Thermometer/Datalogger Universal Dual Thermocouple Input

HH84

$580

2 YEAR WARRANTY

Optional*

HH84, $580, shown actual size.

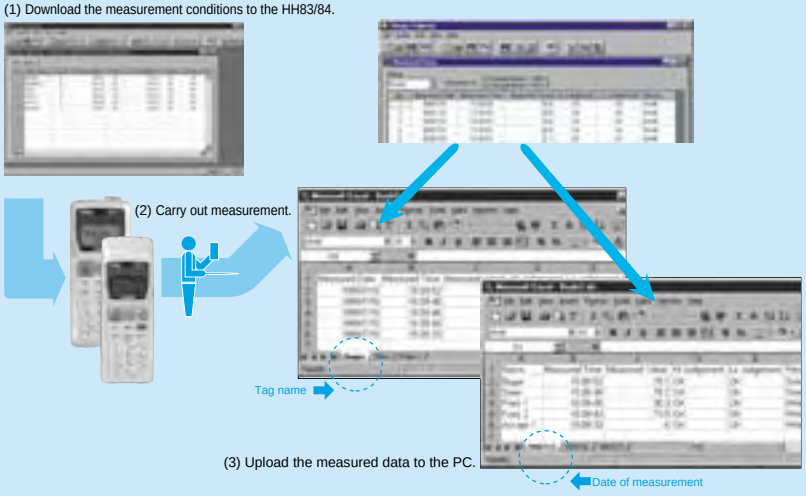
Thermocouple probes (-200°C to 1372°C) [-328°F to 2501.6°F]
Type K: -200°C to 1372°C [-328°F to 2501.6°F]
Type E: -200°C to 700°C [-328°F to 1292°F]
Type J: -200°C to 1000°C [-328°F to 1832°F]
Type T: -200°C to 400°C [-328°F to 752°F]
(Possible temperature ranges with the HH84)

Analog signal input

The HH84 can accept inputs from a sensor that outputs voltage signals ranging ±100 mV or ±1 V. An SMPW-U-M connector is required.

Easy data management using a PC (data management software included)

Setting measurement conditions from the PC.
(1) Download the measurement conditions to the HH83/84.



●Microsoft Excel spreadsheets are automatically generated for each object being measured (tag name) and each date of measurement. Data collected later can also be added to these spreadsheets.
The HH83 supports this feature with HH83 Version 1.10 when used with application software version 1.30 or later.

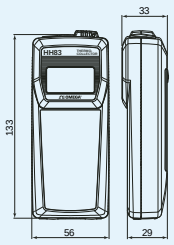
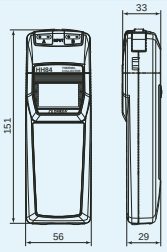
AVAILABLE FOR FAST DELIVERY!

To Order *(Specify Model Number)*		
Model No.	**Price**	**Description**
HH84	**$580**	Thermocouple thermometer/datalogger with software and RS232 cable
Accessories		
CAL-3-HH	**$75**	NIST-traceable calibration, with points
HH-NIST*	**55**	NIST-traceable calibration no points
WPC-80	**25**	Spare waterproof cover
SC-800	**10**	Soft carrying case with belt loop
HH84-CABLE	**77**	Spare RS232C cable

Comes with 2 Type K beaded wire thermocouples, 2 "AA" batteries, software, RS232C cable, waterproof cover and operator's manual.

Ordering Example: HH84** thermometer/datalogger, **$580.

