

**GRAPHTEC**

10-channel handy-type logger  
**midi LOGGER**

**GL200A**

**NEW**



**It's my LOGGER**

Voltage

**10 isolated channels, multifunction input**

Temperature

**Supports sampling up to  
a maximum speed of 10 ms**

Humidity

**Accepts USB memory sticks; hot-swappable**

Pulse

**Internal flash memory ensures  
worry-free measurements**

Logic

**Easy-to-read 3.5-inch TFT color LCD**

10 isolated channels & multifunction input

## GL200A main unit specifications

Item	Description																																																								
Number of input channels	Analog: 10 ch, Pulse <sup>1)</sup> : 1 ch, Logic <sup>1)</sup> : 1 ch																																																								
Analog input terminal shape	Screw terminal																																																								
Sampling interval	10 ms to 1 h (10 ms to 50 ms are for voltage measurement only, there is a limit to the number of channels)																																																								
Measurement method	Scanning method																																																								
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, T, R, S, B, N, W (WR5-26) Humidity: 0 to 100 % (when using optional humidity sensor, 0-1 V scaling conversion is used)																																																								
Filter	Off, 2, 5, 10, 20, 40 (Moving average with following values is done) 0.1 % of F.S.																																																								
Measurement accuracy (23°C±5°C) When 30 minutes or more have elapsed after power was switched on	<table border="1"> <thead> <tr> <th>Temperature</th> <th>Thermo couple</th> <th>Measurement Temperature Range (°C)</th> <th>Measurement Accuracy</th> </tr> </thead> <tbody> <tr> <td rowspan="3">R/S</td> <td rowspan="3">R/S</td> <td>0 ≤ TS ≤ 100</td> <td>±5.2°C</td> </tr> <tr> <td>100 &lt; TS ≤ 300</td> <td>±3.0°C</td> </tr> <tr> <td>R: 300 &lt; TS ≤ 1600 S: 300 &lt; TS ≤ 1760</td> <td>±(0.05% of rdg +2.0°C) ±(0.05% of rdg +2.0°C)</td> </tr> <tr> <td rowspan="2">B</td> <td rowspan="2">B</td> <td>400 ≤ TS ≤ 600</td> <td>±3.5°C</td> </tr> <tr> <td>600 &lt; TS ≤ 1820</td> <td>±(0.05% of rdg +2.0°C)</td> </tr> <tr> <td rowspan="2">K</td> <td rowspan="2">K</td> <td>-200 ≤ TS ≤ -100</td> <td>±(0.05% of rdg +2.0°C)</td> </tr> <tr> <td>-100 &lt; TS ≤ 1370</td> <td>±(0.05% of rdg +1.0°C)</td> </tr> <tr> <td rowspan="2">E</td> <td rowspan="2">E</td> <td>-200 ≤ TS ≤ -100</td> <td>±(0.05% of rdg +2.0°C)</td> </tr> <tr> <td>-100 &lt; TS ≤ 800</td> <td>±(0.05% of rdg +1.0°C)</td> </tr> <tr> <td rowspan="2">T</td> <td rowspan="2">T</td> <td>-200 ≤ T ≤ -100</td> <td>±(0.1% of rdg +1.5°C)</td> </tr> <tr> <td>-100 &lt; TS ≤ 400</td> <td>±(0.1% of rdg +0.5°C)</td> </tr> <tr> <td rowspan="3">J</td> <td rowspan="3">J</td> <td>-200 ≤ TS ≤ -100</td> <td>±2.7°C</td> </tr> <tr> <td>-100 &lt; TS ≤ 100</td> <td>±1.7°C</td> </tr> <tr> <td>100 &lt; TS ≤ 1100</td> <td>±(0.05% of rdg +1.0°C)</td> </tr> <tr> <td rowspan="2">N</td> <td rowspan="2">N</td> <td>0 ≤ TS ≤ 1300</td> <td>±(0.1% of rdg +1.0°C)</td> </tr> <tr> <td>0 ≤ TS ≤ 2315</td> <td>±(0.1% of rdg +1.5°C)</td> </tr> <tr> <td rowspan="2">W</td> <td rowspan="2">W</td> <td>0 ≤ TS ≤ 2315</td> <td>±(0.1% of rdg +1.5°C)</td> </tr> <tr> <td>0 ≤ TS ≤ 2315</td> <td>±(0.1% of rdg +1.5°C)</td> </tr> </tbody> </table>	Temperature	Thermo couple	Measurement Temperature Range (°C)	Measurement Accuracy	R/S	R/S	0 ≤ TS ≤ 100	±5.2°C	100 < TS ≤ 300	±3.0°C	R: 300 < TS ≤ 1600 S: 300 < TS ≤ 1760	±(0.05% of rdg +2.0°C) ±(0.05% of rdg +2.0°C)	B	B	400 ≤ TS ≤ 600	±3.5°C	600 < TS ≤ 1820	±(0.05% of rdg +2.0°C)	K	K	-200 ≤ TS ≤ -100	±(0.05% of rdg +2.0°C)	-100 < TS ≤ 1370	±(0.05% of rdg +1.0°C)	E	E	-200 ≤ TS ≤ -100	±(0.05% of rdg +2.0°C)	-100 < TS ≤ 800	±(0.05% of rdg +1.0°C)	T	T	-200 ≤ T ≤ -100	±(0.1% of rdg +1.5°C)	-100 < TS ≤ 400	±(0.1% of rdg +0.5°C)	J	J	-200 ≤ TS ≤ -100	±2.7°C	-100 < TS ≤ 100	±1.7°C	100 < TS ≤ 1100	±(0.05% of rdg +1.0°C)	N	N	0 ≤ TS ≤ 1300	±(0.1% of rdg +1.0°C)	0 ≤ TS ≤ 2315	±(0.1% of rdg +1.5°C)	W	W	0 ≤ TS ≤ 2315	±(0.1% of rdg +1.5°C)	0 ≤ TS ≤ 2315	±(0.1% of rdg +1.5°C)
