

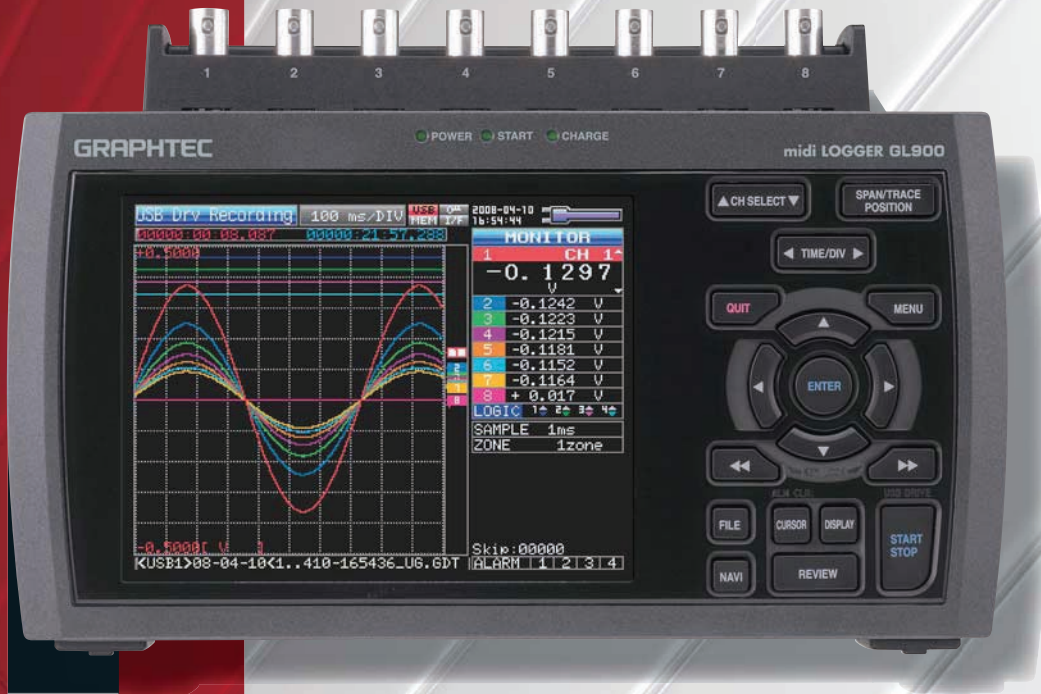
# GRAPHTEC

High-speed isolated 8-channel multifunction logger

## midi **LOGGER**

# GL900

8 isolated channels & high speed simultaneous sampling



Pulse



Humidity



Voltage



Strain



Temp°  
T/C



Frequency



**Multifunction input on eight isolated channels**

**High-speed simultaneous sampling on eight channels, 16-bit resolution**

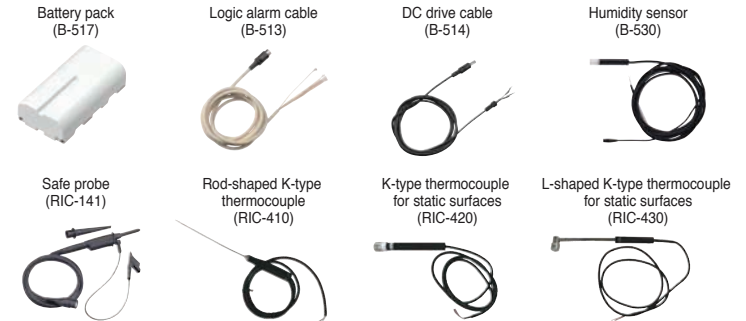
**Equipped with a large-format 5.7-inch color LCD for comprehensive waveform display**

**Data can be saved to USB memory sticks**

GL900 main unit specifications		
Item	Description	
No. of analog input ch.	8 ch	
External input/output	Trigger input (1 channel), Logic input (4 channels) or Pulse input (4 channels), Alarm output (4 channels)	
Sampling interval	10µs to 1 min	
TIME/DIV	10 ms/DIV to 24 hour/DIV	
Timer functions	Date and time, daily cycle, hourly cycle	
Trigger functions	Type	Start: Data capture starts when a trigger is activated; Stop: Data capture stops when a trigger is activated
	Condition	Start: Off, Input signal level (analog, logic/pulse), External*1 Stop: Off, Input signal level (analog, logic/pulse), External*1, Scheduled time
	Combination	Input signal level: Level OR, Level AND, Edge OR, Edge AND
	Mode	H (Rising), L (Falling), Window In*2, Window Out*2
Alarm setting functions	Rising, Falling, Window In*2, Window Out*2	
Alarm output*1	Number of channels: 4, Open collector output (V5, 10 k Ω pull-up resistance)	
Pulse input*1, *3	RPM mode	5 to 20 M RPM/F.S. (in steps of 1, 2, or 5)
	Count mode	5 to 20 M C/F.S. (in steps of 1, 2, or 5)
	Inst. Mode	5 to 20 M C/F.S. (in steps of 1, 2, or 5)
Calculation functions	Statistical calculations*4: Average, Peak, Maximum, Minimum, RMS (2 calculations can be set simultaneously)	
Other functions	Search function, annotation input function	
PC interface	Ethernet (10BASE-T/100BASE-TX), USB (High Speed supported) provided as standard	
Ethernet functions	Web server function, FTPserver function, NTPclient function	
USB function	USB drive mode (File transfer and deletion from internal GL900 memory)	
Memory device	Internal	One million data points / Internal flash memory: Approx. 256 MB
	External	USB memory slot (High speed supported)*5
Display screens	Waveforms + digital values, enlarged waveforms, digital values + calculation results, X-Y	
Display unit	5.7-inch TFT color LCD	
Operating environment	0 to 40°C, 5 to 85% R.H. (15 to 35°C when using batteries)	
Withstand voltage	Between each input channel and GND: 1000 V p-p for one minute, between input terminals: 1000 Vp-p for one minute	
Power supply	AC adapter	100 to 240VAC, 50 to 60 Hz
	DC input	8.5 to 24 VDC
	Battery pack*6	Option
Power consumption	28 VA	
External dimensions	232 x 150 x 80 mm (W x H x D), approx.	
Weight (approx.)	1.1 kg (excluding AC adapter and battery)	
Vibration-tested conditions	Equivalent to automobile parts Type 1 Category A classification	

