



HOBO U10 data loggers are an economical choice for indoor temperature and humidity monitoring. Their small size and large memory capacity make these ideal multi-purpose loggers for a wide range of environmental monitoring projects.

Key Advantages:

- Small size for mounting anywhere
- Low cost lets you monitor many locations economically
- Internal sensors for easy deployment

Memory: 52,000 measurements
 Sample rate: 1 second to 18 hours, user-selectable
 Battery life: 1 year (typical)—user-replaceable



Temperature




Measurement range: -20° to 70°C (-4° to 158°F)
 Accuracy: ± 0.54°C from 0° to 50°C (0.97°F from 32° to 122°F)
 Resolution (10-bit): 0.1°@ 25°C (0.2°@ 77°F)
 Response time: 10 minutes (to 90% in airflow of 1 m/s)

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

Relative Humidity (RH)

Measurement range: 25% to 95% RH
 Accuracy: ±3.5% RH from 25% to 95% over range of 5° to 55°C (41° to 131°F)
 Resolution (10-bit): 0.07% RH
 Response time: 6 minutes (to 90% in airflow of 1 m/s)

HOBO U10 Model Comparison

		Temperature	Temp/RH
			
		U10-001	U10-003
Number of Channels		1	2
Internal Sensors	Temperature	yes	yes
	Relative Humidity	--	yes
Size	cm	6.0 x 4.7 x 1.9	6.0 x 4.7 x 1.9
	inches	2.4 x 1.9 x 0.8	2.4 x 1.9 x 0.8
Weight	grams	28	28
	ounces	0.9	0.9

Complete system requires logger and software.

Ordering Information

Data Loggers

HOBO U10 Temp	U10-001
HOBO U10 Temp/RH	U10-003

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


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



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 

Temperature

Measurement range: -20° to 70°C (-4° to 158°F)
 Accuracy: ± 0.35°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: ±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/ft²) typical
 0-32,300 lumens/m² [0-3,000 footcandles (lumens/ft²)]

External Input

External sensors for temperature, AC current, AC voltage, CO₂, 4-20 mA, 0-10 VDC
(see sensors page 57)

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

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

CO₂**

Telaire CO ₂ /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 for details.



HOBO U14 LCD data loggers display and record temperature and humidity conditions. They are well-suited for use in manufacturing, processing, and storage environments where reliable monitoring and documentation of specific temp/RH conditions are critical.

Key Advantages:

- Real-time display of temperature and relative humidity
- Alarm display and output ensure timely notification of out-of-range conditions
- Two models to choose from—Internal Temp/RH or External Temp/RH sensors
- Optional protective case for outdoor environments
- Optional Remote Alarm and Autodialer
- Fast data offload via USB

Memory: 43,000 measurements
 Sample rate: 1 second to 18 hours
 Battery life: 1-year (typical)—user-replaceable
 Operating range: -20° to 50°C (-4° to 122°F) 0 to 100% RH non-condensing



Weatherproof case (CASE-4x) required for outdoor use. HOBO U14-001 is not suitable for outdoor use.

Internal Temperature Measurement

Temperature Measurement

Range: -20° to 50°C (-4° to 122°F)
 Accuracy: ±0.21°C from 0° to 50°C (±0.38°F from 32° to 122°F)
 Resolution (12 bit): 0.03°C @ 25°C (0.05° @ 77°F)
 Response time: 15 minutes (to 90% in airflow of 1 m/s)

Internal RH Measurement

Range: 0 - 100% RH, -20° to 50°C (-4° to 122°F)
 Accuracy: ±2.5% typical, 3.5% maximum, from 10 to 90% RH
 Resolution (12 bit): 0.03% RH @ 25°C (77°F)
 Response time: 2 minutes (to 90% in airflow of 1 m/s)

External Temperature

Temperature Measurement

Range: -40° to 100°C (-40° to 212°F) for sensor tip only
 Accuracy: ±0.2°C from 0° to 50°C (±0.36°F from 32° to 122°F)
 Resolution (12-bit): 0.03°C @ 25°C (0.05° @ 77°F)
 Response time: 2 minutes (to 90% in airflow of 1 m/s)



***Last two digits of product number indicate sensor cable length (in meters).**



12-bit Temperature Probe

S-TMB-M002*
 S-TMB-M006*
 S-TMB-M017*



**External Temperature/
RH Probe**
S-THB-M002*
S-THB-M008*

Temperature Measurement

Range: -40° to 75°C (-40°F to 167°F)
Accuracy: ±0.21°C from 0° to 50°C (0.38°F from 32° to 122°F)
Resolution (12 bit): 0.03°C @ 25°C (0.05°F @ 77°F)
Response time: 5 minutes (to 90% in airflow of 1 m/s)

RH Measurement

Range: 0 - 100% RH, -40° to 75°C (-40° to 167°F)
Accuracy: ±2.5% typical, 3.5% maximum, from 10 to 90% RH
Resolution (10 bit): 0.1% RH @ 25°C (77°F)
Response time: 10 minutes (to 90% in airflow of 1 m/s) with protective cap



***Last two digits of product number indicate sensor cable length (in meters).**



**Remote Alarm
ARA**

Remote Alarm

- Adjustable audible alarm level (soft/loud)
- Self-test confirms proper indicator operation
- Two inputs provide alarm notification for separate zones
- 1 year battery life (typical)—user-replaceable
- Battery status indication



**Auto Dialer
AVD-45**

Auto Dialer

- Dials up to 4 different numbers
- Transmits either voice or numeric messages (for pagers)
- Automatically redials busy or unanswered numbers (up to 10 times for each number)
- AC powered (AC adapter included)
- Internal 9V alkaline battery provides 4 hours of stand-by power
- Works alone or in conjunction with remote alarm



**Protective Case
for LCD Logger
CASE-4x**
1.7 x 12.7 x 5.7 cm
(6.75 x 2.25 in)
315.2 g (11.2 oz)




Protective Case

- Tested to NEMA 4X (IP65) Standards
- External Temperature or Temperature/RH sensor and alarm relay cables feed through watertight grommets
- Easy data readout via removable watertight fitting with O-ring seal
- Hook and loop tape secures LCD logger inside case
- Materials: Polycarbonate body and cover—UV stabilized

Note: Protective Case is for use with the U14-002 HOB0 LCD Data Logger with external input from remote Temperature or Temperature/RH sensors. Check the HOB0 LCD Sensor specifications to assure that the unprotected external sensor is recommended for your operating environment.