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Reference contact compensation	Internal/External switching																																																								
A/D converter	16 bits (out of which 14 are internally acknowledged)																																																								
Trigger Functions	Trigger types: Start: Data capture starts when a trigger is generated. Stop: Data capture stops when a trigger is generated. Trigger conditions: Start: Off, Level <sup>2)</sup> , External, Time. Stop: Off, Level <sup>2)</sup> , External, Time, Specified period of time																																																								
Alarm functions	Type: Analog, Logic or Pulse; OR logic Condition <sup>2)</sup> : Analog: Rising, Falling, Window In, Window Ou. Pulse: Rising, Falling, Window In, Window Out. Logic: Rising, Falling																																																								
Pulse input mode	Count mode: Displays a count of the number of pulses for each sampling interval from the start of measurement. Inst mode: Counts the number of pulses for each sampling interval. Resets the count value after each sampling interval. RPM mode: Counts the number of pulses per second, enables them to be converted to rpms.																																																								
Pulse input range	Count mode: 50 c, 500 c, 5000 c, 50 kc, 500 kc, 5 Mc, 50 Mc, 500 Mc Inst mode: 50 c, 500 c, 5000 c, 50 kc, 500 kc, 5 Mc, 50 Mc, 500 Mc RPM mode: 50 rpm, 500 rpm, 5000 rpm, 50 krpm, 500 krpm, 5 Mrpm, 50 Mrpm, 500 Mrpm																																																								
Alarm output	Number of channels: 1 ch Output type: Open collector output (100 kΩ pull-up resistance) Output conditions: Level judgment, window judgment, logic pattern judgment, pulse judgment																																																								
External trigger input <sup>1)</sup>	1ch																																																								
PC I/F	USB																																																								
Data storage functions	Measurement data: Direct capture to the internal flash memory or USB memory stick Other: Setting parameters and screen copy data can also be saved																																																								
Memory devices	GL200A internal flash memory (3.5 Mbytes), USB memory stick																																																								
Calculation functions	Statistical calculation: Average value, Peak value, Maximum value, Minimum value, RMS																																																								
Search function	Search for analog signal levels or alarm generation points in captured data																																																								
Search types	Analog signal: Rising or falling with respect to the specified level Alarm: Both, Rising, Falling																																																								
Scaling conversion function	Input (upper and lower limits) and output (upper and lower limits) can be set for each channel																																																								
Display unit	Size: 3.5-inch TFT color LCD, Display information: Waveforms + digital values, waveforms only, digital values only																																																								
Maximum permissible input voltage	Between +/- terminals: 60 Vp-p Between input terminals and casing: 60 Vp-p																																																								
Withstand voltage	Between each input channel and main unit chassis, and also between each CHs: 1 minute at 350 Vp-p																																																								
Operating environment	0 to 40°C, 30 to 80% RH																																																								
Power supply	AC adapter: 100 to 240 VAC, 50/60 Hz DC input: 8.5 to 24 VDC <sup>3)</sup> Battery pack (option) <sup>3)</sup>																																																								
Power consumption	28 VA or lower (when the AC drive is used)																																																								
External dimensions (W x D x H) (approx.)	194 x 122 x 41 mm																																																								
Weight (approx.)	480 g (excluding AC adapter and battery)																																																								

