



## HOBO<sup>®</sup> UX100-014M Data Logger

Type J, K, T, E, R, S, B, N Thermocouple

The HOBO UX100-014M Single Channel Thermocouple data logger records temperature in indoor environments with thermocouple sensors (sold separately). Designed for a broad range of monitoring applications – from industrial process monitoring to concrete maturity testing – the logger provides exceptional flexibility by accepting J, K, T, E, R, S, B or N type thermocouple probes.

Onset also offers a four-channel thermocouple data logger, the HOBO UX120-014M.



### Key Advantages:

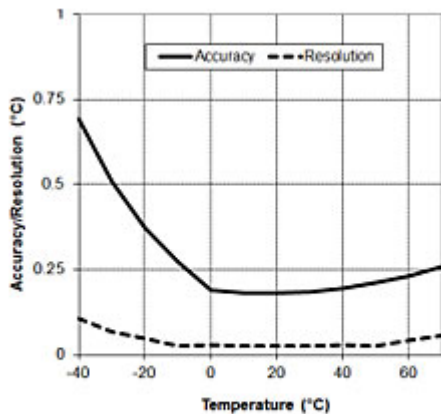
- High-accuracy J, K, T, E, R, S, B, N thermocouple readings
- Easy-to view LCD display
- Large memory capacity
- Visual high & low alarm thresholds
- New Burst and Statistics logging modes
- Record ambient temperature with internal thermistor

## HOBO UX100-014M Data Logger Specifications

### Thermocouple

Type	Range	Accuracy	Resolution
J	-210° to 760°C (-346° to 1,400°F)	$\pm 0.6^{\circ}\text{C}$ ( $\pm 1.08^{\circ}\text{F}$ ) $\pm$ thermocouple probe accuracy	0.03°C (0.06°F)
K	-260° to 1,370°C (-436° to 2,498°F)	$\pm 0.7^{\circ}\text{C}$ ( $\pm 1.26^{\circ}\text{F}$ ) $\pm$ thermocouple probe accuracy	0.04°C (0.07°F)
T	-260° to 400°C (-436° to 752°F)	$\pm 0.6^{\circ}\text{C}$ ( $\pm 1.08^{\circ}\text{F}$ ) $\pm$ thermocouple probe accuracy	0.02°C (0.03°F)
E	-260° to 950°C (-436° to 1,742°F)	$\pm 0.6^{\circ}\text{C}$ ( $\pm 1.08^{\circ}\text{F}$ ) $\pm$ thermocouple probe accuracy	0.03°C at (0.05°F)
R	-50° to 1,550°C (-58° to 2,822°F)	$\pm 2.2^{\circ}\text{C}$ ( $\pm 3.96^{\circ}\text{F}$ ) $\pm$ thermocouple probe accuracy	0.08°C (0.15°F)
S	-50° to 1,720°C (-58° to 3,128°F)	$\pm 2.2^{\circ}\text{C}$ ( $\pm 3.96^{\circ}\text{F}$ ) $\pm$ thermocouple probe accuracy	0.08°C (0.15°F)
B	550° to 1,820°C (1,022° to 3,308°F)	$\pm 2.5^{\circ}\text{C}$ ( $\pm 4.5^{\circ}\text{F}$ ) $\pm$ thermocouple probe accuracy	0.1°C (0.18°F)
N	-260° to 1,300°C (-436° to 2,372°F)	$\pm 1.0^{\circ}\text{C}$ ( $\pm 1.8^{\circ}\text{F}$ ) $\pm$ 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:**  $\pm 0.21^{\circ}\text{C}$  from 0° to 50°C ( $\pm 0.38^{\circ}\text{F}$  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

**Resolution:** 22-bit

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

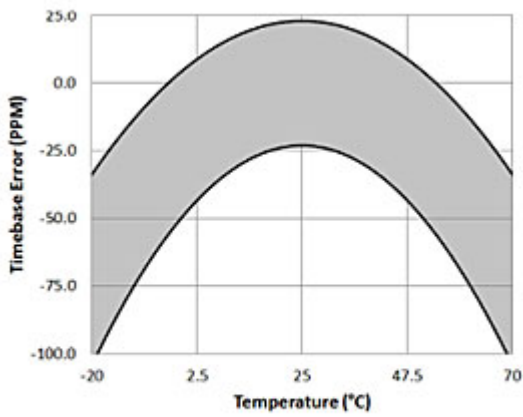
**Logging modes:** Normal, Burst or Statistics

**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:** One 3V CR2032 lithium battery

**Memory:** 512 KB (208,076 measurements, maximum)

**Download type:** USB 2.0 interface

**Full memory download time:** 1 minute, 30 seconds

**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:** 3.66 x 5.94 x 1.52 cm (1.44 x 2.34 x 0.6 in.)

**Weight:** 30 g (1.06 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)

- ▶ Email [sales@onsetcomp.com](mailto:sales@onsetcomp.com)
- ▶ Call 1-508-759-9500
- ▶ In U.S. toll free 1-800-564-4377
- ▶ Fax 1-508-759-9100

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

- ▶ Contact Product Support [www.onsetcomp.com/support/contact](http://www.onsetcomp.com/support/contact)
- ▶ Call 1-508-759-9500
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