



Handheld Digital Thermometers

HH800 Series



No Points

The HH800A and HH801A handhelds are easy to use Type J and K input thermocouple thermometers. Both feature a large 3½ digit LCD with a maximum reading of 1999.

The HH800A is a single-input model while the HH801A has two inputs and allows for display of T1, T2 or ΔT (T1-T2). Both models feature T/C offset adjustment and are °C/°F switchable, have data storage capability and accept Type J or K thermocouples.

The HH801B offers most of the features of the HH801A, but accepts Type J, K, T, and E thermocouples. HH801B also features settable High/Low limits for both inputs and has an integral alarm beeper and three displays for simultaneous viewing of both inputs and the differential.

Common Specifications

Measurement Rate: 2.5 times/second

Operating Environment: 0 to 50°C at <70% RH

Storage Temperature: -20 to 60°C, 0 to 80% RH with battery removed

Battery: 4 x 1.5V "AAA" (included)

Dimensions: 160 H x 83 W x 38 mm D (6.3 x 3.3 x 1.5")

Specifications

Measurement Range:

-200 to 1372°C (-328 to 1999°F)

Accuracy: Stated accuracy at 23°C ±5°C, <75% RH

± (0.1% rdg + 1°C) -200 to 1372°C

± (0.1% rdg + 2°F) -328 to 1999°F

Weight: Approximately 235 g (0.5 lb) including batteries

HH800A
single
channel.

Both models shown
smaller than actual size.



HH801B dual
channel.

HH800A/801A

- ✓ Single or Dual J/K Input
- ✓ Thermocouple Offset Adjustment
- ✓ Data Storage for 120 Samples

- ✓ Includes NIST-Traceable Calibration Certificate
- ✓ Large Easy-to-Read Display
- ✓ Protective Rubber Boot
- ✓ Auto Power-Off
- ✓ Backlight
- ✓ MAX/MIN/HOLD Functions
- ✓ Auto-Range: 0.1/1° Resolution

Specifications

Measurement Range:

Type K: -200 to 1372°C

(-328 to 1999°F)

Type J: -200 to 1200°C

(-328 to 1999°F)

Accuracy: Stated accuracy at 23°C

±5°C, <75% RH

±(0.1% rdg + 1°C) -200 to 1372°C

±(0.1% rdg + 2°F) -328 to 1999°F

Weight: Approximately 230 g (0.5 lb)

including batteries

HH801B

- ✓ Dual J/K/T/E Input
- ✓ Thermocouple Offset Adjustment
- ✓ Includes NIST-Traceable Calibration Certificate
- ✓ Large Easy to Read Display
- ✓ Protective Rubber Boot
- ✓ Auto Power-Off
- ✓ High/Low Alarm (audible)
- ✓ Backlight
- ✓ MAX/MIN/AVG/REL/HOLD Functions

Specifications

Measurement Range HH801B:

Type K: -200 to 1372°C

(-328 to 2501°F)

Type J: -210 to 1050°C

(-346 to 1922°F)

Type T: -200 to 400°C

(-328 to 752°F)

Type E: -220 to 790°C

(-364 to 1454°F)

Accuracy HH801B:

±(0.1%rdg + 1°C) -60 to 1372°C

±(0.1%rdg + 2°C) -60 to -220°C

±(0.1%rdg + 2°F) -76 to 2501°F

±(0.1%rdg + 4°F) -76 to -364°F

Weight: Approximately 265 g (0.6 oz)

including batteries



HH801B
shown smaller
than actual size.

To Order

Model No.	HH800A	HH801A	HH801B
Units	°C/°F	°C/°F	°C/°F
Display	Single 3½ Digit	Single 3½ Digit	Single 3½ Digit
Input types	J, K	J, K	J, K, T, E
Data Storage	120 samples	120 samples	NO
No. of Inputs	1	2	2
Resolution	0.1° to 199°; 1° above 199° (auto ranging)		

Comes complete with 4 "AAA" batteries, Type K thermocouple (one per channel), rubber boot and operator's manual.

Ordering Example: HH801B, dual input handheld thermometer.



