HOBO® UX120-014M Data Logger

4-Channel Thermocouple Data Logger

The HOBO UX120 Thermocouple Data Logger is a four-channel LCD data logger for measuring and recording temperature in a broad range of monitoring applications. The data logger makes it easy and convenient to record temperatures over a broad range (-260 to 1820 C) and can accept up to four J, K, T, E, R, S, B, or N type probes.

In addition to accepting four thermocouple probes, the data logger 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.

Supported Measurements:

Temperature

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 (0.18F)
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)
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)

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