

GRAPHTEC

DATALOGGER & DATA PLATFORM PRODUCT GUIDE

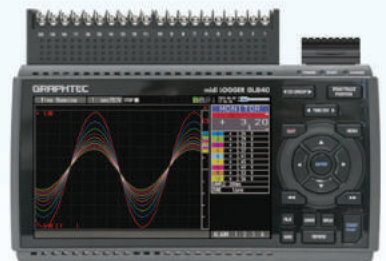
Portable and Versatile Dataloggers for General Purpose Data Acquisition



Compact Datalogger GL100



midi Logger GL240



midi Logger GL840



Hi-Speed/Hi-Voltage Datalogger GL980



Hi-Speed/Hi-Voltage Datalogger GL2000



Data Acquisition Data Platform GL7000

Dataloggers

midILogger GL240



GL100
1 unit
as remote sensor

10 channel portable datalogger

Max. 10ms sampling	Σ type A/D converter	Temp., Humidity, Voltage, Pulse/Logic	10 channels	USB SDCard
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Features & Benefits

- 4.3" TFT color LCD (WVGA)
- Built-in web/FTP interface
- Windows APS software included
- 10 isolated channels
- Linear scaling capabilities for each channel
- Maximum sampling rate up to 10 ms (100ms for 10 channels)
- Extended memory capacity using SD card (32GB SDHC max)
- WLAN (option) capable for remote monitoring
- Combine GL100 and GL240 using WLAN
- 4-20mA inputs using B-551 shunt resistor (250 channels)

■ Multifunction analog inputs

Voltage	20 mV to 100 V
Temp.	TC: R, S, B, K, E, T, J, N, W (WRε5-26) RTD: Pt100, Pt1000 (IEC750), JPt100 (JIS)
Humidity	0 to 100% (the B-530 option is required)

■ Pulse/Logic inputs

Pulse	4ch (Accumulating, Instant, or Rotation)
Logic	4ch

midILogger GL840 series



GS sensor

GL100
up to 5 units
as remote sensor

LAN USB SDCard

GL840-WV
Higher withstand voltage and accuracy model

GL840-M
Multi-input model

Isolated, multi-channel datalogger

Max. 10ms sampling	Σ type A/D converter	Temp., Humidity, Voltage, Pulse/Logic	Up to 200 channels
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Features & Benefits

- Expandable up to 200 channels
- 7.0" TFT color LCD (WVGA)
- Built-in web/FTP interface
- Isolated inputs with linear scaling capability for each channel
- WLAN (option) capable for remote monitoring
- Maximum sampling rate up to 10 ms (200ms for 20 channels)
- Extended memory capacity using SD card (32GB SDHC max)
- Monitor up to 5 GL100s on GL840 using WLAN
- Additional input channels with GS sensors
- PC control software included (APS)
- 4-20mA inputs using 250 ohm shunt resistor (use option B-551)

■ Multifunction analog inputs

Voltage	20 mV to 100 V
Temp.	TC: R, S, B, K, E, T, J, N, W (WRε5-26)
Humidity	0 to 100% (the B-530 option is required)

■ Pulse/Logic inputs (use option B-515)

Pulse	4ch (Accumulating, Instant, or Rotation)
Logic	4ch

CompactLOGGER GL100

- Supports a wide array of measurements with swappable sensors/modules
- Connect to a PC or smart device via wireless LAN
- Powered by Alkaline AA batteries

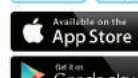


GL100-WL (with wireless LAN) *1: WLAN is available in limited regions



GL100-N (non-wireless unit)

Wireless LAN GL100-WL	USB Interface
microSD memory card	Sensor, input terminal, adapter 7types



GS Sensors

Also includes extension cable (GS-EXC) and dual port adaptor (GS-DPA) capability. Compatible with GL100 and GL840 series