Control software specifications		
Item	Description	
Supported OS	Windows 7 Edition: All Editions Windows Vista (32-bit and 64-bit versions)	
Functions	GL900 control, real-time data capture, data conversion	
Setting range	Amp settings, data capture settings, trigger settings, alarm settings, other	
Captured data	Real-time data	Binary: Sampling speed: 10µs to 60 s CSV: Sampling speed: 10ms to 60 s
	Data conversion	Binary, CSV
Display information	Analog waveforms, logic waveforms, pulse waveforms, digital values	
File conversion	Data between cursors, All data, Thin out function	
2-screen function (Zoom)	Display of current and past data	
Display of statistics and history	Display of maximum, minimum, and average values	

Options and accessories		
Product name	Model name	Specification
Battery pack*6	B-517	One pack
Logic alarm cable	B-513	2 m
DC drive cable	B-514	2 m
Humidity sensor*9	B-530	3 m
Safe probe	RIC-141	1:1, 42 pF
BNC-BNC cable	RIC-112	1.5 m
BNC banana plug cable	RIC-113	1.5 m
BNC alligator clip cable	RIC-114	1.5 m
Rod-shaped K-type thermocouple	RIC-410	1.1 m
K-type thermocouple for static surfaces	RIC-420	1.1 m
L-shaped K-type thermocouple for static surfaces	RIC-430	1.1 m



### Terminal block specifications

Item	Description			
Number of input channels	Fixed to 8 channels			
Input terminal type	Voltage	BNC connector		
	Temperature	M3 screw type terminal board*7		
Input method	All channels isolated Imbalanced input Simultaneous sampling of all channels			
Measurement ranges	Voltage	20, 50, 100, 200, 500 mV; 1, 2, 5, 10, 20, 50, 100, 200, 500 F.V.S., 1-5 V.F.S.		
	Temperature	Thermocouples: K, J, E, T, R, S, B, N, W (WRε5-26)		
	Humidity	0 to 100% (voltage 0 V to 1 V scaling conversion)* with B-530 (option)		
Input filter	Off, Line, 5 Hz, 50 Hz, 500 Hz			
Measurement accuracy*8 (23°C±5°C) When 30 minutes or more have elapsed after power was switched on Filter: Line GND: connected	Thermocouple	Type	Measurement temperature range	Measurement accuracy
		R/S	0 ≤ TS ≤ 100 100 < TS ≤ 300 R:300 < TS ≤ 1600 S:300 < TS ≤ 1760	±7.0°C ±5.0°C ±(0.05% of rdg +3.0°C) ±(0.05% of rdg +3.0°C)
	B	400 ≤ TS ≤ 600°C 600 < TS ≤ 1820°C	±5.5°C ±(0.05% of rdg +3.0°C)	
	K	-200 ≤ TS ≤ -100°C -100 < TS ≤ 1370°C	±(0.05% of rdg +3.0°C) ±(0.05% of rdg +2.0°C)	
	E	-200 ≤ TS ≤ -100°C -100 < TS ≤ 800°C	±(0.05% of rdg +3.0°C) ±(0.05% of rdg +2.0°C)	
	T	-200 ≤ TS ≤ -100°C -100 < TS ≤ 400°C	±(0.1% of rdg +2.5°C) ±(0.1% of rdg +1.5°C)	
	J	-200 ≤ TS ≤ -100°C -100 < TS ≤ 100°C 100 < TS ≤ 1100°C	±3.7°C ±2.7°C ±(0.05% of rdg +2.0°C)	
	N	0 ≤ TS ≤ 1300°C	±(0.1% of rdg +2.0°C)	
	W	0 ≤ TS ≤ 2000°C	±(0.1% of rdg +2.5°C)	
	Reference contact compensation accuracy: ±1.0°C ‡ Thermocouple diameters T: 0.32mm, others: 0.65mm			
A/D converter	16 bits (out of which 14 bits are internally acknowledged)			
Maximum permissible input voltage	Between input channel + and - terminals	20 mv to 1 V : 30 Vp-p : 2 V to 500 V : 500 Vp-p		
	Between input channel terminals	60 Vp-p		
	Between input channel terminal and GND terminal	60 Vp-p		
Withstand voltage	Between input channel terminal and GND terminal	1 minute at 1000 Vp-p		
	Between input channel terminals	1 minute at 1000 Vp-p		

\*1 Logic alarm cable (B-513) is required.

\*2 Cannot be set for logic input

\*3 Maximum input frequency: 50 kHz, maximum number of counts: 15 M C

\*4 In real time or when Between Cursors has been specified (during Replay)

\*5 1 file = 2 Gbytes (depends on the USB memory stick used)

\*6 Please install two battery packs.

\*7 Connections are made to both the BNC terminal and M3 screw terminal for the same channel.

\*8 Thermocouple diameters T:0.32mm, others:0.65mm

\*9 Operating temperature range: -25 to +80°C

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RoHS Compliant model

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