

# GRAPHTEC

## Print Out Data Instantly!

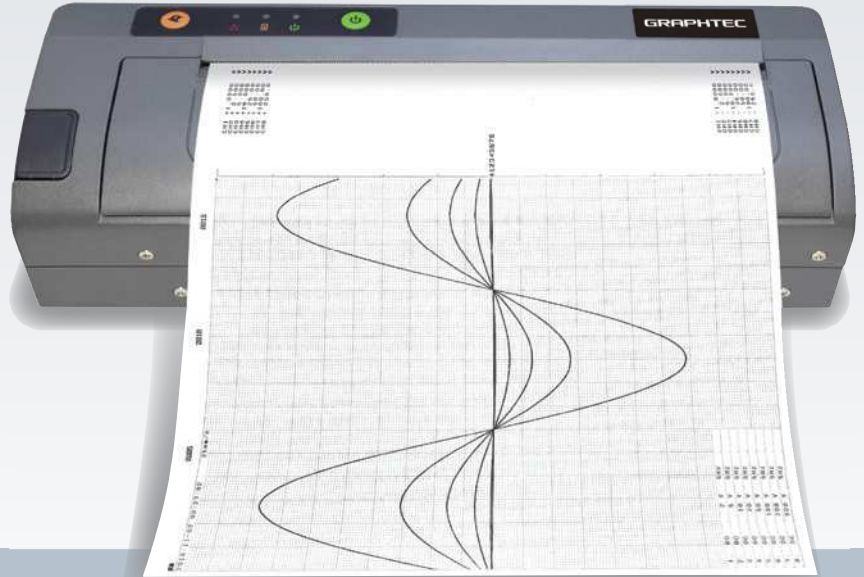
### Thermal printer DP-581H

Supports Models

GL980, GL2000, GL840-WV,  
GL840-M, and GL240



USB, LAN cable or WLAN



#### Features:



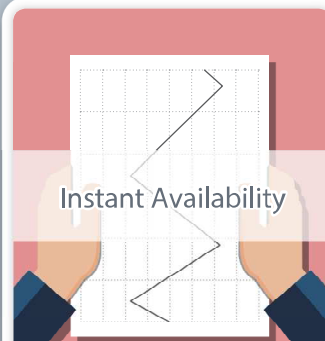
Highly Portable  
with Built-in Battery

Battery operated printer  
can be used as standalone  
with the GL series  
midiLOGGERS.



Tamperproof

Prevent data tampering by  
printing your record on  
paper - use as certified  
records.



Instant Availability

On-the-spot printing  
allows you to quickly hand  
over records.



Wireless LAN connection

Print wirelessly with the GL240  
and GL840 using optional  
wireless module.

\* GL980/GL2000 connect via USB or LAN cable.



General Machinery/  
Industrial

Heavy Equipment  
Installation Check

Check signal data from  
test operation and hand  
over the record to  
customer immediately at  
the site of the installation.

Tasks Maintenance



Steel Industry

Print Out Crack  
Detection Test  
Result On-Site

Keep records of crack  
detection test on site.

Tasks Manufacturing and  
Production Control



Construction  
Equipment Industry

Measuring oil  
pressure and tension  
load of construction  
equipment

Record and print the  
actual vehicle data for  
specified function testing.

Tasks Maintenance and  
Inspection



Maintenance  
Business

Plant Test Sites  
and Transformer  
Testing

Print and save the results  
from transient voltage,  
leaks, electric current  
(clamp) test results.

Tasks Inspection and  
Power Analysis



In-Vehicle  
Testing

For collecting  
test data of  
railroad vehicles

Simultaneously record  
and output various  
measurement data during  
in-vehicle testing with  
paper printout.

Tasks Research and  
Development



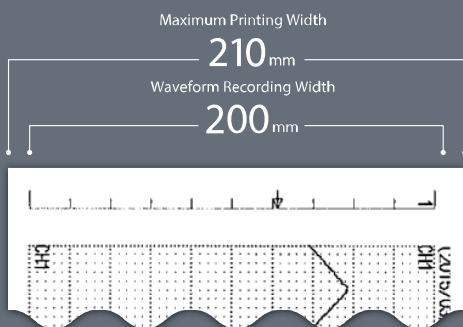
Research

To output XY data  
in prints

Print out the recording  
data in XY diagram from  
the GL series on paper.

