



HOBO[®] UX100-014M Data Logger

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

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.

Supported Measurements:

Temperature

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) | ±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)

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

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

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: 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

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