

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.

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# **Internal Temperature Measurement**

**Temperature Measurement** 

Range: -20° to 50°C (-4° to 122°F)

Accuracy: ±0.2°C from 0° to 50°C (±0.36°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: ±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\* External Temperature/Temp/RH Sensors

Temperature Measurement

Range:  $-40^{\circ}$  to  $100^{\circ}$ C ( $-40^{\circ}$  to  $212^{\circ}$ F) for sensor tip only Accuracy:  $\pm 0.2^{\circ}$ C from  $0^{\circ}$  to  $50^{\circ}$ C ( $\pm 0.36^{\circ}$ F from  $32^{\circ}$  to  $122^{\circ}$ 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\*



Remote Alarm ARA



**Auto Dialer** AVD-45



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)

# **Temperature** Measurement

-40° to 75°C (-40°F to 167°F) Range:

±0.2°C from 0° to 50°C (0.36°F from 32° to 122°F) Accuracy:

0.03°C @ 25°C (0.05°F @ 77°F) Resolution (12 bit): 5 minutes (to 90% in airflow of 1 m/s) Response time:

**HOBO U14 LCD Loggers** 

# Measurement

0 - 100% RH, -40° to 75°C (-40° to 167°F) Range:

Accuracy: ±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

- 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

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### **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

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#### **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 accuracy certification is available. (See page 72)

Supplied in Australia by Instrument Choice Call our scientists on 1300 737 871 www.instrumentchoice.com.au

#### **HOBO U14 Model Comparison** Internal Temp/RH External Temp or Temp/RH # 544 U14-001 U14-002 Temperature yes Internal Sensors Relative Humidity yes Temperature yes **External Sensor** Relative Humidity yes 12.4 x 9.1 x 3.0 12.4 x 9.1 x 3.0 cm Size 4.9 x 3.6 x 1.2 inches 4.9 x 3.6 x 1.2 170 170 grams Weight 6 6 ounces

# 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)
HOBOware Lite Software (Windows/Mac)
Real Time Alarm Software Plug-in\*
BHW-PRO-CD
BHW-LITE-CD
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
HOBO 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 for details.