Tasks Research and  
Development

[www.graphteccorp.com](http://www.graphteccorp.com)



**Direct Printouts with Features including:**

- Real-time Printouts**  
 Print data in waveform (Y-T timestamp chart)  
 Synchronous or asynchronous with the trigger
- Real-time Printout with Digital Values**  
 Print data in digital values  
 Synchronous or asynchronous with the trigger  
 (For GL240 and GL840 Series only)
- X-Y Format Printing**  
 Print data displayed in X-Y diagram on the GL  
 (For GL980 and GL2000 only)
- Print Recorded Data Post Process**  
 Print all saved data or selected data within cursors in waveform
- Print Selected Digital Data Values**  
 Print data in digital values of selected data using cursor up to 1000 samples
- Stacked Bar Chart Printing**  
 Print accumulated data displayed on the GL unit  
 (For GL240 and GL840 Series with GS sensor only)

Main unit specifications	
Item	Description
Model name	DP-581H
Printing method	Thermal printing system using thermal paper
Print resolution	8 dots/mm in width and feed direction
Paper feed accuracy	±2% ±0.5mm
Print width	210 mm
Recording paper roll length	30 m
Print head lifetime	Approx. 30 km (in print density 12.5 %)
Operation panel	Key Power, Paper feed
	Display Status LED (Power, Battery, Alert) Status is indicated by combinations of three LEDs turning on/blinking/turning off.
Interface	Type USB2.0 (Type-C), Wireless LAN (IEEE 802.11 b/g/n)
	Network function Web server function (for printer unit condition setting), DHCP client function
Supported models	GL2000, GL980, GL840, GL240 * GL2000, GL980: Connect with USB or LAN cable (*1) * GL840: Connect with LAN cable (*1) or WLAN (*2) * GL240: Connect with WLAN (*2)
Operating environment	5 to 35 °C, 30 to 80 %RH (No condensation)
Power source (*3)	AC Adapter 100 to 240 V AC, 50/60 Hz
Battery (*3)	Battery pack Rechargeable lithium-ion battery (6-cell, 11.1 V, 6000 mAh, 66.6 Wh)
	Charging Charge using the main printer unit
	Battery level Indicates low power warning with LED
	Driving time (typical) Approx 150 meters at full charge in continuous printing at 5 mm/s with a low printing rate
External dimensions	Approx. 312 [W] x 109 [D] x 66 [H] mm (excluding protrusions)
Weight	Approx. 2.0 kg (including battery pack and excluding AC adapter)
Corresponding standards	CE mark, RoHS

Connectable data logger				
Model	GL240	GL840-M/WV	GL980	GL2000
				
USB	—	—	Yes	Yes
LAN cable (*1)	—	Yes (*4)	Yes (*4)	Yes (*4)
WLAN (B-568 required)	Yes (*4)	Yes (*4)	—	—

Standard accessories					
• Battery pack	1 pc	• AC adapter (100-240 V)	1 pc	• AC power cable	1 pc
• USB cable (length 1.5m)	1 pc	• Recording paper	1 roll	• Guide for Quick Start	1 pc
• Guide for Startup	1 pc	• CD-ROM	1 pc		

Supplies and Accessories			
Item	Model name	Description	Package
Recording paper	PR-210x30	Thermal paper, 210 mm (W) x 30 m (L)	6 rolls/box
Battery pack	BAT-581H	Rechargeable lithium-ion battery (11.1 V, 6000 mAh)	1 pc/box

- \*1 : WLAN access point is required.  
GL unit is connected to access point by LAN cable and printer is connected to access point wirelessly.
- \*2 : When wireless LAN on GL unit is set to access point mode, connect either printer or the GL100-WL.  
Both cannot be connected at the same time.
- \*3 : When AC adapter and battery are connected to printer, it is automatically selected and AC adapter has priority. It is not switched while data is being printed.  
When it is used with slow feed speed or with long standby time, the driving time (printable length) becomes short.
- \*4 : WLAN access point is required when using LAN cable connection, and it may not be satisfied full functions of printer depending on condition of the radio wave communication.
- \* Available regions for this product are limited in order to comply with local wireless communications laws.  
\* This printer unit is made by the DASCOR and configured for Graphtec GL series.

