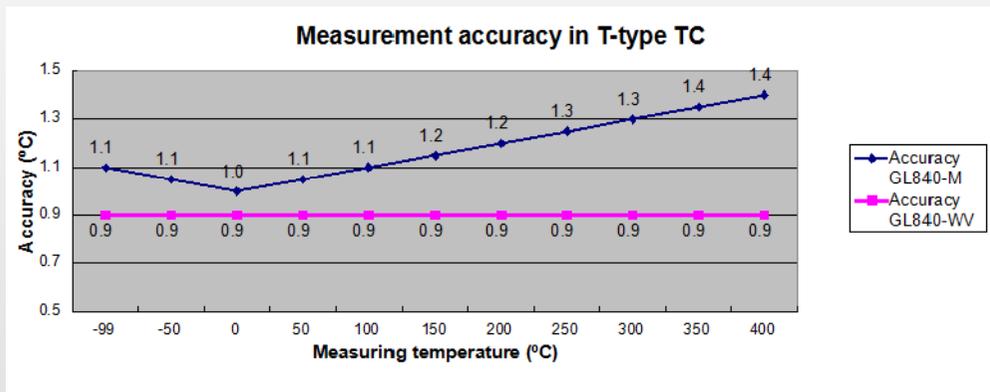
The specification of measurement accuracy in the GL840 is the following. The accuracy varies by the type of TC (thermocouple). Actual value of an error is shown below.

### Measure temperature using the T-type TC

Accuracy (*1) in the GL840-M	Measurement: $\pm (0.1\% \text{ of rdg} + 0.5 \text{ }^\circ\text{C})$ (*2) R.J.C.: $\pm 0.5 \text{ }^\circ\text{C}$
Accuracy (*1) in the GL840-WV	Measurement: $\pm 0.6 \text{ }^\circ\text{C}$ (*2) R.J.C.: $\pm 0.3 \text{ }^\circ\text{C}$

\*1: The total measuring accuracy is the sum of the measurement and the RJC (Reference Junction Compensation). Total accuracy = Measurement + R.J.C.

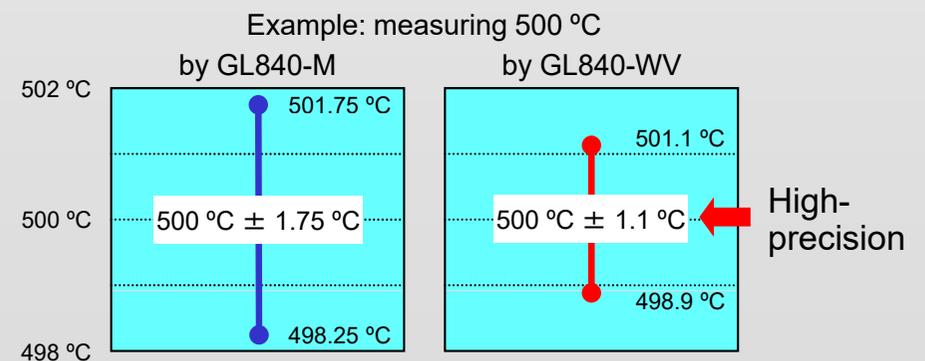
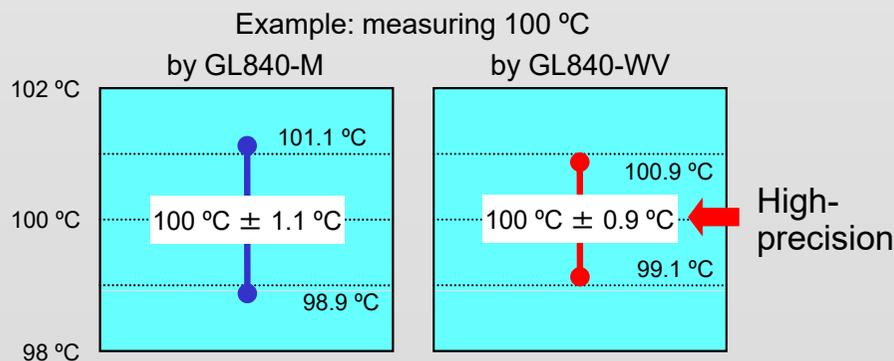
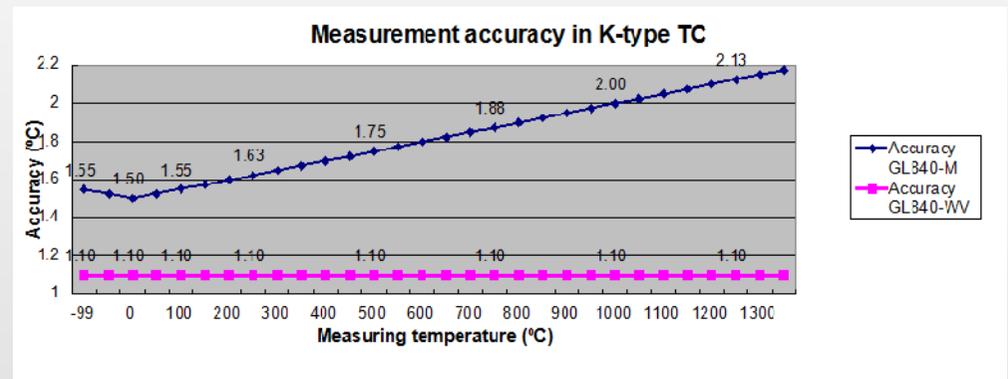
\*2: When the temperature is in range of -99 °C to 400 °C.