High Accuracy Thermocouple Thermometers

HH800 Series



No Points
Standard

- ✓ J/K Input
- ✓ High 0.05% Reading Accuracy
- ✓ Includes NIST-Traceable Calibration Certificate
- ✓ MAX/MIN/AVG/REL/HOLD
- ✓ Auto Power-Off
- ✓ High/Low Alarm (Audible)
- ✓ Dual Temperature Display
- ✓ 1 Second Sample Rate
- ✓ Optional Windows Software (See omega.com)
- ✓ Optional AC Adaptor (USB Models Only)

HH802U is a dual input high accuracy J/K input thermocouple thermometer that features two 5 digit displays for temperature and a third display for elapsed time. HH802U also has a built-in USB port for use with the optional Windows data logging software and cable, as well as a DC power jack for extended use with the optional AC adaptor. HH802W replaces the USB port with a built in wireless interface for cable free data transmission to a PC when purchased with the optional wireless receiver and Windows software.

Specifications

Measurement Range:

Type K: -200 to 1370°C
(-328 to 2498°F)

Type J: -200 to 1200°C
(-328 to 2192°F)

Accessories

Model No.	Description
HH800-ADAPTOR	AC adaptor (USB models only)
SC-800	Soft case for HH800 series
HH800-SW	Windows software and USB cable (USB models only)
HH800W-RSW	Windows software and wireless receiver (wireless models only) USA version
HH800WE-RSW	Windows software and wireless receiver (wireless models only) European version

Both models shown smaller than actual size.

Wireless Model Available! Monitors Up to 10 Different Meters With 1 Receiver

HHW802W dual J/K input.

HH802U dual J/K input.

Accuracy: Stated accuracy at 23°C ±5°C, <75% RH
 $\pm(0.05\% \text{ rdg} + 0.3^\circ\text{C})$ -50 to 1370°C
 $\pm(0.05\% \text{ rdg} + 0.7^\circ\text{C})$ -50 to -200°C
 $\pm(0.05\% \text{ rdg} + 0.6^\circ\text{F})$ -58 to 2498°F
 $\pm(0.05\% \text{ rdg} + 1.4^\circ\text{F})$ -58 to -328°F

Measurement Rate: 1 times/second
Operating Environment: 0 to 50°C at <70% RH

Storage Temperature: -20 to 60°C, 0 to 80% RH with battery removed

Battery: 4 x 1.5V "AAA" (included)
Dimensions: 160 H x 83 W x 38 mm D (6.3 x 3.3 x 1.5")

Weight: Approximately 270 g (0.5 lb) including batteries

Wireless Features:

Frequency Range: USA 900 MHz
 European 868.0 to 868.6 MHz
Current Consumption: 5 to 20 mA
Approximate Range: 25 m (75')

To Order

Model No.	HH802U	HH802W (Wireless)
Units	°C/°F	°C/°F
Display	Dual 5 digit + Elapsed Time	Dual 5 digit + Elapsed Time
Input types	J, K	J, K
Number of Inputs	2	2
Wireless	No	Yes
USB Port	Yes	No
DC Power Jack	Yes	No

Note: All wireless units are USA, 900 Mhz frequency band versions. For European 868.0 Mhz-868.6 Mhz frequency band versions, add suffix "E", no additional charge.

Comes complete with 4 "AAA" batteries, Type K thermocouple (one per channel), rubber boot, NIST certificate and operator's manual.

Ordering Example: HH802W, high accuracy thermometer with built-in wireless transmitter and HH800W-RSW, Windows software and wireless receiver (see omega.com).

High Accuracy RTD Thermometers



HH800 Series



No Points

- ✓ 100 Ω Platinum
- ✓ 0.00385/0.003916/0.003926 Curves
- ✓ 3- or 4-Wire RTD
- ✓ High $\pm 0.05\%$ $+0.2^\circ\text{C}$ Reading Accuracy
- ✓ Includes NIST-Traceable Calibration Certificate (No Points)
- ✓ MAX/MIN/AVG/REL/HOLD
- ✓ Elapsed Time
- ✓ High/Low Limits Alarm (Audible)
- ✓ Dual Temperature Display
- ✓ Supplied with 4 Pin Mini DIN Plug (One per Channel)
- ✓ Optional Windows® Software (See omega.com)
- ✓ Optional AC Adaptor (USB Models Only)

The HH804U is a high accuracy RTD input thermometer. HH804U works with 100 Ω platinum RTDs and is selectable for 3 different temperature coefficient curves. HH804U complies with ITS-90 and comes standard with a built in USB port and DC power jack. Optional Windows software and AC adaptor allow real time data logging to PC for extended periods. The HH804W features a quick and easy to use wireless interface instead of USB. This allows real time data transmission at distances of up to 25 m (75'). HH804 is a basic version, without wireless or USB interface.

