Onset Computer Corporation

HOBO U12 Temperature/Relative Humidity/Light/External Data Logger - U12-012

Measures:

Temperature, Relative Humidity, 4-20mA, AC Current, AC Voltage, Air Velocity, Carbon Dioxide, Compressed Air Flow, DC Current, DC Voltage, Gauge Pressure, Kilowatts (kW), Light Intensity, Volatile Organic Compound

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

Qty	1-9	10-99	100+
$US	$140	$130	$119

Contact Onset at 1-800-564-4377

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.

Detailed Specifications:

Measurement range:
Temperature: -20° to 70°C (-4° to 158°F)
RH: 5% to 95% RH
Light intensity: 1 to 3000 footcandles (lumens/ft2) typical; maximum value varies from 1500 to 4500 footcandles (lumens/ft2)
Analog channels:
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)

Accuracy:
Temperature: ± 0.35°C from 0° to 50°C (± 0.63°F from 32° to 122°F), see Plot A
RH: ±2.5% from 10% to 90% RH (typical), to a maximum of ±3.5%, see Plot B
Light intensity: Designed for indoor measurement of relative light levels, see Plot D for light wavelength response
External input channel (see sensor manual): ± 2 mV ± 2.5% of absolute reading

Resolution:
Temperature: 0.03°C at 25°C (0.05°F at 77°F), see Plot A
RH: 0.03% RH

Sample Rate:
1 second to 18 hours, user selectable

Drift:
Temperature: 0.1°C/year (0.2°F/year)
RH: <1% per year typical; RH hysteresis 1%

Response time in airflow of 1 m/s (2.2 mph):
Temperature: 6 minutes, typical to 90%
RH: 1 minute, typical to 90%

Time accuracy: ± 1 minute per month at 25°C (77°F), see Plot C
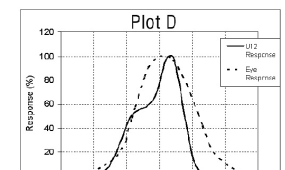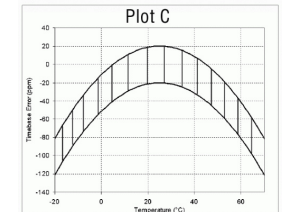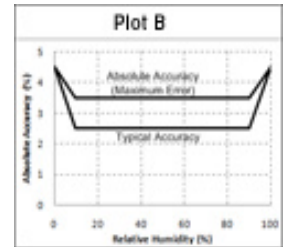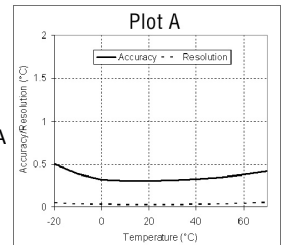
Operating temperature:
Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing)
Launch/readout: 0° to 50°C (32° to 122°F), per USB specification

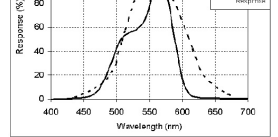**Battery life:** 1 year typical use

Memory: 64K bytes (43,000 12-bit measurements)

Weight: 46 g (1.6 oz)

Plot A

Plot B

Plot C

Plot D

Dimensions: 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).

HOBO® Data Loggers