GRAPHTEC

High-speed isolated 8-channel multifunction logger
midi LOGGER   GL900

8 isolated channels & high speed simultaneous sampling

NEW

Voltage

Temperature

Humidity

Pulse

Logic
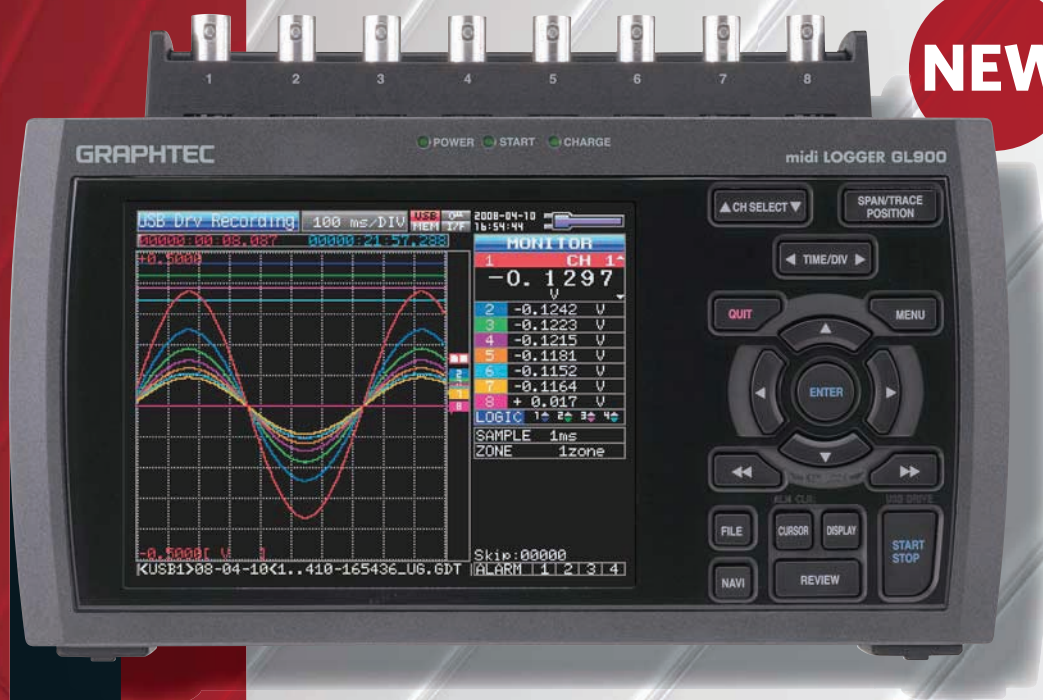
Multifunction input on eight isolated channels

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

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

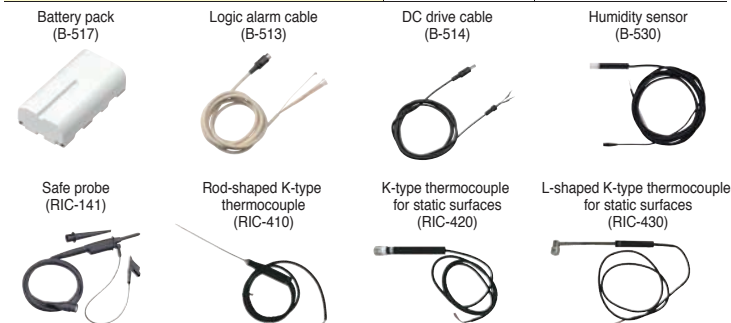**Data can be saved to USB memory sticks**

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: Of f, Input signal level (analog, logic/pulse), External*1
		Stop: O ff, 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 inteface		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℃ , 5 to 85% R.H. (15 to 35° Cwhen 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

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 FV.S., 1-5 VF.S.	
	Temperature		Thermocouples : K, J, E,T, R, S, B, N, W (WRe5-26)	
	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	Voltage		±0.25% of F.S.	
	Thermocouple	Type	Measurement temperature range	Measurement accuracy
		R/S	0 ≤ TS ≤100	±7.0°C
			100 < TS ≤300	±5.0°C
			R:300 < TS ≤1600	±(0.05% of rdg +3.0°C)
			S:300 < TS ≤1760	±(0.05% of rdg +3.0°C)
		B	400 ≤ TS ≤ 600℃	±5.5°C
			600 < TS ≤1820℃	±(0.05% of rdg +3.0°C)
		K	-200 ≤ TS ≤ -100℃	±(0.05% of rdg +3.0°C)
			-100 < TS ≤ 1370℃	±(0.05% of rdg +2.0°C)
		E	-200 ≤ TS ≤ -100℃	±(0.05% of rdg +3.0°C)
			-100 < TS ≤ 800℃	±(0.05% of rdg +2.0°C)
		T	-200 ≤ TS ≤ -100℃	±(0.1% of rdg +2.5°C)
			-100 < TS ≤ 400℃	±(0.1% of rdg +1.5°C)
		J	-200 ≤ TS ≤100℃	±3.7°C
			-100 < TS ≤ 100℃	±2.7°C
			100 < TS ≤1100℃	±(0.05% of rdg +2.0°C)
		N	0 ≤ TS ≤ 1300℃	±(0.1% of rdg +2.0°C)
		W	0 ≤ TS ≤2000℃	±(0.1% of rdg +2.5°C)
			Reference contact compensation accuracy : ±1.0°C ‡ Thermocouple diametersT: 0.32mm, others: 0.65 mm	
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℃

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, dataconversion
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

Battery pack (B-517)

Logic alarm cable (B-513)

DC drive cable (B-514)

Humidity sensor (B-530)

Safe probe (RIC-141)

Rod-shaped K-type thermocouple (RIC-410)

K-type thermocouple for static surfaces (RIC-420)

L-shaped K-type thermocouple for static surfaces (RIC-430)

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eco RoHS Compliant model

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