

- Weatherproof housing for use in outdoor or condensing environments
- High-accuracy measurements
- Replaceable RH sensor provides superior recovery from condensing conditions
- Small-diameter, external sensor versions for measurements in tight spaces
- Optic USB interface for fast and reliable download



BASE-U-4 or U-DTW-1 is required with this logger (coupler is included with these).

Memory: 42,000 measurements
 Sample rate: 1 second to 18 hours, fixed rate or multiple logging intervals
 Battery life: 3 years (typical)—user-replaceable



Internal Temperature

Measurement range: -40° to 70°C (-40° to 158°F)
 Accuracy: ±0.18°@ 25°C (±0.32°@ 77°F)
 Resolution (12-bit): 0.02°@ 25°C (0.04°@ 77°F)
 Response time: 40 minutes (to 90% in airflow of 1 m/s)

Relative Humidity (RH)

Measurement range: 0 to 100% RH
 Accuracy: ± 2.5% typical, 3.5% maximum, from 10 - 90% RH
 Resolution (12-bit): 0.03% RH
 Response time: U23-001: 10 minutes (90% in airflow of 1 m/s; RH change only)
 U23-002: 5 minutes (90% in airflow of 1 m/s)

External Temperature

Measurement range: U23-002: -40° to 70°C (-40° to 158°F)
 U23-003 & 004: -40° to 100°C (-40° to 212°F);
 sensor tip and cable immersion in fresh water up to 50°C (122°F) for one year
 Accuracy: ±0.18°@ 25°C (±0.32°@ 77°F)
 Resolution (12-bit): 0.02°@ 25°C (0.04°@ 77°F)
 Response time: U23-002: 5 minutes (to 90% in airflow of 1 m/s)
 U23-003 & U23-004: 3 minutes (to 90% in airflow of 1 m/s)
 30 seconds (to 90% in water)

NIST-traceable temperature accuracy certification service available for all temperature sensors. See page 41 for details.

HOBO Pro v2 Comparison & Ordering Information

		Internal Temp/RH HOBO Pro v2	External Temp/RH HOBO Pro v2	2x External Temp HOBO Pro v2	Temp/External Temp HOBO Pro v2
Product Number		U23-001*	U23-002*	U23-003	U23-004
Number of Channels		2	2	2	2
Internal Sensors	Temperature	yes	--	--	yes
	Relative Humidity	yes	--	--	--
Integrated External Sensors	Temperature	--	yes	yes	yes
	Relative Humidity	--	yes	-	--
Size	cm	10.2 x 3.8	10.2 x 3.8	10.2 x 3.8	10.2 x 3.8
	inches	4.0 x 1.5	4.0 x 1.5	4.0 x 1.5	4.0 x 1.5
	probe	--	1 cm (0.38 in) diameter probe on 1.8 m (6 ft) cable	0.5 cm (0.2 in) diameter probe on 1.8 m (6 ft) cable	0.5 cm (0.38 in) diameter probe on 1.8 m (6 ft) cable
Weight	grams	57	118	138	102
	ounces	1.5	3.1	3.7	2.7

Complete system requires logger, software and base station.

** Replaceable RH Sensors Available*

Software, Communications and Accessories

Software

HOBOWare® Pro Software (Windows®/Mac®)

HOBOWare Lite Software

Optic USB Base Station* with Couplers

BHW-PRO-CD

BHW-LITE-CD

BASE-U-4

Optional Communications and Accessories

HOBO U-Shuttle (requires Base Station)***

HOBO Waterproof Shuttle with Couplers***

Solar Radiation Shield** (U23-001 only)

Assembled Solar Radiation Shield** (U23-001 only)

Solar Radiation Shield**

U23-002, 003, 004

Mounting Clamp

(for mounting U23-001 and 004 in RS1 or M-RSA)

Replaceable RH Sensor for U23-001

Replaceable RH Sensor for U23-002

Replaceable RH Sensor Caps for U23-002 (5 pack)

U-DT-1

U-DTW-1

RS1

M-RSA

RS3

U23-RS-CLAMPKIT

HUM-RHPCB-1

HUN-RHPCB-2

HUM-RHCAP-2

* HOBO Waterproof Shuttle can also be used as a Base Station (See pages 38-40 for details on Data Shuttles and Base Stations).

** Accurate temperature and RH measurements in sun require a radiation shield. Use the RS1 for internal sensors and the RS3 for external sensors.

*** Requires HOBOWare Pro software. See page 36 and 37 for details.

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