

HOBO 4-Channel Thermocouple Data Logger





A four-channel thermocouple LCD display data logger to measure and record temperature in a broad range of monitoring applications. Records temperatures from -260 to 1820° C and accepts up to four J, K, T, E, R, S, B, or N type probes. This logger also features an internal temperature sensor for logging ambient temperatures, further extending the range of application possibilities.

Features:

- Easy-to-view LCD display confirms logger operation and battery status
- Near real-time readout of current temperatures, as well as minimum, maximum, average, and standard deviation statistics
- On-screen alarms notify you if temperatures exceed high or low thresholds
- Large memory capacity capable of storing 1.6 million measurements
- Start, stop, and restart pushbuttons
- User-upgradeable firmware
- Optional protective case enables logger use in outdoor environments
- Compatible with HOBOware and HOBOware Pro software for logger setup and graphing & analysis

What's In The Box

- HOBO UX120-014M 4-Channel Thermocouple Data Logger
- Command[™] strip
- Double-sided tape
- Hook & loop strap
- Two AAA 1.5 V alkaline batteries



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Specifications:

Thermocouple

Type	Range	Accuracy `	Resolution
J	-210° to 760°C (-346° to 1,400°F)	± 0.6 °C (± 1.08 °F) \pm thermocouple probe accuracy	0.03°C (0.06°F)
K	-260° to 1,370°C (-436° to 2,498°F)	$\pm 0.7^{\circ}$ C ($\pm 1.26^{\circ}$ F) \pm thermocouple probe accuracy	0.04°C (0.07°F)
T	-260° to 400°C (-436° to 752°F)	± 0.6 °C (± 1.08 °F) \pm thermocouple probe accuracy	0.02°C (0.03°F)
Ε	-260° to 950°C (-436° to 1,742°F)	± 0.6 °C (± 1.08 °F) \pm thermocouple probe accuracy	0.03°C at (0.05°F)
R	-50° to 1,550°C (-58° to 2,822°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)
S	-50° to 1,720°C (-58° to 3,128°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)
В	550° to 1,820°C (1,022° to 3,308°F)	±2.5°C (±4.5°F) ± thermocouple probe accuracy	0.1°C (0.18F)
N	-260° to 1,300°C (-436° to 2,372°F)	$\pm 1.0^{\circ}$ C ($\pm 1.8^{\circ}$ F) \pm thermocouple probe accuracy	0.06°C (0.11°F)

Internal 10K Thermistor (Temperature):

Range: Logging: -20° to 70°C (-4° to 158°F)

Acuracy: ±0.21°C from 0° to 50°C (±0.38°F from 32° to 122°F), see Plot A

Resolution: 0.024°C at 25°C (0.04°F at 77°F); see Plot A

Drift: <0.1°C (0.18°F) per year

Logger

Logger Operating Range

Logging: -20° to 70° C (-4° to 158° F); 0 to 95% RH (non-condensing); logger accuracy from 0° to 50° C (32° to 122° F)

Launch/readout: 0° to 50°C (32° to 122°F) per USB specification

Logging rate: 1 second to 18 hours, 12 minutes, 15 seconds

Logging modes: Normal, Burst or Statistics

Memory modes: Wrap when Full or Stop when Full

Start modes: Immediately, Push Button, Date & Time or Next Interval

Stop modes: When Memory Full, Push Button, or Date & Time

Restart mode: Push Button

Time accuracy: ±1 minute per month at 25°C (77°F), see Plot B

Battery life: 1 year, typical with logging rate of 1 minute and sampling interval of 15

seconds or greater

Battery type: Two AAA 1.5V alkaline batteries, user replaceable

Memory: 4 MB (1.6 million measurements, maximum)

Download type: USB 2.0 interface

Full memory download time: Approximately 1.5 minutes

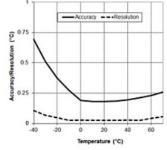
LCD: LCD is visible from: 0° to 50°C (32° to 122°F); the LCD may react slowly or go blank in temperatures outside this

range

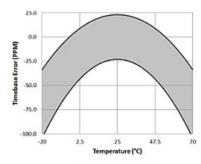
Size: 10.8 x 5.41 x 2.54 cm (4.25 x 2.13 x 1 in.)

Weight: 107.5 g (3.79 oz) **Environmental rating:** IP50

CE: The CE Marking identifies this product as complying with all relevant directives in the European Union (EU)



Plot A: Internal Temperature Accuracy & Resolution



Plot B: Time Accuracy