Sensors			
<p>Temp./Humidity GS-TH Temp.: -20 to 65°C Humidity: 0 to 100% RH Dew-point temp., Accumulated temp.</p>	<p>Acceleration/Temp. GS-3AT Try-axis: max. 10 G Temp.: -10 to 50°C</p>	<p>Carbon dioxide (CO₂) GS-CO₂ CO₂ concentration: 0 to 9999 ppm</p>	<p>Illuminance/UV GS-LXUV Illuminance: 0 to 200 klx UV intensity: 0 to 30 mW/cm² Accumulated Illuminance and UV</p>
Dual port adaptor		Input terminal / Adapter	
<p>Dual port adaptor GS-DPA Connects two sensors of GS-TH, GS-CO₂, GS-LXUV.</p>	<p>Thermistor terminal GS-4TSR 4ch Temp.: -40 to 120°C * It varies by the sensor. 4ch Logic or Pulse.</p>	<p>Current sensor adaptor GS-DPA-AC 50, 100, 200 A Max. 5ch Single-phase, three-phase power system</p>	<p>Voltage/Temp. terminal GS-4VT 4ch Voltage: max. 50 V 4ch Temp.: TC, K or T 4ch Logic or Pulse.</p>
<p>Extension cable for input module GS-EXC Cable length: 1.5 m</p>	<p>Thermistor sensor Normal type GS-103AT-4P Ultrathin type GS-103JT-4P</p>	<p>AC current sensor 50 A 100 A 200 A</p>	

Feature & Benefits

- Wireless Datalogging
- Up to 10 GL100 can be viewed on the software APS via USB or WLAN
- Swappable sensors and modules
- Real time APS software included
- Apps available on iOS and AndroidOS platforms

High Voltage/High Speed Datalogger

midi LOGGER HV GL2000



Protective Rubber Holder (standard accessory)



All Channel Isolated	4 ch	CAT III 600V	Multi function	Simultaneous sampling	1 MS/s (1µs)	Built-in RAM 4MW/ch	Built-in Flash Memory 4GB	SD Card
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Voltage	20 mV to 1000 V DC, 1-5 V DC 10 mV to 1000 V rms Max. safety input 600VDC	Pulse	4 channels (*1) Accumulating, instant or RPM
Temp	Thermocouples: K, J, E, T, R, S, B, N, W (WRe5-26)	Logic	4 channels (*1)
Humidity	0 to 100% (the B-530 option is required)		

*1 Select either pulse input or logic input, and use the optional input/output cable for GL (B-513 option).

Features & Benefits

- 4ch High speed 1MS/s Max. simultaneous sampling
- CAT III 600 V compatible
- Measure up to 600VDC and AC True RMS Measurement
- 7.0" TFT color LCD (WVGA)
- Isolated BNC inputs and M3 screws for T/C
- Linear scaling for physical measurement sensors
- 4ch digital inputs for flow, RPM, and digital totalization measurement for pulse-based meters

Applications

- Discontinuity testing
- CAT III-rated voltage monitoring
- Dynamic signal testing
- Inrush current monitoring
- Motor performance measurement
- Electrical panel measurement

midi LOGGER GL980



Protective Rubber Holder (standard accessory)



All Channel Isolated	8 ch	USB Memory	Multi function	Simultaneous sampling	1 MS/s (1µs)	Built-in RAM 4MW/ch	Built-in Flash Memory 4GB	SD Card
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Voltage	20 mV to 500 V DC, 1-5 V DC 10 mV to 250 V rms	Pulse	4 channels (*1) Accumulating, instant or RPM
Temp	Thermocouples: K, J, E, T, R, S, B, N, W (WRe5-26)	Logic	4 channels (*1)
Humidity	0 to 100% (the B-530 option is required)		

*1 Select either pulse input or logic input, and use the optional input/output cable for GL (B-513 option).

Features & Benefits

- 8ch High speed simultaneous sampling
- Includes 500 V measurement with 16-bit A/D converter
- Equipped with true-RMS measurement
- Large built-in RAM (4 MS/ch) and built-in Flash memory (4 GB)
- Large easy-to-read 7-inch LCD
- Isolated BNC inputs and M3 screws for T/C
- 4ch digital inputs for flow, RPM, and digital totalization measurement for pulse-based meters

Applications

- Discontinuity testing
- Voltage fluctuations
- Dynamic signal recording
- Chart recorder replacement
- Torque and RPM monitoring
- Inrush current monitoring
- Additional temp/humidity monitoring