### Measure temperature using the K-type TC

Accuracy (*1) in the GL840-M	Measurement: $\pm (0.05\% \text{ of rdg} + 1.0 \text{ }^\circ\text{C})$ (*3) R.J.C.: $\pm 0.5 \text{ }^\circ\text{C}$
Accuracy (*1) in the GL840-WV	Measurement: $\pm 0.8 \text{ }^\circ\text{C}$ (*3) R.J.C.: $\pm 0.3 \text{ }^\circ\text{C}$

\*3: When temperature is in range of -99 °C to 1370 °C.



# Typical application of the GL840-WV (1)

## Components manufacturers for vehicle

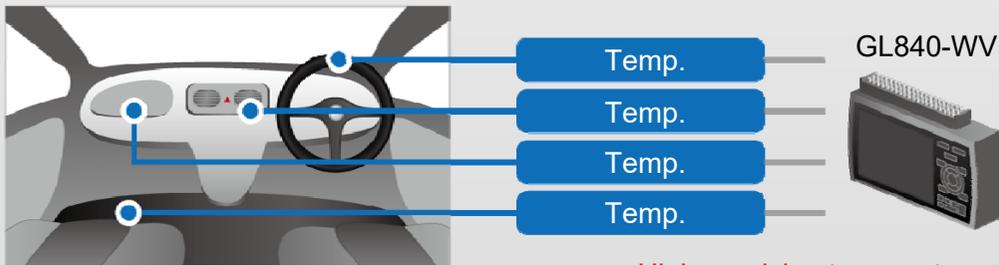
Application

Measurements for an air conditioning system of the vehicle

The temperature in the vehicle is intentionally controlled in order to have comfortable condition for passenger using the air conditioning system. The temperature needs to be measured with high precision at multiple points for testing of it.

