



HOBO U14 LCD data loggers display and record temperature and humidity conditions. They are well-suited for use in manufacturing, processing, and storage environments where reliable monitoring and documentation of specific temp/RH conditions are critical.

Key Advantages:

- 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 Temp/RH or External Temp/RH sensors
- Optional protective case for outdoor environments
- Optional Remote Alarm and Autodialer
- Fast data offload via USB

Memory: 43,000 measurements
 Sample rate: 1 second to 18 hours
 Battery life: 1-year (typical)—user-replaceable
 Operating range: -20° to 50°C (-4° to 122°F) 0 to 100% RH non-condensing



Weatherproof case (CASE-4x) required for outdoor use. HOBO U14-001 is not suitable for outdoor use.

Internal Temperature Measurement

Temperature Measurement

Range: -20° to 50°C (-4° to 122°F)
 Accuracy: $\pm 0.21^{\circ}\text{C}$ from 0° to 50°C ($\pm 0.38^{\circ}\text{F}$ from 32° to 122°F)
 Resolution (12 bit): 0.03°C @ 25°C (0.05° @ 77°F)
 Response time: 15 minutes (to 90% in airflow of 1 m/s)

Internal RH Measurement

Range: 0 - 100% RH, -20° to 50°C (-4° to 122°F)
 Accuracy: $\pm 2.5\%$ typical, 3.5% maximum, from 10 to 90% RH
 Resolution (12 bit): 0.03% RH @ 25°C (77°F)
 Response time: 2 minutes (to 90% in airflow of 1 m/s)



12-bit Temperature Probe

S-TMB-M002*
S-TMB-M006*
S-TMB-M017*

Temperature Measurement

Range: -40° to 100°C (-40° to 212°F) for sensor tip only
 Accuracy: $\pm 0.2^{\circ}\text{C}$ from 0° to 50°C ($\pm 0.36^{\circ}\text{F}$ from 32° to 122°F)
 Resolution (12-bit): 0.03°C @ 25°C (0.05° @ 77°F)
 Response time: 2 minutes (to 90% in airflow of 1 m/s)



***Last two digits of product number indicate sensor cable length (in meters).**



External Temperature/ RH Probe

S-THB-M002*
S-THB-M008*

Temperature Measurement

Range: -40° to 75°C (-40°F to 167°F)
Accuracy: $\pm 0.21^{\circ}\text{C}$ from 0° to 50°C (0.38°F from 32° to 122°F)
Resolution (12 bit): 0.03°C @ 25°C (0.05°F @ 77°F)
Response time: 5 minutes (to 90% in airflow of 1 m/s)

RH Measurement

Range: 0 - 100% RH, -40° to 75°C (-40° to 167°F)
Accuracy: $\pm 2.5\%$ typical, 3.5% maximum, from 10 to 90% RH
Resolution (10 bit): 0.1% RH @ 25°C (77°F)
Response time: 10 minutes (to 90% in airflow of 1 m/s) with protective cap



***Last two digits of product number indicate sensor cable length (in meters).**



Remote Alarm ARA

Remote Alarm

- Adjustable audible alarm level (soft/loud)
- Self-test confirms proper indicator operation
- Two inputs provide alarm notification for separate zones
- 1 year battery life (typical)—user-replaceable
- Battery status indication



Auto Dialer AVD-45

Auto Dialer

- Dials up to 4 different numbers
- Transmits either voice or numeric messages (for pagers)
- Automatically redials busy or unanswered numbers (up to 10 times for each number)
- AC powered (AC adapter included)
- Internal 9V alkaline battery provides 4 hours of stand-by power
- Works alone or in conjunction with remote alarm



Protective Case for LCD Logger

CASE-4x
1.7 x 12.7 x 5.7 cm
(6.75 x 2.25 in)
315.2 g (11.2 oz)




Protective Case

- Tested to NEMA 4X (IP65) Standards
- External Temperature or Temperature/RH sensor and alarm relay cables feed through watertight grommets
- Easy data readout via removable watertight fitting with O-ring seal
- Hook and loop tape secures LCD logger inside case
- Materials: Polycarbonate body and cover—UV stabilized

Note: Protective Case is for use with the U14-002 HOBO LCD Data Logger with external input from remote Temperature or Temperature/RH sensors. Check the HOBO LCD Sensor specifications to assure that the unprotected external sensor is recommended for your operating environment.

NIST-traceable temperature accuracy certification is available. (See page 72)

HOBO U14 Model Comparison

		Internal Temp/RH  U14-001	External Temp or Temp/RH  U14-002
			External Sensors sold separately. See pages 8 and 9.
Internal Sensors	Temperature	yes	--
	Relative Humidity	yes	--
External Sensor	Temperature	--	yes
	Relative Humidity	--	yes
Size	cm	12.4 x 9.1 x 3.0	12.4 x 9.1 x 3.0
	inches	4.9 x 3.6 x 1.2	4.9 x 3.6 x 1.2
Weight	grams	170	170
	ounces	6	6

Ordering Information

Data Loggers

HOBO U14 Temp/RH (Internal Temp/RH)	U14-001
HOBO U14 Temp/RH (External Temp or Temp/RH)	U14-002

Software

HOBOWare Pro Software (Windows/Mac)	BHW-PRO-CD
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Sensors

External Temperature Probe	S-TMB-M002
	S-TMB-M006
	S-TMB-M017
External Temperature/RH Probe	S-THB-M002
	S-THB-M008

Communications and Accessories

Two-Zone Remote Alarm	ARA
Protective Case for LCD Logger	CASE-4x
Auto Dialer	AVD-45
HOBO U-Shuttle*	U-DT-1

*Requires HOBOWare Pro software, see page 52 for details.

HOBOWare includes USB interface cable

HOBOWare Software is available for download via the web. Visit onsetcomp.com for details.