Options and Accessories

Model	Item	GL240	GL840 series	GL900 series	GL7000 series
B-513	Input/Output cable for GL series	Yes	Yes	Yes	Yes
B-514	DC drive cable	Yes	Yes	Yes	N/A
B-530	Humidity sensor	Yes	Yes	Yes	Yes
B-564	Input terminal (M type)	N/A	Yes	N/A	N/A
B-565	Input terminal (WV type)	N/A	Yes	N/A	N/A
B-566	Base of input terminal	N/A	Yes	N/A	N/A
B-567-05,-20	Connection cable	N/A	Yes	N/A	N/A
B-568	Wireless LAN unit	Yes	Yes	N/A	N/A
B-569	Battery pack	Yes	Yes	Yes	N/A
ACADP-20	AC power adapter	Yes	Yes	N/A	N/A
ACADP-90	AC power adapter	N/A	N/A	Yes	N/A
RIC-10	Probe set for Logic input	N/A	N/A	N/A	Yes
RIC-142	Input cable, BNC - BNC	N/A	N/A	Yes	Yes
RIC-143	Input cable, Banana - BNC	N/A	N/A	Yes	Yes
RIC-144	Clip, Alligator (small size) for RIC-143,147	N/A	N/A	Yes	Yes
RIC-145	Clip, Alligator (middle size) for RIC-143,147	N/A	N/A	Yes	Yes
RIC-146	Clip, Grabber for RIC-143,147	N/A	N/A	Yes	Yes
RIC-147	Input cable, Banana - BNC (High voltage)	N/A	N/A	Yes	Yes

ACADP-90
AC power adapter



RIC-10
Probe set for Logic input



RIC-142
Input cable



RIC-143, -144, -145, -146, -147
Input cable, Clip



B-513
Input / Output cable



B-514
DC drive cable



B-530
Humidity sensor



B-564
Input terminal (M type)



B-565
Input terminal (WV type)



B-566
Base of input terminal



B-567-05 or -20
Connection cable



B-568
Wireless LAN unit



B-569
Battery pack



ACADP-20
AC power adapter



Data Acquisition | Datalogger | Recorder

Modular Type Data Acquisition Unit

DATA PLATFORM **GL7000**

GL-Connection PC software included. Command API also available and compatible with other GL dataloggers



Hi-speed 1MS/s	Multi-channels max.112ch
High voltage 1000 V	Large Memory Capacity 128GB SSD

Optional touch panel display (GL7-DISP)



* Up to 10 modules can be connected to one main unit. Unit above shows five modules and touch panel display.

Voltage Module



Voltage
10ch/unit

Max.
1kS/s
(1ms)

Simultaneous sampling
Isolated

GL7-V

Voltage/Temperature Module



Voltage,
Temp.
10ch/unit

Max.
100S/s
(10ms)

Σ
Type
A/D converter
Isolated

GL7-M

High speed Voltage Module



High speed
4ch/unit

Max.
1MS/s
(1μs)

Simultaneous sampling
Isolated

GL7-HSV

High Voltage Module



Voltage
2ch/unit

Max. input voltage
1000V

Max.
1MS/s
(1μs)
Isolated

GL7-HV

DC Strain Module



Strain,
Voltage
4ch/unit

Strain gauge,
Sensor

Max.
100kS/s
(10μs)
Isolated

GL7-DCB

Charge Module



Acceleration
Voltage
4ch/unit

Charge,
IEPE
Sensor (TEDS)

Max.
100kS/s
(10μs)
Isolated

GL7-CHA

Voltage Output Module



Output voltage
8ch/unit

Max.
100kS/s
(10μs)

Captured data,
Arbitrary waveform

GL7-DCO

Logic/Pulse Module



Logic/
Pulse
16ch/unit

Max.
1MS/s
(1μs)

Simultaneous sampling

GL7-L/P

SSD Module



128
GB
Storage

GL7-SSD

Touch Panel Display Module



GL7-DISP

* Optional SMA cable available (B-682)

Features & Benefits

- Standalone System with GL7-DISP optional display (5.7" TFT color LCD)
- Add-on modules for optional expansion
- Analog Low Pass Filter (Anti-Aliasing) for noise cancellation
- Linear scaling mechanisms for various sensor signals for each isolated input channels
- Includes Strain Gauge and Accelerometer modules (GL7-DCB and GL7-CHA)
- Enhanced memory capability for extended recording on four different memory medium (internal RAM, internal Flash, SDHC, and SSD modules)
- Compatible software usage with our other portable GL Datalogger instruments
- GL-Connection Software included with the purchase of the platform
- FFT Analysis, X-Y analysis, digital display, and waveform views
- Max. 10 modules per main GL7000 unit and sync capability among 5 main GL7000s (max 560 channels)

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⚠ Use equipment correctly and safely! Use only in accordance with product's user manual. To avoid malfunction or an electric shock by current leakage or voltage, please ensure a ground connection and use according to the specification.

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