

H14-001

HOBO Temperature/Relative Humidity Data Logger



Discontinued

The HOBO LCD Temperature/Relative Humidity (RH) Data Logger displays and records temperature and humidity conditions. It is well-suited for use in manufacturing, processing, and storage environments where reliable monitoring and documentation of specific temperature/relative humidity conditions are critical. Data is offloaded via cable to a PC. An alarm display and built-in relay for use with Onset's Remote Alarm and/or Autodialer accessories assure timely notification of alarm conditions.

Important Information

HOBO data loggers require HOBOWare software (USB interface cable included w/CD purchase) and a communications device. See compatible items below.



Compatible with
HOBOWare[®] Software

[View upgrade options](#)

Supported Measurements

Relative Humidity, Temperature

Features

- Real-time display of Temperature and Relative Humidity
- Alarm display and output ensure timely notification of out-of-range conditions
- Two models to choose from-internal Temperature/Relative Humidity or external Temperature or Temperature/Relative Humidity sensors
- Optional Remote Alarm and Autodialer
- Optional protective case for wet or condensing environments

Contact Us

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

- Email sales@onsetcomp.com
- Call 1-508-759-9500
- In U.S. toll free 1-800-564-4377
- Fax 1-508-759-9100

Onset Computer Corporation
470 MacArthur Boulevard
Bourne, MA 02532

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

- Contact Product Support www.onsetcomp.com/support/contact
- Call 1-508-759-9500
- In U.S. toll free 1-877-564-4377

HOBO Temperature/Relative Humidity Data Logger (H14-001) Specifications

Environmental

- Operating temperature range -20°C to +50°C, (-4°F to +122°F)
- Operating relative humidity range 0 to 95%, non-condensing
- Non-corrosive environment

Logger Capabilities

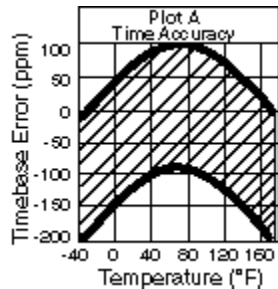
- Capacity: 65,136 measurements
- Software-selectable sampling intervals: 1 second up to 9 hours, recording times up to 1 year
- Programmable start time/date
- Recording modes: Stop when full, Wrap-around when full
- Nonvolatile EEPROM memory retains data even if batteries fail

LCD

- Size: 33 x 50.8 mm (1.3 x 2 inches)
- Displays temperature and relative humidity simultaneously
- Displays °C or °F (selectable within host software)
- Displays memory remaining
- Displays battery level
- Displays flashing ALERT for out-of-limits conditions (selectable within host software)

ALERT

- High and low set points for both temperature and relative humidity
- ALERT conditions reset on offload
- ALERT relay output selectable: Normally Closed or Normally Open
- Contact rating: 48VDC, 1A max
- Contact resistance: less than 1 Ohm
- Wire size range is 22AWG to 14AWG



Communications

- High Speed RS-232 serial offload
- Offloads to PC or Palm handheld with serial cable
- Offload speed 38.4Kbps. Readout full logger (64K) in less than 1 minute

Timekeeping

- Time accuracy: ± 1 minute per week at +20°C (+68°F), see

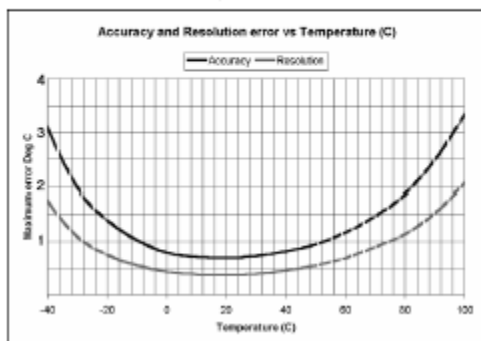
plot A

Size/Weight:

- 125 x 92 x 31 mm (4.9 x 3.6 x 1.2 inches)
- 170 g (6.0 oz) with batteries

Plot B

Internal Temperature Sensor Accuracy/Resolution



Power

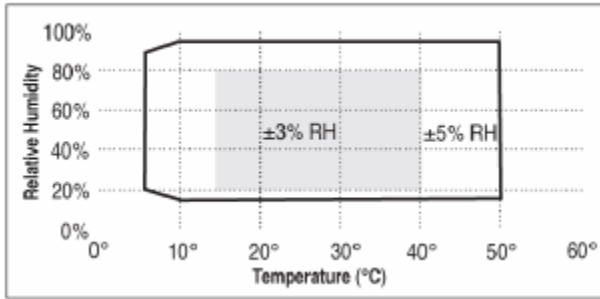
- 3 AAA Alkaline batteries, user-replaceable

Internal Temperature Sensor

- Measurement range: -20°C to +50°C (-4°F to +122°F)
- Accuracy: $\pm 0.7^\circ\text{C}$ at +20°C ($\pm 1.3^\circ\text{F}$ at +68°F), see plot B
- Resolution: 0.4°C at +20°C (0.7°F at +68°F)
- Response time (to 90%): Less than 15 minutes in airflow of 1 m/s (2.2 mph)
- Temperature Accuracy Drift: Negligible

Int

Plot C Internal Model RH Range



Internal Relative Humidity Sensor

- User replaceable
- Measurement range: 15% to 95% at +25°C (+77°F)
- Accuracy: $\pm 3\%$ over range of 20% to 80%, see plot C
- Response time to 90%: <2 minutes in airflow of 1 m/s (2.2 mph)
- Accuracy Drift: <2% over 5 years typical