Specifications

Measurement Range:

0.00385 (100 Ω): -200 to 800 $^\circ\text{C}$
(-328 to 1472 $^\circ\text{F}$)

0.003916/0.003926 (100 Ω):
-200 to 630 $^\circ\text{C}$ (-328 to 1166 $^\circ\text{F}$)

Accuracy: Stated accuracy at 23 $^\circ\text{C}$

$\pm 0.05\%$, $<75\%$ RH
 $\pm(0.05\% \text{ rdg} + 0.2^\circ\text{C})$
 $\pm(0.05\% \text{ rdg} + 0.4^\circ\text{F})$

Input Connections: 4-pin mini on DIN

Measurement Rate: 1 times/second

Operating Environment: 0 to 50 $^\circ\text{C}$ at $<70\%$ RH

Wireless Models
Available! Monitors
Up to 10 Different
Meters With
1 Receiver

Order a spare
DIN connector,
HH804-CONNECTOR.

HH804U dual
RTD input
shown smaller
than actual
size.



To Order			
Model No.	HH804U	HH804W	HH804
Units	$^\circ\text{C}/^\circ\text{F}$	$^\circ\text{C}/^\circ\text{F}$	$^\circ\text{C}/^\circ\text{F}$
Display	Dual 4½ digit + Elapsed Time	Dual 4½ digit + Elapsed Time	Dual 4½ digit + Elapsed Time
Input types	Pt100 RTD	Pt100 RTD	Pt100 RTD
No. of Inputs	2	2	2
Wireless	No	Yes	No
USB Port	Yes	No	No
DC Power Jack	Yes	No	Yes
Resolution	0.1 $^\circ$ /0.2 $^\circ\text{F}$		

Note: All wireless units are USA, 900 Mhz frequency band versions. For European 868.0 Mhz-868.6 Mhz frequency band versions, add suffix "E", no additional charge. Comes complete with HH804-CONNECTOR (one per channel), protective rubber boot, NIST certificate, 4 "AAA" batteries, and operator's manual.

Ordering Example: HH804U, high accuracy RTD input thermometer and HH800-SW, Windows software and USB cable (see omega.com).

Accessories

Model No.	Description
HH800-ADAPTOR	AC adaptor (USB models only)
SC-800	Soft case for HH800 series
HH800-SW	Windows software and USB cable (USB models only)
HH800W-RSW	Windows software and wireless receiver (wireless models only) USA version
HH800WE-RSW	Windows software and wireless receiver (wireless models only) European version
HH804-CONNECTOR	Spare DIN connector

High Accuracy Data Logger/ Thermometers

HH800 Series



Specifications

Measurement Range:

Type K: -200 to 1372°C
(-328 to 2501°F)

Type J: -210 to 1200°C
(-346 to 2192°F)

Type T: -200 to 400°C
(-328 to 752°F)

Type E: -220 to 1000°C
(-364 to 1832°F)

Type R: 0 to 1767°C (32 to 3212°F)

Type S: 0 to 1767°C (32 to 3212°F)

Type N: -50 to 1300°C
(-58 to 2372°F)

- ✓ Dual Inputs
- ✓ 7 Thermocouple Types
- ✓ Triple Display
- ✓ Data Logging
- ✓ Includes NIST-Traceable Calibration Certificate
- ✓ High/Low Alarm (Audible)
- ✓ Auto Power-Off
- ✓ MAX/MIN/MAX/MIN/AVG/REL/HOLD
- ✓ Thermocouple Offset
- ✓ Optional USB Interface
- ✓ Optional AC Adaptor

The HH806 represents the top of the line in the HH800 series of handheld thermometers. All of the HH806 versions feature exceptional 0.05% basic accuracy and include a triple display as well as data logging capabilities. At a push of a button the HH806W can store up to 128 samples on demand, and at a user specified logging interval up to 1024 in data logging mode. The HH806AU and HH806AW expand the data logging capabilities further and allow storage of up to 256 samples on demand and up to 16,000 in data logging mode. All versions of the HH806 feature three easy to read displays. Two 4½ digit displays are selectable for T1 or T2 and the third 6 digit display can be used for T1-T2 or to show the current date and time. Windows software is available for all models but is included with the HH806AW, as is the USB cable, wireless receiver, and AC adaptor (HH806AW only).



