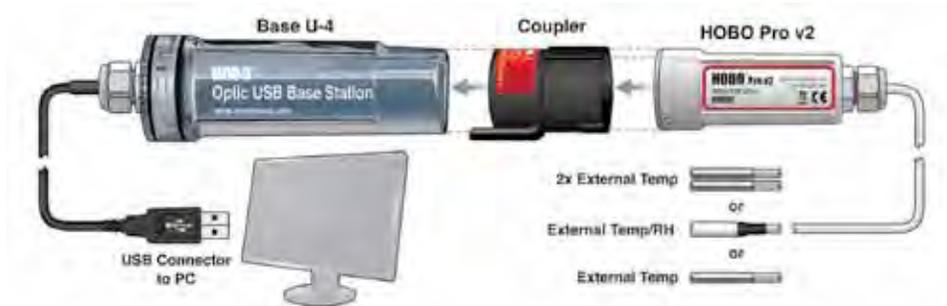




HOBO Pro v2 data loggers are weatherproof loggers that provide high accuracy temperature and relative humidity measurements in a wide range of outdoor environments.

Key Advantages:

- 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).



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: ± 0.21°C from 0° to 50°C (0.38°F from 32° to 122°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 & U23-004: -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: ± 0.2°C from 0° to 50°C (0.36°F from 32° to 122°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 72)

HOBO Pro v2 Comparison				
	Internal Temp/RH	External Temp/RH	2x External Temp	Temp/External Temp
				
	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
	Relative Humidity	--	yes	--
Size	cm	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
	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
Weight	grams	57	118	138
	ounces	1.5	3.1	3.7

* Replaceable RH Sensors available. Complete system requires logger, software, and base station or shuttle U-DTW-1.

Ordering Information	
Data Loggers	
HOBO Pro v2 Internal Temp/RH	U23-001
HOBO Pro v2 External Temp/RH	U23-002
HOBO Pro v2 2x External Temp	U23-003
HOBO Pro v2 Internal Temp/External Temp	U23-004
Software	
HOBOWare Pro Software (Windows/Mac)	BHW-PRO-CD
Optic USB Base Station* with Couplers	BASE-U-4
Optional Communications and Accessories	
HOBO U-Shuttle (requires Base Station)***	U-DT-1
HOBO Waterproof Shuttle with Couplers***	U-DTW-1
Solar Radiation Shield** (U23-001, 004)	RS1
Assembled Solar Radiation Shield** (U23-001, 004)	M-RSA
Solar Radiation Shield** U23-002, 003, 004	RS3
Mounting Clamp (for mounting U23-001 and 004 in RS1 or M-RSA)	U23-RS-CLAMPKIT
Replaceable RH Sensor for U23-001	HUM-RHPCB-1
Replaceable RH Sensor for U23-002	HUM-RHPCB-2
Replaceable RH Sensor Caps for U23-002 (5 pack)	HUM-RHCAP-2
* HOBO Waterproof Shuttle can also be used as a Base Station (See pages 70-71 for details on Data Shuttles and Base Stations).	
** Accurate temperature and RH measurements in sun require a radiation shield. Use the RS1 or M-RSA for internal sensors and the RS3 for external sensors.	
*** 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.