

GRAPHTEC INSTRUMENTS

Isolated Multi-Channel

GL860 data LOGGER



Evolved

SIMPLE • PORTABLE • VERSATILE

4 TERMINALS for MORE FLEXIBILITY

NEW FEATURES including CLOUD ACCESS

Alarm History Function

- Easy search of event dates and history

Enhanced CH to CH Calculation

- New calculation functions added

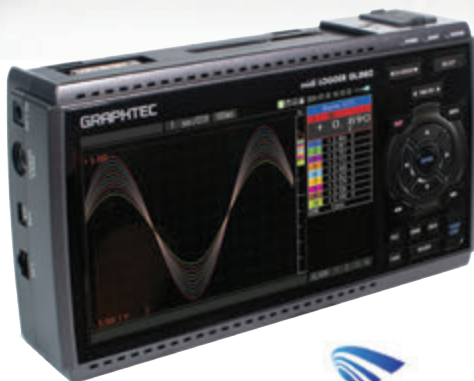
Memory Loop Function

- Enables recording for longer periods of time



G-REMOTE

- Cloud Server Service
- Remote Control Service
- Data Storage Service
- *Additional charge for use.
- *Offered in limited areas only.



G-REMOTE

GRAPHTEC
Graphtec America, Inc.

GL860 data LOGGER

4 TERMINALS for MORE FLEXIBLE OPTIONS

NEW 30CH TERMINAL

20CH High Accuracy,
High Isolation Terminal
B-565

30ch Screwless Input Terminal
B-563 SL-30 **NEW**

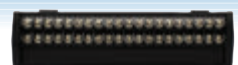
20ch Screwless Input Terminal
B-563 SL

20ch Screw Input Terminal
B-563



*Terminals are not included. Please purchase separately.

GL860 TERMINAL SPECIFICATIONS



Terminal:	20ch High Accuracy, High Isolation Terminal B-565	30ch Screwless Input Terminal B-563 SL-30	20ch Screwless Input Terminal B-563SL	20ch Screw Input Terminal B-563
Number of CHs	20ch/per terminal	30ch/per terminal	20ch/per terminal	
Measuring	Voltage	20mV-100V		
	Temperature	Thermocouple K•J•E•T•R•S•B•N•C (old: W(WRe5-26)) RTD (*three-wire system only) Pt100 •JPt100 •Pt1000(IEC751)	(*RTD cannot be connected)	
	Humidity	0-100% (Optional Humidity Sensor B-530 is required)		
Max. input voltage	20mV - 2 V Range: 60Vp-p (between input terminal and (+) / (-) terminal), 5V - 100 V 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	±(0.05% of F.S. + 10µV)		±0.1% of F.S.	
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 Values include GL860

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

GL860 data LOGGER

6 NEW FEATURES including G-REMOTE

Memory Loop Function

- Added relay capture function for longer recordings.

Enhanced Inter-CH Operation

- More various calculating options than previous models.

Alarm History Function

- Easily search the history of abnormal event dates and times.

CH Copy Function

- Easy setup by copying the amp settings for the target channel.

Faster Sampling Interval

- Twice as fast as the previous models!

Maximum Sampling Interval of 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	Voltage	•	•	•	•	•	•	
	Temp.				•	•	•	

USER FRIENDLY FEATURES

- 7" Color LCD Display
- 8GB internal memory, SDHC to 32GB
- 20mV to 100 Vdc & 1-5 Vdc full scale ranges
- Thermocouples: K, J, E, T, R, S, B, N, C, RTD
- 4 Pulse or Logic inputs, 4 Alarm Outputs
- 10ms to 1H sample intervals & ext. sample
- Independent start / stop triggers & ext. trigger
- Record to GBD or CSV file format
- USB 2.0, Ethernet & optional Wi-Fi capability
- GL28-APS / GL-Connection SW GUI / G-Remote capable
- Independent input type, alarm, trigger and EU scaling per channel

Long Time Recording 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	15 days	24 days	47 days	54 days	108 days	270 days	366+days	366 days
CSV format	1 day	3 days	8 days	11 days	22 days	55 days	111 days	366+days

Wireless LAN
B-568 required
(optional item)



WIRED LAN



USB 2



PC SOFTWARE

GL-Connection

- Integrated application software for the GL series.

GL28-APS

- Application software to connect GL series and PC.

NEW G-REMOTE CLOUD SERVICE

Remote Control Service

- Remotely control GL860 connected to the Internet.

Data Storage Service

- Store GL series recorded data on a server.



GL860 data LOGGER

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
	Pulse input
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	$\Delta\Sigma$ type, 16Bit (effective resolution: 1/40,000 of \pm range)
PC I / F	Ethernet (10BASE-T / 100BASE-TX) USB2.0 (Hi-SPEED) ,Wireless LAN (Option)
Storage media (*2)	Storage
	Data format
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
	DC input
	Battery pack
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: IEEE802.11 b / g / n Approx. Communication Distance: 40m
20CH High Accuracy, High Isolation Terminal	B-565	Analog input terminal
30CH Screwless Input Terminal	B-563SL-30	Analog input terminal
20CH Screw Input Terminal	B-563	Analog input terminal
20CH Screwless Input Terminal	B-563SL	Analog input terminal
Base unit for input terminal	B-566	Used for channel expansion
Shunt resistor 250 Ω	B-551-1	\pm 250 Ω (0.1%), Rated power of 1 W,
Connection cable for extension terminal (50cm)	B-567-05	Expansion cable (50cm)
Connection cable for extension terminal (2m)	B-567-20	Expansion cable (2m)
Battery Pack	B-573	1 pack: 7.2V (2875mAh) 2 packs can be mounted
Input/Output cable for GL series	B-513	Input-Output cable for pulse-logic-alarm, 2m
DC drive cable	B-514	External DC cable, 8.5-24vdc, 2m
Humidity sensor (*4)	B-530	3 m long (with power plug)
Type K TC adapter	TC-K-5	Type K mini-connector-spade lugs, 12", 5 pk
Type T TC adapter	TC-T-5	Type T mini-connector-spade lugs, 12", 5 pk

SOFTWARE SPECIFICATIONS 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
GL-Connection	Connectable Units / Channels: Max. 10 units / 1,000ch GL Series Integration Software Allows for main unit settings and data recording, storage, and playback from a PC
Supported models:	GL7000 / GL2000 / GL980 / GL860 / GL840 / GL260 / GL240 / GLT400
Connectable units:	20 / Max. 2000ch

- *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 : Operating temperature range: -25°C to +80°C
- *5 : OS that are no longer supported by the OS manufacturer are not supported by Graphtec

CALIBRATION (Production Data)

Item	Code
NIST-CAL	NIST calibration with cert.
NIST-CAL-DATA	NIST calibration with cert & data
ISO-17025-860	ISO-17025 calibration for GL860

*Documents ordered at the time of product purchase are data at the time of manufacture.

*Please visit calibration services section of our website for details.

CLOUD SERVICE (G-REMOTE) (*Additional charge for use)

Item	Description
Supported OS (*5)	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 save service> Storing data on Graphtec cloud servers via Internet connection * For more information about product, please check the web site

- 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 specifications.