



# DISCONTINUED: HOBO U12-012 Temperature/Relative Humidity/Light/External Channel Data Logger

## Product Images



## Short Description

The U12-012 is a small, accurate 12-bit Data Logger with USB interface and Temperature, Relative Humidity, Light Level and External input for use in indoor environments.

## Description

Measure temperature, relative humidity, light intensity, and more with the HOBO U12-012. With 12-bit resolution measurements, this data logger gathers a range of recorded data and stores 43,000


measurements.

## Key Features

- 12-bit resolution provides high accuracy
- Large memory for long-term deployments or fast sampling
- Programmable and push button start
- Direct USB interface for fast data offload
- Compatible with Onset's HOBO U-Shuttle for convenient data transport
- Compatible with HOBOWare and HOBOWare Pro for logger setup, graphing and analysis.

NOTE: HOBO loggers require a USB cable and [HOBOWare software](#) (free download).

# Additional Information

Country of Manufacture	United States
Explanation	<p><b>Measurement Range</b> <b>Temperature:</b> -20° to 70°C (-4° to 158°F) <b>RH:</b> 5% to 95% RH <b>Light intensity:</b> 1 to 3000 footcandles (lumens/ft2) typical; maximum value varies from 1500 to 4500 footcandles (lumens/ft2) <b>Analog channels:</b> 0 to 2.5 Vdc (w/CABLE-2.5-STEREO); 0 to 5 Vdc (w/CABLE-ADAP5); 0 to 10 Vdc (w/ CABLE-ADAP10); 4-20 mA (w/CABLE-4-20MA) <b>Accuracy</b> <b>Temperature:</b> ± 0.35°C from 0° to 50°C (± 0.63°F from 32° to 122°F), see Plot A in manual <b>RH:</b> ± 2.5% from 10% to 90% RH typical, to a maximum of ±3.5% including hysteresis at 25°C (77°F); below 10% and above 90% ±5% typical, see Plot B in manual <b>Light intensity:</b> Designed for indoor measurement of relative light levels, see Plot D in manual for light wavelength response <b>External input channel (see sensor manual):</b> ± 2 mV ± 2.5% of absolute reading <b>Resolution</b> <b>Temperature:</b> 0.03°C at 25°C (0.05°F at 77°F), see Plot A in manual <b>RH:</b> 0.05% RH <b>Sample rate:</b> 1 second to 18 hours, user selectable <b>Drift</b> <b>Temperature:</b> 0.1°C/year (0.2°F/year) <b>RH:</b> &lt;1% per year typical; RH hysteresis 1% <b>Response Time in Airflow of 1 m/s (2.2 mph)</b> <b>Temperature:</b> 6 minutes, typical to 90% <b>RH:</b> 1 minute, typical to 90% <b>Time accuracy:</b> ± 1 minute per month at 25°C (77°F), see Plot C in manual <b>Operating Temperature</b> <b>Logging:</b> -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing) <b>Launch/readout:</b> 0° to 50°C (32° to 122°F), per USB specification <b>Battery life:</b> 1 year typical use <b>Memory:</b> 64K bytes (43,000 12-bit measurements) <b>Weight:</b> 46 g (1.6 oz) <b>Dimensions:</b> 58 x 74 x 22 mm (2.3 x 2.9 x 0.9 inches)  The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).</p>
Promotion	This product has been discontinued. See our full range of <a href="#">indoor data loggers</a>
Brand	Onset HOBO
Channel(s)	4
Onset Product Series	U12

Typical applications	Building Monitoring, Energy, Environmental (Indoor), Thermal Comfort
Measurements	4-20mA, Air Velocity, CO2, Compressed Air Flow, Current AC, Current DC, Humidity, Kilowatts (kW), Light Intensity, Pressure, Temperature, Volatile Organic Comp., Voltage AC, Voltage DC

## Additional Options

<b>Temperature &amp; Humidity Calibration Certificate</b>	Temperature & Humidity Calibration @ 20°C and 50RH
	Temperature & Humidity Calibration (please specify measurement points required)
<b>4-20 mA Input Cable</b>	4-20 mA Input Cable (CABLE-4-20MA)
<b>AC Current Sensor</b>	0-20AMP AC Split-Core Current Sensor Transformer (CTV-A)
	0-50AMP AC Split-Core Current Sensor Transformer (CTV-B)
	0-100AMP AC Split-Core Current Sensor Transformer (CTV-C)
	0-200AMP AC Split-Core Current Sensor Transformer (CTV-D)
<b>AC Voltage Transmitter Sensor</b>	ConLab Volt AC Transmitter Sensor (0 to 150 Volts AC) (SKU: T-CON-ACT-150)
	ConLab Volt AC Transmitter Sensor (0 to 300 Volts AC) (SKU: T-CON-ACT-150)
<b>Air Velocity Transducer</b>	TSI 8455 General Purpose Airflow / Air Velocity Transducer (8455)
	TSI 8465 Windowless Airflow / Air Velocity Transducer (8465)
	TSI 8475 Omni-directional Airflow / Air Velocity Transducer (8475)
<b>Carbon Dioxide Sensor (hold down Ctrl key &amp; click to select multiple items)</b>	Telaire 7001i Carbon Dioxide Sensor (TEL-7001)
	Telaire 7001 CO2 Sensor Output Cable - required with CO2 Sensor (CABLE-CO2)
<b>Compressed Air Flow Meter Sensor</b>	Compressed Air Flow Meter Sensor (for 1 inch pipe) (SKU: T-CDI-5200-10S)
	Compressed Air Flow Meter Sensor (for 2 inch pipe) (SKU: T-CDI-5400-20S)
<b>DC Amperage (hold down Ctrl key &amp; click to select multiple items)</b>	Split-Core Bi-Polar DC Transducer (T-VER-971BP-200)
	4-20 mA Input Cable (CABLE-4-20MA)
	Switched AC Power Adapter (P-AC-1)
<b>DC Voltage Input Cable</b>	0 to 2.5 V DC (CABLE-2.5-STEREO)
	0 to 5 V DC (CABLE-ADAP5)

	0 to 10 V DC (CABLE-ADAP10)
	0 to 10 V DC (CABLE-ADAP24)
<b>Differential Pressure (hold down Ctrl key &amp; click to select multiple items)</b>	Differential Air Pressure & Air Velocity Transducer Sensor with LCD Display (T-VER-PX3UL)
	0-5 Volt DC Input Cable (CABLE-ADAP5)
<b>Temperature Sensors</b>	AC Power Adapter for 3rd Party Sensors up to 400mA @12vdc Power (AC-SENS-1)
	Air/Water/Pipe Temperature Sensor - 1ft cable, 0.5 cm x 2.5 cm round probe (TMC1-HD)
	Air/Water/Pipe Temperature Sensor - 6ft cable, 0.5 cm x 2.5 cm round probe (TMC6-HD)
	Air/Water/Pipe Temperature Sensor - 20ft cable, 0.5 cm x 2.5 cm round probe (TMC20-HD)
	Air/Water/Pipe Temperature Sensor - 50ft cable, 0.5 cm x 2.5 cm round probe (TMC50-HD)
	Air/Water/Pipe Temperature Sensor - 6ft cable, plated copper sensor probe (TMC6-HE)
	Stainless Steel Temperature Sensor - 6 ft cable (TMC6-HC)