

# GRAPHTEC

## Multi-Purpose Anytime, Anywhere midi LOGGER GL800

Standard 20 Channel  
(shown)



### Multi-Function Input

Expandable number of channels from 20 up to 200 PhotoMOS relay isolated input channels.

### Streamlined Design

Compact size of 7.6"x4.8" and weight of approximately 1lb. Built-in 5.7" TFT Color LCD display.

### Direct Data Capture to a USB Memory—up to 1GB

### Optional Battery Pack

Provides up to 9 hours of continuous recording. Battery also functions as a UPS in the event of AC power failure.

### Interface and Storage

Ethernet (10BASE-T / 100BASE-TX).  
USB (High-Speed Compatible).  
Internal Flash Memory (12MB).



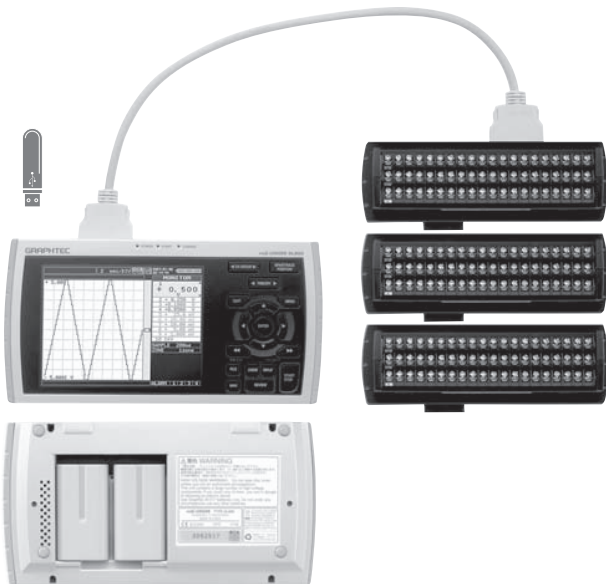
1.800.561.8187

www.itm.com

information@itm.com

# midi LOGGER GL800

Main Unit Specifications		
Item	Description	
Number of analog input terminal units	1 unit (20 ch) or Extension unit (max. 200 ch) Maximum 10 units or 200 ch when using with a PC	
Sampling interval *1	100 ms (10 ch) to 1 h	
Trigger function	Type	Start (Data capture starts when a trigger is generated) Stop (Data capture stops when a trigger is generated)
	Condition	Start Off, Level, Alarm, Scheduled time, External Stop Off, Level, Alarm, Scheduled time, External
	Alarm function	Type Analog, Logic, Pulse (AND and OR operation available) Condition Analog H, L, Window In, Window Out Logic H, L at each channel Pulse H, L, Window In, Window Out
Pulse / Logic input *2 *5	Selectable between Pulse and Logic, Number of channels : 4	
Pulse input range	Count mode	50 C, 500 C, 5 kC, 50 kC, 500 kC, 5 MC, 50 MC, 500 MC/F.S. (max. 50 k/sampling interval)
	Inst. Mode	50 C, 500 C, 5 kC, 50 kC, 500 kC, 5 MC, 50 MC, 500 MC/F.S. (max. 50 k/sampling interval)
	RPM mode	50 rpm, 500 rpm, 5 krpm, 50 krpm, 500 krpm, 5 Mrpm, 50 Mrpm, 500 Mrpm/F.S. (max. 50 k/sec)
Alarm output *5	No. of channels	4
	Output format	Open collector output (5V pull-up resistance 10 k ohm), 5 to 24V (100 mA or less)
	Output conditions	Level judgement, Window judgement, Logic pattern judgement, Pulse judgement
External trigger input *2 *5	1 ch	
Interface to PC	Ethernet (10BASE-T / 100BASE-TX), USB (Compatible with high speed)	
Data storage function	Measured data	Internal flash memory or USB memory directly
	Other	Setting conditions and Screen hard copy can be saved into the internal memory or the USB memory
Internal storage device	Internal flash memory : 12 Mbyte	
USB memory slot (Full speed)	Provided as standard	
Calculation function	Statistics calculation	Average, Peak, maximum, Minimum, RMS
	Number of calculations	2 calculations can be set simultaneously
Searching function	Searching the necessary point from captured data. Type : Level, Alarm, Logic, Pulse	
Display	Size	5.7 inch TFT color LCD
	Displayed items	Waveforms + Digital values, Waveforms only, Digital values only
Operating environment	Temperature : 0 to 45 °C (15 to 40 °C when operating by battery), Humidity : 5 to 85 % R.H.	
Power supply	AC adapter	: 100 to 240V AC, 50/60 Hz
	DC input	: 8 to 24 V DC *3 Battery pack : Max. 2 batteries installable, 9 hours operation (when using under Graphtec specified condition) *3
Power consumption	28 VA or lower (when operating with AC power)	
External dimensions (W x D x H) (approx.)	232 mm x 152 mm x 50 mm	
Weight (approx.)	990 g including a 20 channel input terminal unit *4	
Vibration resistance	Compatible with JIS Vibration testing methods for automobile Type 1 Class A-equivalent	
Certifications	CE, RoHS, China RoHS	