Printer function		
Item	Description	
Print mode	Y-T format in real time	Prints data in waveform in real time while GL unit is recording in Y-T display mode • Synchronous or asynchronous with the trigger
	Y-T format in replay	Prints data in waveform while data is being replayed on the GL unit in Y-T display mode • All data or data in the area specified by cursors * Not supported during 2 screen replay
	Logging data in real time (*5)	Prints data in digital value in real time while GL unit is recording in digital display • Synchronous or asynchronous with the trigger
	Digital data in replay	Prints data in digital data while data is being replayed on the GL unit in Y-T display mode • Option to print data in the area specified by cursors (Up to 1000 data points)
	X-Y format printing	Prints the XY graph when displaying data in X-Y format on the GL unit
	Bar graph printing (*5)(*9)	Prints accumulated data graph displayed on the stacked bar graph on the GL unit
Y-T format	Feed speed (*7)	1, 2, 5, 10, 20, 25 mm/s, 1, 2, 5, 10, 20, 25, 30, 50, 100 mm/min, 1, 2, 5, 10, 20, 25, 30, 50, 100 mm/h, 10, 20 mm/day and external signal synchronization • Function to set feed speed close to the screen TIME/DIV setting of GL unit. * Does not automatically sync with TIME/DIV setting on the GL unit. Effective feed speed range depends on the sampling setting of the GL unit.
	Print format	200 mm x 1 (Multi-zone printing is not available.)
	Zone function	Trace position on printing is the same as the setting of the GL unit. * One DIV grid on the GL unit corresponds to two DIV grids on printed paper.
	Grid printing	Off, 5 mm, 10mm Fine/Coarse
	Span/Position	Size and position of trace on printing are dependent on the setting of the GL unit
	Annotation (*8)(*9)	Prints the information set on the GL unit Title field: Date, time, feed speed, system annotations Channel field: Ch Annotation, AMP setting, data value * Other texts can be added using flying annotation.
	Channel mark	Prints channel number
	Distance mark	Prints the accumulated value from the start point every 50 mm (*10)
	Timing marker	Off, 1, 10 sec, 1, 10 min, 1, 10 hrs (*10)
	Alarm printing	Prints the mark at point where the alarm occurred * Prints perpendicular to feed direction.
	Envelope mode	Prints only an envelope of waveform
	Trigger mark	Prints the mark at point where the trigger occurred
	Scale printing	Prints scale value of channel (*8)(*9)
	Logging printing (*5)(*8)(*9)	Prints data with digital format * Sampling is limited to 1 second or slower.
XY printing		
Screen copy	Function	Prints waveform by copying the screen of the GL unit
	Tone	Prints image of screen displayed on the GL unit
	Waveform area	Color lines on screen of the GL unit are converted to grayscale by dither system Background color is the same as screen setting of the GL unit
List printout		
External signal synchronous feed function		

- \*5 : Available when using GL240 or GL840.  
\*6 : Available when using GL240 or GL840 with GS sensor and displaying data with bar graph.  
\*7 : When the GL240 or GL840 is connected, maximum feed speed is 10 mm/s even if printer is driven by AC adapter.  
When printer is driven with the battery pack, max feed speed is 5 mm/s for all GL series connection.  
\*8 : Characters that can be printed are limited to alphabets (A-Z, a-z), numbers (0-9) and symbols that can be set on the GL unit.  
Double-byte characters such as Chinese, Japanese are not supported.  
When double-byte code is entered, it is printed by square mark.  
\*9 : When using GL840, up to 10 channels can be printed at the same time.  
\*10 : Select to print the timing mark or the distance mark.

- Due to the possibility of equipment or PC failure, the data files on the instrument are not guaranteed to hold memory.  
Please make a backup of data whenever possible to avoid data loss.  
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• Items mentioned are subject to change without notice. For more information about product, please check the web site or contact your local representative.

**For using equipment in correctly and safely**

- Before using it, please read the user manual and then please use it properly in accordance with the description.
- To avoid an occurrence of malfunction or an electric shock by leakage, please ensure ground connection and use it in specified power source.

**GRAPHTEC**  
Graphtec Corporation

503-10 Shinano-cho, Totsuka-ku, Yokohama 244-8503, Japan  
Tel : +81-45-825-6250 Fax : +81-45-825-6396  
Email : webinfo@graphtec.co.jp

**Website** <http://www.graphteccorp.com>



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