Data Loggers with Integral Hard Disks for Acquisition of Vast Data Volumes

HARD DISK LOGGER GL1000/1100

HARD DISK LOGGER GL1000

The Hard Disk Logger with incorporated a Standard 40 GB Hard Disk

Graphtec's original technology permits ultra high-speed sampling (1µ simultaneously on 8 ch) and direct data acquisition to a hard disk for extended measurement sessions.

High-Speed and Simultaneous Sampling Inputs

Stable measurement thanks to multi-channel, high-speed, and simultaneous sampling. Realizes data acquisition without time delaysbetween channels.

Easy PC Connection through LAN and USB

Standard configuration provides a USB interface for easy PC linking, LAN interface for remote acquisition, and a PCMCIA card slot (Type II).

Easy-to-Use Bundled PC Application Software

Bundled PC application software allows viewing of waveforms in real-time through USB and LAN interfaces.

Insulated Multifunction Inputs for All Channels

Allows combined use of voltage, voltage/temperature, strain and frequency amplifiers based on the measurement target. Insulated inputs ensure worry-free measurements.

HARD DISK LOGGER GL1100

*Including optional monitor

HARD DISK LOGGER GL1000/1100 SPECIFICATIONS

Standard function		Plug-in amplifiers		Options
40GB HDD, Logic input PC software, AC adapter	+	High speed voltage amp, Voltage amp Voltage/Temperature amp, DC strain amp, F/V amp	+	Monitor, Printer Cable to connect main units, 12VDC drive, Monitor cable

High-speed voltage amp is for GL1100 only,
F/V amp is for GL1000 only

Main unit specifications

Item		GL1100-8	GL1000-8	GL1100-16	GL1000-16
Analog input		8 channels (4 slots)	8 channels (4 slots)	16 channels (8 slots)	16 channels (8 slots)
Logic input		8 channels	8 channels	16 channels	16 channels
Internal strage device	Memory	2 Mword/channel	512 kword/channel	2 Mword/channel	512 kword/channel
	HDD	40 Gbyte			
Synchronize function		-	Max. 8 units or 64 ch	-	Max. 8 units or 64 ch
PC interface		PCMCIA slot (Type II), LAN (Ethernet), USB			
Operating environment		0 to 40˚C, 30 to 80% R.H.(5 to 35˚C when using the printer and HDD)			
Rated power supply		AC adapter (100V to 240V AC)		AC adapter (100V to 240V AC)x 2	
		12V (10V to 16V) DC drive : Option			
Power consumption		Approx. 90 VA max.		Approx. 135 VA max.	
External dimensions		300mm(W) x 222mm(D) x 57mm(H) (*1)		300mm(W) x 222mm(D) x 114mm(H) (*1)	
Weight		2.4 kg (*2) (including 4 amplifiers)		4.2 kg (including 8 amplifiers)	

*1:Excluding rubber foot *2:Option, excluding AC adapter

High-speed Voltage amp : GL11-HSVAMP

Item	Specification
No. of channels	2 ch / unit
Range	200mV to 200V/F.S.
Max. sampling rate	25 ns (A/D : 12 bit)
Input terminal	BNC connector

Voltage amp : GL10-VAMP

Item	Specification
No. of channels	2 ch / unit
Range	50mV to 200V/F.S.
Max. sampling rate	1µs (A/D : 12 bit)
Input terminal	BNC connector

Voltage/Temperature amp : GL10-MAMP/GL11-MAMP

Item		Specification
No. of channels		2 ch / unit
Range	Voltage	20mV to 500V/F.S.
	Temperature	K, J, T, R, E, B
Max. sampling rate		10µs (A/D : 16 bit)
Input terminal		Banana connector

DC strain amp : GL10-DCBAMP/GL11-DCBAMP

Item	Specification
No. of channels	2 ch / unit
Range	1000 to 20000 x 10 strain/F.S.
Frequency range	DC to 20 kHz
Max. sampling rate	10µs (A/D : 16 bit)
Input terminal	NDIS strain input

F/V amp : GL10-FVAMP

Item	Specification
No. of channels	2 ch / unit
Range	200 Hz to 40 kHz
Max. sampling rate	4µs (A/D : 12 bit)
Input terminal	BNC connector

Logic input : Standard function

Item	Specification
No. of channels	8 ch / unit
Input volt range	0V to 25V (single ground input)
Threshold level	TTL (+1.4 V), CMOS (+2.5 V), Contact (+5.0 V)
Max. sampling rate	GL1000: 1µs, GL1100: 25 ns

Monitor specification and display function

Item		Specification
Display size		8.4" TFT LCD
Display details		Setting windows, measurement values
Mode		Recorder mode, FFT mode
Recorder mode		
	Format	Scroll, Fixed, Oscillo, XY
	Contents	Waveform : 16 channels max.
		Digital value : 8 channels max. CH1 to 8, CH9 to 16 group selection
	Scroll speed	1, 2, 2.5, 5, 10, 20, 25 mm/s
		1, 2, 2.5, 5, 10, 25, 50, 100 mm/min
		1, 2, 2.5, 5, 10, 25, 50, 100 mm/h
	Function after measurement	Waveform zoom, Curosr, Calculation
		Data search function
FFT mode		
	Analysis functions	Auto-correlation: Linear spectrum, Power spectrum, Power spectrumdensity, RMS spectrum
		Cross-correlation: Cross spectrum, Transfer function, Coherence function
	Analysis frequencies	GL1000 : 0.5 Hz to 400 kHz
		GL1100 : 0.08 Hz to 16 MHz
Analysis CH.		4 channels
Window		Hanning window, rectangular window
Sampling		1000 points, 2000 points
Averaging		Summation, exponential, peak hold
Divisions		1 Div, 2 Div, 4 Div, Nyquist

Control software : Standard function

Item	Specification
OS	Windows2000, XP
Function	Meas. condition, Data measurement,
	X-Y between cursor, FFT,
	File convert (CSV)

Main unit / Amp

Unit	Model name
Main Unit 8 ch	GL1000-8
Main Unit 16 ch	GL1000-16
Main Unit 8 ch High-speed	GL1100-8
Main Unit 16 ch High-speed	GL1100-16
High-speed Voltage amp for GL1100	GL11-HSVAMP
Voltage amp for GL1000	GL11-MAMP
Voltage/Temperature amp for GL1100	GL10-MAMP
Voltage/Temperature amp for GL1000	GL11-DCBAMP
DC strain amp for GL1100	GL10-DCBAMP
DC strain amp for GL1000	GL10-FVAMP
F/V amp for GL1000	GL10-VAMP

Option

Unit	Model name	Specification
Monitor	B-534	
Monitor Cable set	B-506	One 225-mm cable to mount the monitor at the front of the main unit One 1-m cable for detached monitor use
Additional memory for GL1000-16	B-509	1 MW / channel
Additional memory for GL1000-8	B-510	1 MW / channel
12VDC drive	B-505	
100-mm Printer	B-535	
Cable to connect main units together	B-515	Length : 1-m For GL1000 synchronize function
Logic probe set	RIC-10	No. of input channels : 4

Handy type 10-channel logger

Temperature, Voltage, humidity, pulse and logic inputs 10 isolated channels Accepts USB memory devices of up to 1 GB capacity and allows easy connection to PCs

midi LOGGER
GL200

100-ms sampling intervals Temperature, humidity, voltage, pulse and logic inputs Can be expanded to accommodate up to 100 channels

midi LOGGER
GL450

500kS/s sampling for high-speed measurement Votage, temperature, pulse and logic inputs Can be expanded to accommodate up to 16 channels

midi LOGGER dual
GL500A