



## HOBO® UX120-014M Data Logger

### 4-Channel Thermocouple

A four-channel thermocouple LCD 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.

Onset also offers a single-channel thermocouple data logger, the HOBO UX100-014M.



#### Key Advantages:

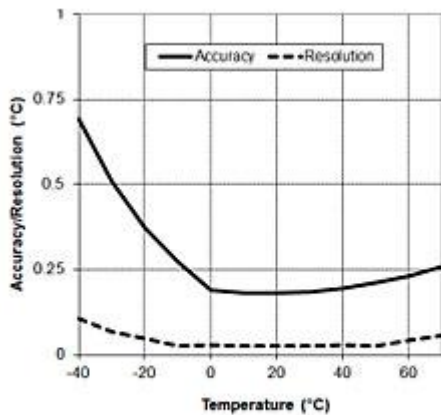
- Easy-to-view LCD display confirms logger operation and battery status
- Near real-time readout of current temperatures as well as minimum, maximum, average and standard deviation statistics
- On-screen alarms notify you if temperatures exceed high or low thresholds
- Large memory capacity capable of 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, graphing, and analysis

## HOBO UX120-014M Data Logger Specifications

### Thermocouple

Type	Range	Accuracy	Resolution
J	-210° to 760°C (-346° to 1,400°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.03°C (0.06°F)
K	-260° to 1,370°C (-436° to 2,498°F)	±0.7°C (±1.26°F) ± thermocouple probe accuracy	0.04°C (0.07°F)
T	-260° to 400°C (-436° to 752°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.02°C (0.03°F)
E	-260° to 950°C (-436° to 1,742°F)	±0.6°C (±1.08°F) ± 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)
B	550° to 1,820°C (1,022° to 3,308°F)	±2.5°C (±4.5°F) ± thermocouple probe accuracy	0.1°C (0.18°F)
N	-260° to 1,300°C (-436° to 2,372°F)	±1.0°C (±1.8°F) ± thermocouple probe accuracy	0.06°C (0.11°F)

### Internal 10K Thermistor (Temperature):



**Plot A: Internal Temperature Accuracy & Resolution**

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

**Accuracy:** ±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

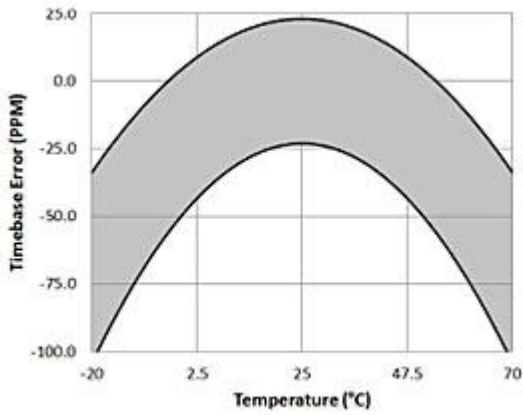
**Logging modes:** Normal, Burst or Statistics

**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



**Plot B: Time Accuracy**

**Time accuracy:**  $\pm 1$  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)

## Contact Us

Sales (8am to 5pm ET, Monday through Friday)

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▶ Call 1-508-759-9500

▶ In U.S. toll free 1-800-564-4377

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Technical Support (8am to 6pm ET, Monday through Friday)

▶ Contact Product Support [www.onsetcomp.com/support/contact](http://www.onsetcomp.com/support/contact)

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