

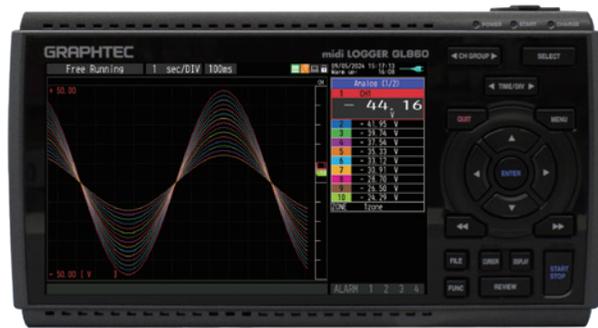
# GRAPTEC

Isolated Multi-CH  
data **LOGGER**

# GL860



## Flexible Options with 4 Terminals



**NEW!**  
**30CH**  
terminal



WITHSTAND HIGH-VOLTAGE  
HIGH-PRECISION TERMINAL  
B-565



30CH SCREW LESS  
INPUT TERMINAL  
B-563SL-30



20CH SCREW  
INPUT TERMINAL  
B-563



20CH SCREW LESS  
INPUT TERMINAL  
B-563SL

\*Terminals are not included. Please purchase separately.

## NEW SERVICE G-REMOTE

\*Additional charge for use  
\*The service is offered for limited areas only.

Remote Control Service - Remotely control GL860 connected to the Internet

Data Storage Service - Store GL series recorded data on a server

## 6 NEW FEATURES

Faster sampling interval - Twice as fast as the previous models!

Recording options

Maximum Sampling Interval of max. **5ms** (\*settings required)

By limiting the number of channels, data can be recorded in max. 5ms.

Sampling interval	5ms	10ms	20ms	50ms	100ms	250ms	0.5s	1s
Number of channels	1	2	4	10	20	50	100	200
Measuring Volt./Humid.	•	•	•	•	•	•	•	•
Temp.					•	•	•	•

Memory Loop Function - Additional Relay Capture Function for Longer Recordings

CH Copy Function - Easy setup by copying the amp settings for the target channel

Alarm History Function - Easily search the history of abnormal event dates and times

Enhanced Inter-CH Operation - Various calculating options than previous models

Support Modbus - Communication function with sequencer by Modbus TCP

## USER FRIENDLY FEATURES

Long time recording is available - Built-in 8GB Memory or SD Card

(data size: 2GB)

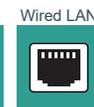
\*Sampling interval is limited by the number of channels in use.

Sampling interval	5ms	10ms	50ms	100ms	200ms	500ms	1s	10s
GBD format	15days	24days	47days	54days	108days	270days	366+ days	366+ days
CSV format	1day	3days	8days	11days	22days	55days	111days	366+ days

## Data Communication

## PC Software

\*Please visit our website for download



GL-Connection - an integrated application software for the GL series.

GL28-APS - The application software to connect GL series and PC.

\*B-568 (optional item) is required



SDK

## GL860 Main Unit Specifications

Item	Description
Number of analog inputs	Maximum 200ch available for 1 terminal(20ch/30ch) or extension unit
External input (*1)	Number of channels Trigger of Sampling (1 channel), or External Sample Inputs 1ch Logic / Pulse (4 channel)
	Pulse input Revolutions mode, Counts mode, Inst. mode Maximum input frequency: 50kHz Maximum number of count: 50kC/sampling
External output (*1)	Alarm output: 4ch
Sampling interval	5ms-1h (5ms-50ms: voltage only, limited number of CH), External signal
Scaling function	4 points can be set for each channel The temperature range scaling function is available.
A/D converter	$\Delta\Sigma$ method, 16Bit (Effective resolution: About 1/40000 of the +/- range)
PC I / F	Ethernet (10BASE-T / 100BASE-TX) USB2.0 (Hi-SPEED), Wireless LAN (Option)
Storage media (*2)	Storage Built-in memory: approx. 8GB, SD card slot: 1
	Data format GBD, CSV
Recording mode	Default, Ring, Relay
Other functions	Calculation function, Trigger, Alarm function, Data backup function (*3)
Display	7-inch TFT color LCD (WVGA: 800 x 480 dots)
Operating environment (including terminals)	0-45°C, 5-85%RH (0 to 40°C when operated in batteries/15 to 35°C when a battery is charging)
Power supply	AC adapter AC100-240V / 50-60Hz
	DC input DC8.5-24V(Option: B-514 is required)
	Battery pack DC7.2V(2875mAh)2 packs can be mounted (Optional item)
Power consumption	38VA or lower (when using the AC adapter, LCD ON, recharging battery, AC100V)
Dimensions [WxDxH] (approx.)	(*Refer to terminal specifications)
Weight (approx.)	(*Refer to terminal specifications)
Vibration resistance	Equivalent to Automobile parts Type 1 Class A