<sup>1)</sup> Maximum input voltage: +24 V, Input threshold voltage: Approx. +2.5 V, Hysteresis: Approx. 0.5 V (+2.5 V to 3 V)

<sup>2)</sup> The trigger condition operation is Level trigger. Measurement starts when the condition specified for the start of measurement is satisfied and the trigger is activated.

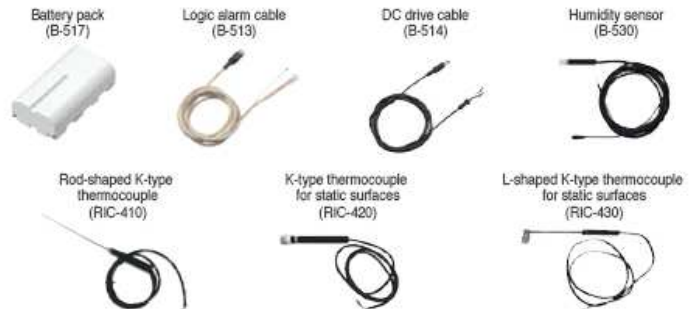
<sup>3)</sup> The DC drive input cable and battery pack are optional.

## Control software specifications

Item	Description
CPU	Pentium 4, 1.7 GHz or more
Memory	At least 512MB (1 GB recommended)
Supported OS	Windows 2000, Windows XP, Windows Vista
Functions	GL200A control, real-time data capture, file format conversion
GL200A setting range	Input settings, memory settings, alarm settings, trigger settings
Captured data	Real-time transfer to a PC, transfer of data from the GL200A's internal memory
Display information	Analog waveforms, logic waveforms, pulse waveforms, digital values
Display modes	Digital values, waveforms
Monitoring function	An email is sent to a specified email address when an alarm is generated
File format conversion	Conversion of data between cursors or all data to the CSV format
Direct to Excel	Saves sampling data up to 100 ms to an Excel file
Maximum/minimum	Displays the maximum, minimum, and current values during measurement

## Options and accessories

Product name	Model name	Remarks
Logic alarm cable	B-513	2 m
DC drive cable	B-514	2 m
Battery pack	B-517	1 piece
Humidity sensor <sup>4)</sup>	B-530	3 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



<sup>4)</sup> Operating temperature range: -25 to +80°C

Distributor pro Českou a Slovenskou republiku:



**TR instruments spol. s r.o.**

Křížkova 70, 612 00 Brno, Česká republika

Tel.: 541 633 670, Fax: 541 212 413

E-mail: info@trinstruments.cz

URL: www.trinstruments.cz

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## 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>



ER030806 Vol.1