



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 downloading 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:  $\pm 0.2^{\circ}\text{C}$  from 0° to 50°C ( $\pm 0.36^{\circ}\text{F}$  from 32° to 122°F)  
 Resolution (12 bit):  $0.03^{\circ}\text{C}$  @ 25°C ( $0.05^{\circ}$  @ 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):  $0.03^{\circ}\text{C}$  @ 25°C ( $0.05^{\circ}$  @ 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:  $\pm 0.2^{\circ}\text{C}$  from 0° to 50°C (0.36°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 HOB0 LCD Data Logger with external input from remote Temperature or Temperature/RH sensors. Check the HOB0 LCD Sensor specifications to assure that the unprotected external sensor is recommended for your operating environment.**

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

## HOB0 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**

HOB0 U14 Temp/RH (Internal Temp/RH)	U14-001
HOB0 U14 Temp/RH (External Temp or Temp/RH)	U14-002

**Software**

HOBOWare Pro Software (Windows/Mac)	BHW-PRO-CD
HOBOWare Lite Software (Windows/Mac)	BHW-LITE-CD
Real Time Alarm Software Plug-in*	BHW-T-ALRM

**Sensors**

Stainless Steel 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
HOB0 U-Shuttle*	U-DT-1

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

HOBOWare Software is available for download via the web. Visit [onsetcomp.com](http://onsetcomp.com) for details.