## Options

Item	Model	Description
GL wireless LAN unit	B-568	Standard: IEEE802.11b / g / n communication distance: approx. 40m(Depends on the situation)
Withstand high-voltage high-precision terminal	B-565	Analog input terminal
30CH SCREW LESS INPUT TERMINAL	B-563SL-30	Analog input terminal
20CH SCREW INPUT TERMINAL	B-563	Analog input terminal
20CH SCREW LESS INPUT TERMINAL	B-563SL	Analog input terminal
Base unit for input terminal	B-566	Used for attaching each input terminal
Input terminal cover	B-588	Mountable each analog terminal. Not mountable when B-551 Shunt resistor used
Connection cable for extension terminal (50cm)	B-567-05	Connection cable (50cm)
Connection cable for extension terminal (2m)	B-567-20	Connection cable (2m)
Battery Pack	B-573	1 pack: 7.2V(2875mAh) 2 packs can be mounted
Bracket for DIN rail for main body	B-570	made-to-order
Bracket for DIN rail (for B-566)	B-540	made-to-order
Input/Output cable for GL series	B-513	2 m long (no clip on end of cable)
DC drive cable	B-514	2 m long (no clip on end of cable)
Humidity sensor(*4)	B-530	3 m long (with power plug)
midi LOGGER storage case(*5)	B-581	Support RoHS directive
Ultra-fine K type thermocouple	ST-55K-TC-1.2M	tip wire $\phi$ 0.127, 0.5X0.7X200mm, relaying 1m, -40 ~260°C, class2, 5 units
Shunt resistor 250 $\Omega$ (*7)	B-551-10	$\pm$ 250 $\Omega$ (0.1%), Rated power of 1 W Maximum operating voltage 15.8V
AC adapter for GL860	ACADP-20	Adapter for maintenance

## Terminal specifications \*When using B-565 with other terminals, the lower withstand voltage will be applied.

	WITHSTAND HIGH-VOLTAGE HIGH-PRECISION TERMINAL(B-565)	30CH SCREW LESS INPUT TERMINAL (B-563SL-30)	20CH SCREW INPUT TERMINAL (B-563)	20CH SCREW LESS INPUT TERMINAL (B-563SL)
Number of CHs	20ch/per terminal	30ch/per terminal	20ch/per terminal	
Measuring Voltage	20mV-100V			
Temp.	Thermocouple K·J·E·T·R·S·B·N·C (old: W(WRe5-26))			
	RTD (*three-wire system only)	(*RTD cannot be connected)		
	Pt100·JPt100·Pt1000(IEC751)			
Humidity	0-100% (Optional humidity sensor B-530 is required)			
Max. input voltage	20mV - 2V Range: 60Vp-p (between input terminal and (+) / (-) terminal), 5V -100V range: 110Vp-p (between input terminal and (+) / (-) terminal)			
	600Vp-p (between input terminal and input terminal)	60Vp-p (between input terminal and input terminal)		
	300Vp-p (between input terminal and GND)	60Vp-p (between input terminal and GND)		
Volt. measurement accuracy	$\pm$ (0.05%off.F.S.+10 $\mu$ V)			
Dimensions (approx.)	240x166x52.5mm (exclude protrusion)	240x158x52.5mm (exclude protrusion)		
Weight (approx.)	1035g (without AC adapter & battery)	1010g (without AC adapter & battery)		

\*Weight and dimensions are the values including GL860.

## Remote Control Service (G-REMOTE)

(\*Additional charge for use)

Item	Description
Supported OS(*6)	Windows11/10
Supported WEB browser	Google Chrome (recommended), Microsoft Edge, Firefox (*Internet browser supporting HTML5)
Service content	<Remote control service> Easy remote control and confirmation of measurement data from G-REMOTE on a browser via an Internet connection <Data Storage Service> Storing data on Graphtec cloud servers via Internet connection *For more information about the service, please check the web site. *The service is offered for limited areas only.

## Software for PC

Item	Description
Supported OS(*6)	Windows11/10
GL28-APS	Allows for main unit settings and data recording, storage, and playback from a PC Supported models: GL860/GL260/GL840/GL240 Connectable units / channels: Max. 10 units / 1,000ch
GL-Connection	GL Series Integration Software Allows for main unit settings and data recording, storage, and playback from a PC Supported models: GL7000 Plus/GL2000/GL980/ GL860/GL840/GL260/GL240/GLT400 Connectable units: 20 / Max. 2000ch

## Calibration-related documents (Production Data)

Item	Code	Description
TEST CERTIFICATE	B-TEST	*The data of documents ordered at the time of product purchase are as of manufacture. Additional fee will be required to order documents with the latest data.
TRACEABILITY CHART	B-TRACE	
CALIBRATION CERTIFICATE	B-CAL	

- \*1 : Input/Output cable for GL (option B-513) is required.
- \*2 : Recorded in 2GB per file, SD cards available, Supported SDHC, up to approx. 32GB memory
- \*3 : If the ring setting and external sampling function is ON, the backup function is not available.
- \*4 : Available temperature range: -25°C~+80°C (Special order/ 10m, 15m, 20m available)
- \*5 : Not available in the US area.
- \*6 : OS that are no longer supported by the OS manufacturer are not supported by Graphtec.
- \*7 : 1 shunt resistor per channel is required. Cannot be used with screwless terminals.

- Due to the possibility of equipment or PC failure, the data files on the instrument will not be guaranteed to be held on the memory. Please make a back up of data whenever possible to avoid data loss.
- Brand names and product names listed in this brochure are the trademarks or registered trademarks of their respective owners.
- Items mentioned are subject to change without notice. For more information about product, please check the web site or contact your local representative.

**⚠ For using equipment in correctly and safely**

• Before using it, please read the user manual and then please use it properly in accordance with the description.  
• To avoid malfunction or an electric shock by current leakage or voltage, please ensure a ground connection and use according to the specification.



Web page

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