

Handy-type Logger with huge 2GB Flash Memory

NEW



10 isolated channels, each with multifunction input

Its compact size contains an isolated input system which ensures that signals are not corrupted by inputs to other channels, thus eliminating wiring concerns. The GL220s multi-type inputs are suitable for voltage, temperature, humidity, pulse, and logic signals, enabling combined measurements of different phenomena like temperature/humidity and voltage.

- Voltage** ▶ Ranges from 20 mV to 50 V
- Temp.** ▶ Thermocouple types: K, J, E, T, R, S, B, N, W (WR65-26)
- Humidity** ▶ 0 to 100% RH Humidity sensor (B-350 option)
- Pulse** ▶ 4 channels¹, Accumulating, Instant or RPM
- Logic** ▶ 4 channels¹

¹: Select either Pulse input or Logic input, and use the optional Logic/Alarm cable (ES-13 option)



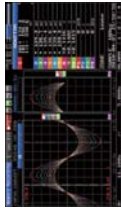
Standard type input terminals (M3 screws) are used

4.3-inch WQVGA TFT colour LCD

Utilises a bright clear 4.3-inch wide TFT color LCD monitor (WQVGA: 480 x 272 dots). Makes it easy to read data in waveform or digital form and to check your measurement parameter settings.



Waveform display (Analog + Digital)



Dual display (Current + Past)

Waveform display (Analog only)

Easy operation and device setup

Ergonomically designed and easy to operate, just like a mobile device. The input/output terminals and keyboard layout are arranged so that it can be operated in hands-on mode even when recording data. Parameters in the AMP settings menu can be easily changed whilst viewing the waveform.



Parameters in AMP settings can be changed on to our menu once using the ALL field.

Useful functions

Alarm output function

Alarm signals can be output when alarm conditions occur.⁷ Four alarm output ports are fitted.

⁷: The Logic/Alarm cable, (B-513 option), is needed to connect the alarm output ports.

Maximum sampling rate of up to 10ms

Provides faster sampling rates for voltage measurements. Can achieve 10ms sampling interval when limiting the number of channels in use.

Sampling interval	10ms	20ms	50ms	100ms	1s
Number of channels	1	2	5	10	10
Voltage	X	X	X	X	X
Temp.	N/A	N/A	N/A	X	X

³: Selection is available. N/A: selection is not available. ⁴: The above figures are approximate. ⁵: Standard USB memory devices without high-speed functions such as fingerprint recognition are required.

Built-in 2GB Flash Memory for reliable long term measurement

The 2GB Flash Memory enables secure long term data measurement without using an external storage device. Data is retained even when power is turned off because flash memory is used. Also, supports popular USB memory sticks for external storage. The GL220 saves measured data directly to USB memory sticks. USB memory sticks can be replaced during measurement without data loss.

Capturing time² (10 Analogue channels being used.)

Sampling interval	10ms ⁴	50ms ⁴	100ms	200ms	500ms	1s	10s
Built-in 2GB Flash Memory	39 days	83 days	97 days	194 days	485 days	971 days	9714 days
512MB USB memory stick ⁵	9 days	21 days	24 days	49 days	124 days	248 days	2481 days

²: The above figures are approximate. ⁴: The sampling rate is limited by the number of channels in use. (10ms: 1ch, 50ms: 5ch) ⁵: Standard USB memory devices without high-speed functions such as fingerprint recognition are required.

Ring memory function

The most recent data is saved when internal memory or external memory is configured in ring memory mode. (Captured data size in ring memory mode is limited to 1/3 of available memory.)

Supports USB memory device Easy connection to PC

Captured data can be saved directly to USB memory sticks when these are chosen for external storage. In addition, the GL220 can be controlled by a PC if connected by USB cable, allowing transfer of data to a PC in real-time. If you need to move large data files to your PC, then the GL220 can emulate an external USB drive for quick data transfer.



Hot-swappable. Save data directly to USB memory stick

Transferring data to the application software.

Transferring data to PC via the USB Drive mode.

External sampling function

Captured data can be synchronized with external timing signals when the external sampling rate function is used.⁷

Easy application software

Various measurement screens

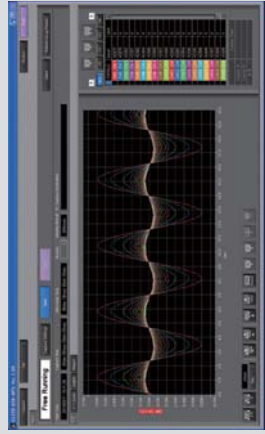
Select from 4 screens such as the Y-T (waveform + digital), Y-T (large waveform), digital view and report view to display measurements in real time. The direct-Excel function enables captured data to be written directly to an Excel file.



Digital display



Report display



Waveform (Y-T) display

Substantial data replay screens

Three screens such as the Y-T (waveform), digital and the X-Y graph for specified data are available to view measurements in replay mode. The maximum, minimum, average and peak-to-peak values between cursors are indicated in the digital display screen.



Waveform (Y-T) display



AMP parameter setting screen

Useful functions

Post-process your captured data with useful functions for arithmetic calculation, statistical calculation, search and file format conversion.



X-Y (specified data) display



Calculation result display

Up to 10 units can be controlled from one PC

Up to 10 units⁸ can be connected to 1 PC. Measurements can be performed simultaneously or independently.

⁸: Device data and create data files from individual GL220s in either simultaneous measurement mode or individual measurement mode.



USB cable

USB hub

LAN

Alarm warnings can be sent via E-mail.

Typical applications for the GL220 midi LOGGER

Recording data from an analyser

Capture signals from an ozone measuring device to record changes in ozone concentration over long periods.



Ozone measuring device

Output signal Voltage: 1-5 V Current: 4-20 mA

<For current output> Shunt resistor is required for converting the current to voltage (1-5V). Shunt resistor: 250 ohms 0.1%

Measuring temperature in an environmental chamber

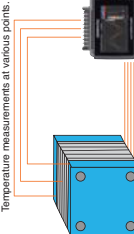
Recording temperature of electronic components in an environmental chamber during an evaluation test.



Thermocouple

Evaluation tests for batteries

Measuring cell voltage and temperatures of fuel cells.



Temperature measurements at various points.

Voltage measurement for each cell. (It is required to be particularly careful to the input voltage between channels.)

midi LOGGER series

Voltage | Temp. | Humidity | Pulse | Logic

Suitable for multi-channel measurement

- Standard 20ch analog input, expandable up to 200ch
- All isolated channels, each with multifunction input
- Large easy-to-read 5.7-inch VGA TFT color LCD
- Built-in 2GB Flash Memory
- Supports USB and LAN



midi LOGGER GL820

Suitable for measuring high-speed phenomena

- 4 or 8 isolated channels, each with multifunction input
- High-speed simultaneous sampling up to 10µs, 16-bits resolution
- Large easy-to-read 5.7-inch TFT color LCD
- Includes X-Y graph display function in real-time
- Captured data can be saved to PC-friendly USB memory stick



midi LOGGER GL900 series