Advantage in using the GL840-WV

High-precision temperature measurement at multiple points



High-precision temperature measurement of 20 channels in standard configuration. (Expandable up to 200 channels)

## Home appliance manufacturers

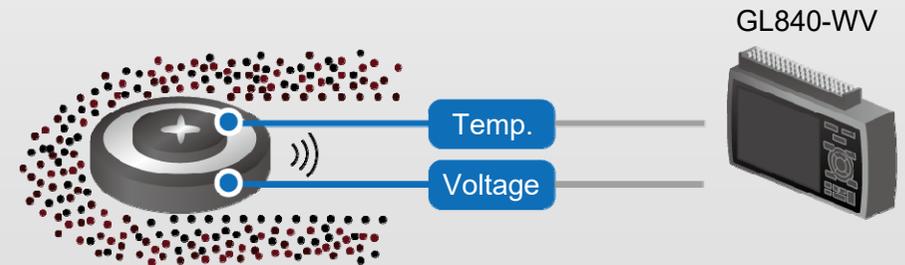
Application

Measurements for self-propelled vacuum cleaner

It is able to perform unattended cleaning using the self-propelled vacuum cleaner. The control algorithm for the self-propelled is key point for it. The temperature and voltage of control signal in the equipment are measured in the development stage.

Advantage in using the GL840-WV

High-precision temperature measurement in a compact size



# Typical application of the GL840-WV (2)

## Functional materials manufacturers

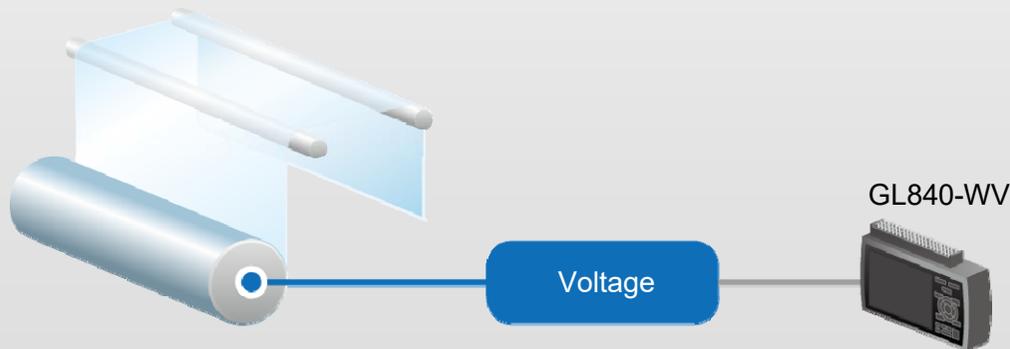
Application

Measurements for the production equipment maintenance

Surface treatment is performed in the manufacturing facility to produce high performance materials such as galvanized steel. The voltage of various control signals are measured in order to maintain the manufacturing facility in good condition.

Advantage in using the GL840-WV

High withstand voltage at the inputs  
(The possibility of damage to the input of the unexpected high voltage is reduced.)



Max. voltage (withstand)  
Channels (-) input terminal) to  
GND: 2300 V ACrms 1 minutes

## Electric Equipment manufacturers

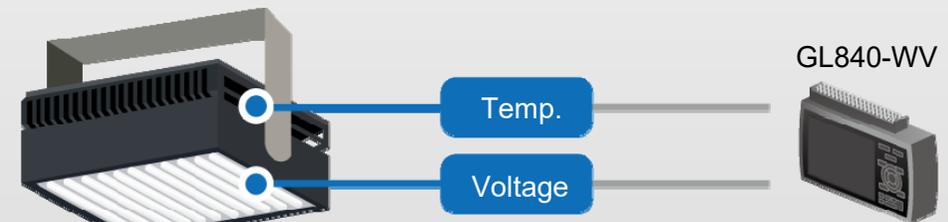
Application

Measurement for LED-type lighting fixtures

LED is an efficient light source. It does not emit light and heat rays like a light bulb, but it is sensitive to heat. Especially in the high-power lighting fixtures, it might be required heat dissipation. The temperature and voltage in the device or the control circuit are measured.

Advantage in using the GL840-WV

High maximum input voltage in between channels



Max. input voltage  
Between channels ((-) input  
terminal of each channel): 600 Vp-p