Thermometer/Datalogger
Thermocouple Input Specifications

Product name (Model)	**HH83 Thermo-collector Thermistor model**	**HH84 Thermo-collector Thermocouple model**
Number of measuring channels	1 (Selectable from 3 channels) One channel is provided for each of the external thermistor probe, built-in thermistor sensor, and external non-contact probe.	2 (when A and B channels are used for thermocouple or voltage input) 1 (when D channel is used with the non-contact probe)
Measuring range (only the main unit)	External thermistor -30C to 200C [-22F to 392F] Built-in thermistor -20C to 50C [-4F to 122F] Thermal emission (external probe) -20C to 400C [-4F to 752F]	Thermocouple Type K : -200C to 1372C [-328F to 2501.6F] Type J : -200C to 1000C [-328F to 1832F] Type E : -200C to 700C [-328F to 1292F] Type T : -200C to 400C [-328F to 752F] Thermal emission -20C to 400C [-4F to 752F] Voltage input 100 mV, 1 V
Resolution	External thermistor: 0.1C Built-in thermistor: 0.1C	Thermocouple: 0.1C Voltage input: 0.1 mV or 0.001 V
Accuracy (only the main unit)	External thermistor Temperature range (T) / Accuracy -30C T < -20C 1.0C -20C T 0C 0.4C 0C < T < 100C 0.3C 100C T < 150C 0.4C 150C T 200C 0.7C Built-in thermistor Temperature range (T) / Accuracy -20C T 0C 1.0C 0C T < 40C 0.8C 40C T 50C 1.0C * For the accuracy when using a non-contact probe (900 03), see the	Thermocouple -100C T: (0.1% of rdg + 0.3C) T < -100C: (0.1% of rdg + 0.6C) Reference junction compensation is 0.4C when the temperature of the input terminal is in equilibrium Thermal emission(1% of rdg + 1C) or 3C, depending on the accuracy of the non-contact probe. Voltage input (0.1% of rdg + 0.2% of range)
Measuring mode	Collector mode or Logging mode	
Measuring interval	Collector mode: 1 second or longer Logging mode: 1 second to 24 hours	Collector mode: 0.5 seconds or longer when 1 channel is used. 1 second or longer when 2 channels are used. Logging mode: 1 second to 24 hours when 1 channel is used. 2 seconds to 24 hours when 2 channels are used.
Data capacity	5000 data items when used in collector mode only. 20000 data items when used in logging mode only. Measurement data obtained in collector mode and logging mode can coexist.	5000 data items when used in collector mode only. 20000 data items when used in logging mode only. Measurement data obtained in collector mode and logging mode can coexist. Under simultaneous 2-channel measurement, 2 data items are recorded at the same time.
Drip-proof construction	Conforms to IP54 standards (dust-proof and drip-proof requirements of IEC529)	
Display	LCD with backlight	
Operating temperature and humidity	-20C to 50C, 20 to 80% RH (no condensation)	0C to 50C, 20 to 80% RH (no condensation)
Power requirements	Two AA-size alkaline dry batteries (LR6) (included)	
Battery life	Approx. 3 months when operated in logging mode at 10-minute intervals; Approx. 1 month when operated in logging mode at 1-minute intervals; Approx. 2 weeks when operated in collector mode 8 hours a day.	Approx. 1.5 months when operated in logging mode at 10-minute intervals; Approx. 1 month when operated in logging mode at 1-minute intervals; Approx. 5 days when operated in collector mode 8 hours a day including 30 minutes of communication.
Registration of tag names	A maximum of 50, each comprising up to 8 alphanumeric characters	
Registration of operator names	A maximum of 10, each comprising up to 8 alphanumeric characters	
Registration of comments	A maximum of 32, each comprising up to 8 alphanumeric characters	
Alarm function	Upper- and lower-limit alarms	
Computing function	Maximum, minimum, and average	Maximum, minimum, and average Reading of difference between the 2 channels is possible.
Communication function	Conforms to EIA RS-232C standard.	
Simplified correction function	None	Corrects the measured data from thermocouple input within the range of 20.0C.
Scaling function	None	Scales the voltage input x according to the formula “Ax + B,” which is defined from the thermo-collector software.
Other functions	Chime, function lock, clock display, auto power-off, and battery alarm	
Thermo-collector software system requirements	CPU: i486DX or higher OS: Windows 95/Windows 98/Windows NT 4.0 FDD: 3.5", 1.44 MB-formatted Required space on the HDD: 10 MB or greater Recommended memory capacity: 16 MB or greater Serial I/O capability: A serial port conforming to RS-232C standard should be available. Software: Microsoft Excel 95, Microsoft Excel 97	
Compliance with standards	EMC standards EMI (interference signal): EN55011;1998, EN61326-1;1998+A1 (Class B, Group 1) EMS (immunity): EN50082-1;1997, EN61326;1998+A1	
External dimensions	 Approx. 133(H) × 56(W) × 33(D) mm (excluding protrusions) Weight: Approx. 170 g (including batteries)	 Approx. 151(H) × 56(W) × 33(D) mm (excluding protrusions) Weight: Approx. 180 g (including batteries)
Supplied accessories	Software, two AA-size alkaline dry batteries (LR6), a waterproof cover, an instruction manual, and Type K beaded wire T/C	

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