Input Terminal Unit Specifications		
Item	Description	
Number of input channels	20 (maximum 200 channels by the expansion terminal unit)	
Type of input terminal	M3 screw type terminal	
Method	Scan	
	All channels isolated, Non balanced input	
Measurement range	Voltage	20, 50, 100, 200, 500 mV, 1, 2, 5, 10, 20, 50, V, 1-5 V F.S.
	Temperature	Thermocouple : K, J, E, T, R, S, B, N, W (WRε5-26) PT : Pt100, JPt100, Pt1000 (IEC751)
	Humidity	0 to 100 % RH (Voltage 0 to 1 V conversion, when using optional B-530 humidity sensor is used)
Input filter	Off, 2, 5, 10, 20, 40 (Moving average)	
Measurement accuracy	Voltage	+/-0.1 % of F.S.
	Thermocouple	Measurement range Accuracy
R/S	0 ≤ TS ≤ 100 °C	± 5.2 °C
	100 < TS ≤ 300 °C	± 3.0 °C
B	R : 300 < TS ≤ 1600 °C	± (0.05 % of rdg + 2.0 °C)
	S : 300 < TS ≤ 1760 °C	± (0.05 % of rdg + 2.0 °C)
K	400 ≤ TS ≤ 600 °C	± 3.5 °C
	600 < TS ≤ 1820 °C	± (0.05 % of rdg + 2.0 °C)
E	-200 ≤ TS ≤ -100 °C	± (0.05 % of rdg + 2.0 °C)
	-100 < TS ≤ 1370 °C	± (0.05 % of rdg + 1.0 °C)
T	-200 ≤ TS ≤ -100 °C	± (0.05 % of rdg + 2.0 °C)
	-100 < TS ≤ 400 °C	± (0.1 % of rdg + 1.5 °C)
J	-200 ≤ TS ≤ -100 °C	± (0.1 % of rdg + 0.5 °C)
	-100 < TS ≤ 100 °C	± 2.7 °C
N	100 < TS ≤ 1100 °C	± (0.05 % of rdg + 1.0 °C)
	0 ≤ TS ≤ 1300 °C	± (0.1 % of rdg + 1.0 °C)
W	0 ≤ TS ≤ 2315 °C	± (0.1 % of rdg + 1.5 °C)
	PT	Pt100 -200 to 850 °C (FS = 1050 °C) ± 1.0 °C JPt100 -200 to 500 °C (FS = 700 °C) ± 0.8 °C Pt1000 -200 to 500 °C (FS = 700 °C) ± 0.8 °C
* If the reference junction compensation is internal, add ± 0.5 °C to each of the above values.		
A/D converter	16 bit (out of which 14 are internally acknowledged)	
Maximum input voltage	60 Vp-p (Between ±)	
	60 Vp-p (Between input terminals)	
	60 Vp-p (Between input terminal and chassis)	
Withstand voltage	350 Vp-p (between input terminal and GND) 1 minute	

- \*1 The available number of channels varies according to the sampling interval.
- \*2 Max. input voltage : 24 V, Input threshold voltage : approx. 2.5 V, Hysteresis approx. 0.5 V (+2.5 to 3 V)
- \*3 Option
- \*4 Excluding the battery and AC adapter
- \*5 Logic/Alarm cable (B-513) is required

GL800 PC software specifications	
Item	Description
Compatible OS	Windows 2000/XP
Function	Control of main unit, Realtime data capture, File conversion
Main unit settings	Input settings, memory settings, alarm settings, trigger settings, report settings, others
Maximum number of controlable units	Either 10 units or 500 channels
Captured data	Realtime data, Internal memory data, USB memory data
Display	Analog waveforms, logic waveforms, pulse waveforms, digital values
Display mode	Y-T waveform view, X-Y waveform view, Digital view, Meter view, Report view
Monitor functions	Alarm monitor enables sending of email to the specified address
File conversion	Data conversion between cursors/All data to CSV file format, batch conversion function
Direct Excel function	Max. 1 sec sampling data can be saved in to Excel file.
Statistics calculation, report	Maximum, minimum, average data during measurement
Reprot function	Automatic creation of daily or monthly files

Options	
Item	Model
Extension terminal base kit	B-537
20 ch extension terminal set	B-538
Battery pack	B-517
Humidity sensor	B-530
Logic / Alarm cable	B-513
DC power cable	B-514

Brand names and product names listed in this brochure are the trademarks or registered trademarks of their respective owners. Specifications are subject to change without notice.

**GRAPHTEC**  
GRAPHTEC AMERICA, INC.



1.800.561.8187

www.itm.com

information@itm.com