HH806AU.

HH806AW.

Both models shown smaller than actual size.

Free Thermocouple Included!

These models include a free 1 m (40") Type K insulated beaded wire thermocouple with subminiature connector and wire spool caddy (1 per channel). **Order a Spare! Model No. SC-GG-K-30-36**

Accuracy: Stated accuracy at 23°C
±5°C, <75% RH

Type K/J/T/E:

±(0.05% rdg + 0.3°C) -50 to 1372°C
±(0.05% rdg + 0.7°C) -50 to -210°C
±(0.05% rdg + 0.6°F) -58 to 2501°F
±(0.05% rdg + 1.4°F) -58 to -346°F

Type N:

±(0.05% rdg + 0.8°C) -50 to 0°C
±(0.05% rdg + 0.4°C) 0 to 1300°C
±(0.05% rdg + 1.6°F) -58 to 32°F
±(0.05% rdg + 0.8°F) 32 to 2372°F

Type R/S:

±(0.05% rdg + 2 0°C to 1767°C
±(0.05% rdg + 4 32°F to 3212°F

Operating Environment: 0 to 50°C
at <70% RH

Storage Temperature: -20 to 60°C,
0 to 80% RH with battery removed

Battery: 4 x 1.5V "AAA" (included)

Dimensions: 160 H x 83 W x 38 mm D
(6.3 x 3.3 x 1.5")

Wireless Features:

Frequency Range:

USA 900 MHz
European 868.0 to
868.6 MHz

Current Consumption:

5 to 20 mA

Approximate Range: 25 m (75')

To Order

Model No.	HH806W (Wireless)	HH806AU	HH806AW (Wireless)
Units	°C/°F	°C/°F	°C/°F
Display	Triple Display	Triple Display	Triple Display
Input types	K/J/T/E/R/S/N	K/J/T/E/R/S/N	K/J/T/E/R/S/N
Data Storage	128 on demand + 1024 in logging mode	256 on demand + 16000 in logging mode	256 on demand + 16000 in logging mode
Number of Inputs	2	2	2
Wireless	Yes	No	Yes
USB Port	No	Yes	Yes
DC Power Jack	No	Yes	Yes
Resolution	0.1° to 1999°; 1° above (auto ranging)		

Note: All wireless units are USA, 900 Mhz frequency band versions. For European 868.0 Mhz-868.6 Mhz frequency band versions, add suffix "E", no additional charge.

Comes complete with 4 "AAA" batteries, Type K thermocouple (one per channel), rubber boot and operator's manual.

Ordering Example: HH806AU, high accuracy data logger and HH800-SW, Windows software.

Accessories

Model No.	Description
HH800-ADAPTOR	AC adaptor (USB models only)
SC-800	Soft case for HH800 series

Software For HH800 Series with USB or Wireless Interface Software for Windows 2000 and Windows XP with Wireless Receiver

HH800-SW

- ✓ Data Logging and Retrieval Software for USB
- ✓ Display Retrieved Data in Graphic Format
- ✓ Display MAX/MIN/AVG/REL
- ✓ High/Low Alarms
- ✓ Selectable Logging Interval
- ✓ Provided on 3.5" CD

HH800W-RSW Windows
software and wireless
receiver (wireless
models only).



The HH800-SW and the HH800W-RSW both allow real time data logging to a PC. For wireless enable meters HH800W-RSW comes with both the software and wireless receiver, while for meters with USB, HH800-SW comes with the software and a USB cable. Both versions of software are identical and can work interchangeably. For meters with built in data storage, the software allows users to download and analyze data on there PC. Users can also export data to Excel or text files for further manipulation.

To Order

Model No.	Description
HH800-SW	Windows software and USB cable (USB models only)
HH800W-RSW	Windows software and wireless receiver (wireless models only) USA version
HH800WE-RSW	Windows software and wireless receiver (wireless models only) European version

Ordering Example: HH800-SW, data logging software for HH800 Series meters with built-in USB port.

Hardware Requirements: Pentium III, 700 Mhz or better, minimum of 150 MB free hard disk space is recommended, single USB port.