Three types of input system enable to measure various phenomena

Input system 1 : Multifunction analog input ports

Contains a highly isolated input system which ensures that signals are not corrupted by noise from other channels. The GL840`s inputs are suitable for combined measurements from voltage, temperature, humidity, logic, and pulse signals.

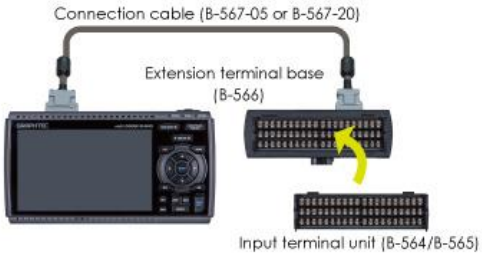
The standard configuration has 20 analog input channels. It is expandable to 200 channels by adding optional 20 channels extension terminal base unit(B-566) and input terminal units(B-564 or B-565).

Withstand voltage & Accuracy		Multi-input type (B-564)	Withstand-voltage type (B-565)
Voltage	Input voltage range	20 mV to 100V	20mV to 100V
	Max. voltage (Input - GND)	60 Vp-p	300 Vp-p
Temp.	Thermocouple	R, S, B, K, E, T, J, N, W (WRe5-26)	
	RTD (Resistance Temp. Detector)	Pt100 (IEC751), JPt100 (JIS), Pt1000 (IEC751)	
Accuracy	Voltage	± 0.1% of F.S.	±(0.05% of FS + 10μV)
	Temperature*	± 1.55 ºC	± 1.1 ºC

* Accuracy rating for K-type thermocouple at 100˚C includes reference junction compensation. Accuracy varies by the temperature levels and thermocouple types.

The following shows how a standard configuration is expanded to more than 40 channels

(1)The terminal units is removed from the main body of the GL840.



(2)Extension terminal base unit (B-566) conncets to the GL840 using the cable(B-567). Terminal unit snaps onto the extension terminal base(B-566).

(3)The combined extension terminal base set (B-566) and additional input terminals (B-564 or -565) are daisy chanined together.

Configuration for additional channels

Number of channels	20 channels	40 channels	100 channels	200 channels
GL840 unit (GL840-M or GL840-WV)	1 set	1 set	1 set	1 set
Connection cable(B-567-05 or -20)	N/A	1 pc	1 pc	1 pc
Terminal base (B-566)	N/A	2 sets	5 sets	10 sets
Input terminal (B-564 or B-565)	N/A	1 set	4 sets	9 sets

Offers longer cable for the input terminals

Input terminal blocks can be connected directly(in daisy chain), or using the B-565 cable(s). This allows the input terminals to be placed in separate locations according to the need of the application.

The input terminal unit and the GL840 main body can be extended by using an extended connections cable.

*If the signal is affected by noise, It may be required to use a slower sampling.

Input system 2 : Support dogotal sensors

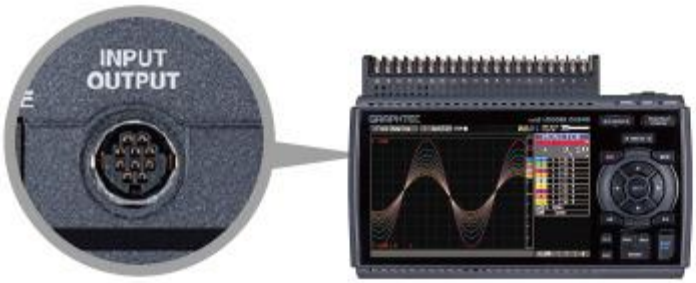
Digital sensors and input terminal/adapters for the GL100 connects to the GL840 directly

Dual ports adapter connects up to two sensors for simultaneous interface

■ The combination of sensor that can be connect

- Pattern1 Temp/Humidity(GS-TH) & Illuminace/UV(GS-LXUV) sensor
- Pattern2 Temp/Humidity(GS-TH) & Carbon Dioxide(GS-CO2) sensor
- Pattern3 Illuminace/UV(GS-LXUV) & Carbon Dioxide(GS-CO2) sensor

Input system 3 : 4 channels of Logic/Pulse inputs



Supports 4-channels logic or pulse signal inputs. Pulse mode allows cumulative, instant, or rotational values for industrial measurement capability with speed and flow.

Maximum sampling interval of up to 10ms

Provides faster sampling rates for voltage measurements. You are able to achieve up to 10ms sampling speed when limiting the number of channels in use.

Sampling Interval		10ms	20ms	50ms	100ms	200ms	500ms	1s	2s
Number of channel		1	2	5	10	20	50	100	200
Measuring	Voltage	●	●	●	●	●	●	●	●
	Temperature	-	-	-	●	●	●	●	●

Supports large-size SD memory card for reliable long term measurement

New GL840 series carries two SD memory card slots for storage device. The SDHC type SD memory card is supported up to 32GB. 4GB SD memory card comes as a standard accessory installed in the first slot.
the captured data can be stored in GBD(Graphtec binary data) or CSV file format.

Capturing time* (when all 20 analog channels are being used with Logic/`Pulse inputs turned off.)

Sampling	10ms	50ms	100ms	200ms	500ms	1s	10s
GBD format	31 days	77 days	95 days	108 days	270 days	Over 365	Over 365
CSV format	3 days	11 days	16 days	21 days	54 days	109 days	Over 365

*Figures are approximate. File size of captured data is 2GB in GBD or CSV file format on this chart.

Sampling interval is limited by the number of channels in use.(10ms:1ch, 50ms:5ch, 100ms:10ch)

Limited sampling speed is available when digital sensors and GL100-WL are used as a remote monitoring device.

Ring capture function

The most recent data is saved when the memory is configured in ring memory mode.(Number of capturing data is 1000 to 2000000 points)

Relay capture function

Data is continuously saved to multiple files up to 2GB without losing any data until capturing is stopped when the memory is configured in the relay mode.

Hot-swapping the SD memory card

SD card can be replaced during data capturing when the sampling interval is 100ms or slower.

Useful functions

Alarm output function


Based on set conditions for each channels, alarm signal can be placed using the four channel alarm output ports.*

*Input/Output cable(B-513 option) is required to connect the alarm output ports to external buzzer/light mechanism.

USB drive mode

USB drive mode function enables data to be transferred to the PC from GL840 by drag&drop feature.

Navigation function

Simple to use navigation screen allows setting operating for measurement and wireless LAN adapter.

Large easy-to-read 7-inch wide color LCD

Carries a clear 7-inch wide TFT color LCD screen (WVGA:800x480 dots) for the GL840. Monitoring data are displayed in waveform or digital form option.

Parameter settings can be displayed on the screen.

3 Types of power source

Choose from AC power supply, DC supply* or the rechargeable battery pack.*

*DC power drive cable(B-514) and battery pack(B-569) are optional accessories.

Networking features

WEB&FTP server function

GL840 can be controlled externally via a network on the WEB browser, which also supports monitoring and transfer of signals and captured data.

FTP client function

Captured data is periodically transferred to the FTP server for backup.

NTP client function

The clock on the GL840 is periodically synchronized with the NTP server.

*The GL840 needs tobe connected to a LAN environment using the available Ethenet/WLAN ports for above functions.