



HOBO U12 data loggers provide high-accuracy monitoring of temperature, humidity and other parameters. They provide 12-bit resolution measurements for detecting greater variability in recorded data, direct USB connectivity for convenient, high-speed data offload, and a 43K measurement capacity. They also feature rugged enclosures for enhanced product durability.

### Key Advantages:

- Large memory for long-term deployments or fast sampling
- Five models to choose from, with flexible measurement options
- Programmable as well as push-button start

Memory: 43,000 measurements  
 Sample rate: 1 second to 18 hours, user-selectable  
 Battery life: 1 year (typical)—user-replaceable CE

### Temperature

Measurement range: -20° to 70°C (-4° to 158°F)  
 Accuracy:  $\pm 0.35^{\circ}\text{C}$  from 0° to 50°C (0.63°F from 32° to 122°F)  
 Resolution (12-bit): 0.03°@ 25°C (0.05°@ 77°F)  
 Response time: 6 minutes (to 90% in airflow of 1 m/s)

***NIST-traceable temperature accuracy certificate available. (See page 72)***

### Relative Humidity (RH)

Measurement range: 5% to 95% RH  
 Accuracy:  $\pm 2.5\%$  typical, 3.5% maximum, from 10 to 90% RH  
 Resolution (12-bit): 0.03% RH  
 Response time: 1 minute (to 90% in airflow of 1 m/s)

### Light Intensity

Designed for general purpose indoor measurement of relative light levels  
 Range: 1 to 3000 footcandles (lumens/ft<sup>2</sup>) typical  
 0-32,300 lumens/m<sup>2</sup> [0-3,000 footcandles (lumens/ft<sup>2</sup>)]

### External Input

External sensors for temperature, AC current, AC voltage, CO<sub>2</sub>, 4-20 mA, 0-10 VDC  
*(see sensors page 57)*

Input range: 0 to 2.5 VDC  
 Accuracy:  $\pm 2$  mV,  $\pm 2.5\%$  of absolute reading  
 Resolution (12-bit): 0.6 mV  
 Output power: 2.5 VDC at 2 mA, active only during measurements

Supplied in Australia by Instrument Choice  
 Call our scientists on 1300 737 871  
[www.instrumentchoice.com.au](http://www.instrumentchoice.com.au)

## HOBO U12 Model Comparison

		Temperature	4 External	Temp/RH	Temp/RH/Light/Ext	Temp/RH/2 Ext
		U12-001	U12-006	U12-011	U12-012	U12-013
Number of Channels		1	4	2	4	4
Internal Sensors	Temperature	yes	--	yes	yes	yes
	Relative Humidity	--	--	yes	yes	yes
	Light Intensity	--	--	--	yes	--
External Sensors		--	yes	--	yes	yes
Size	cm	5.8 x 7.4 x 2.2	5.8 x 7.4 x 2.2	5.8 x 7.4 x 2.2	5.8 x 7.4 x 2.2	5.8 x 7.4 x 2.2
	inches	2.3 x 2.9 x 0.9	2.3 x 2.9 x 0.9	2.3 x 2.9 x 0.9	2.3 x 2.9 x 0.9	2.3 x 2.9 x 0.9
Weight	grams	46	46	46	46	46
	ounces	1.6	1.6	1.6	1.6	1.6

Complete system requires logger and software.

## Ordering Information

### Data Loggers

HOBO U12 Temp	U12-001
HOBO U12 4 Ext Channels	U12-006
HOBO U12 Temp/RH	U12-011
HOBO U12 Temp/RH/Light/Ext Channel	U12-012
HOBO U12 Temp/RH/2 Ext Channels	U12-013

### kW\*\*

3 Phase, 450V, 100 AMP	T-VER-8044-100
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### Gauge Pressure\*\*\*†

100 psig	T-ASH-G2-100
200 psig	T-ASH-G2-200
500 psig	T-ASH-G2-500

### Differential Air Pressure Transducer\*\*\*†

0.01-10.0 WC	T-VER-PXU-L
0.01-10.0 WC	T-VER-PXU-X

### Humidity\*\*\*†

Duct-Mount RH/Temp	T-VAI-HMD-40Y
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### DC Current\*\*\*†

0-200 Amp	T-VER-H970-200
-200 to 200 Amp	T-VER-971BP-200

### Air Velocity Sensor\*\*\*†

0.15-10 m/s	T-DCI-F900-L-P
0.15-5 m/s	T-DCI-F900-L-O
0.15-10 m/s	T-DCI-F900-S-P
0.15-5 m/s	T-DCI-F900-S-O

### Compressed Air Flow Meter\*\*

1-80 SCFM	T-CDI-5200-10S
3-350 SCFM	T-CDI-5400-20S

### Volatile Organic Compound (VOC)\*\*\*†

0-10, 0-100, 0-1000 ppm	T-ION-TVOC
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### Temperature Sensors

Air/Water/Soil Probe 0.3m (1ft)	TMC1-HD
Air/Water/Soil Probe 1.8m (6ft)	TMC6-HD
Air/Water/Soil Probe 6.1m (20ft)	TMC20-HD
Air/Water/Soil Probe 15.2m (50ft)	TMC50-HD
Stainless Steel Temp Probe 1.8m (6ft)	TMC6-HC
Pipe Temp 1.8m (6ft)	TMC6-HE

### Split-core AC Current Sensors

0-20 Amps AC	CTV-A
0-50 Amps AC	CTV-B
0-100 Amps AC	CTV-C
0-200 Amps AC	CTV-D
0-600 Amps AC	CTV-E

### CO<sub>2</sub>\*\*

Telaire CO <sub>2</sub> /Temp Monitor	TEL-7001
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### AC Voltage Transmitters\*\*

0 - 150 Volts AC	T-CON-ACT-150
0 - 300 Volts AC	T-CON-ACT-300

### DC Voltage

0 - 2.5 Volts DC	CABLE-2.5-STEREO
0 - 5 Volts DC	CABLE-ADAP5
0 - 10 Volts DC	CABLE-ADAP10

### Milliamps

4 - 20mA	CABLE-4-20MA
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### Software

HOBOWare Pro Software (Windows/Mac)	BHW-PRO-CD
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### Optional Communications

HOBO U-Shuttle*	U-DT-1
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\* Requires HOBOWare Pro software, see page 52 for details.  
HOBOWare includes USB interface cable.

\*\* Requires input cables. See page 57 for compatibility.

† Requires sensor power adapter (AC-SENS-1) See page 57 for compatibility.

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

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