NIST-traceable temperature accuracy certification is available. (See page 72)

HOBO U14 Model Comparison

		Internal Temp/RH 	External Temp or Temp/RH 
		U14-001	U14-002
Internal Sensors	Temperature	yes	--
	Relative Humidity	yes	--
External Sensor	Temperature	--	yes
	Relative Humidity	--	yes
Size	cm	12.4 x 9.1 x 3.0	12.4 x 9.1 x 3.0
	inches	4.9 x 3.6 x 1.2	4.9 x 3.6 x 1.2
Weight	grams	170	170
	ounces	6	6

External Sensors sold separately. See pages 8 and 9.

Data Loggers/ Indoor Environments

Ordering Information

Data Loggers

HOBO U14 Temp/RH (Internal Temp/RH)	U14-001
HOBO U14 Temp/RH (External Temp or Temp/RH)	U14-002

Software

HOBOWare Pro Software (Windows/Mac)	BHW-PRO-CD
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Sensors

External Temperature Probe	S-TMB-M002 S-TMB-M006 S-TMB-M017
External Temperature/RH Probe	S-THB-M002 S-THB-M008

Communications and Accessories

Two-Zone Remote Alarm	ARA
Protective Case for LCD Logger	CASE-4x
Auto Dialer	AVD-45
HOBO U-Shuttle*	U-DT-1

*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.




HOBO U12 Stainless temperature data loggers are ideal for food, pharmaceutical, autoclave, and other applications where high-accuracy temperature data is critical. They can withstand process conditions from pasteurization to flash freezing and washdown.

Key Advantages:

- High-accuracy, extended temperature range
- Suitable for high pressure applications to 2200psi
- Fast readout via direct USB interface



Memory: 43,000 measurements
 Sample rate: 1 second to 18 hours, user-selectable
 Battery life: 3-years (typical)—factory-replaceable 

Temperature Measurement

range: -40° to 125°C (-40° to 257°F)
 Accuracy: ± 0.25°C from 0° to 50°C (0.45°F from 32° to 122°F)
 Resolution 12 bit: 0.02°@ 25°C (0.04°@ 77°F)
 Response time:
 U12-015: 10 minutes
 (to 90% in airflow of 1 m/s)
 U12-015: 3.5 minutes
 (to 90% in water)

U12-015-02: 2.25 minutes
 (to 90% in airflow of 1m/s)
 U12-015-02: 20 seconds
 (to 90% in water)

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



HOBO U12 Stainless Temperature Logger U12-015
 101.6 x 17.5 mm diameter
 (4.0 x 0.69 in diameter)



HOBO U12 Stainless Temperature Logger 5 inch Probe U12-015-02
 12.4 x 0.4 cm diameter
 (4.9 x 0.16 in diameter)

Complete system requires logger and software.

Ordering Information

Data Loggers

HOBO U12 Stainless Temperature Logger	U12-015
HOBO U12 Stainless Temperature Logger 5" Probe	U12-015-02

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*

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





Thermocouple Logger
HOB0 U12 J,K, S, T
U12-014
 5.8 x 7.4 x 2.2 cm
 (2.3 x 2.9 x 0.85 in)
 46 g (1.6 oz)

The HOB0 U12 Thermocouple data logger provides exceptional measurement flexibility by accepting J, K, S, or T thermocouple probes.

Key Advantages:

- High-accuracy J, K, S, T thermocouple recordings
- Automatic cold-junction compensation
- Accepts industry-standard subminiature thermocouple connectors

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



Temperature	Temperature Ranges	Accuracy	Resolution (12-bit)
with J Thermocouple	0° to 750°C (32° to 1382°F)	± 2.5°C or 0.5% of reading, whichever is greater	0.21° @ 375°C (0.38° @ 707°F)
with K Thermocouple	0° to 1250°C (32° to 2282°F)	± 4.0°C or 0.5% of reading, whichever is greater	0.32° @ 625°C (0.58° @ 1157°F)
with S Thermocouple	-50° to 1760°C (-58° to 3200°F)	± 6.0°C or 0.5% of reading, whichever is greater	0.44° @ 855°C (0.79° @ 1571°F)
with T Thermocouple	-200° to 100°C (-328° to 212°F)	± 1.5°C (± 2.7°F)	0.10° @ -50°C (0.18° @ -58°F)

Data Loggers/ Indoor Environments



Beaded Thermocouple Probes on Spool Caddies
TC6-J, TC6-K, TC6-T
 1.8 m (6 ft)

Probe and Wires

Exposed-junction thermocouple probes include 6 ft of insulated 30-AWG wire wound on an integrated spool caddy/ subminiature connector

100' coils of insulated 24-AWG thermocouple wire



Thermocouple Wire
TCW100-J,
TCW100-K, and TCW100-T
 30.5 cm (100 ft.)

Temperature	Temperature Ranges	Accuracy
Type J TEFLON insulation:	0° to 250°C (32° to 482°F)	± 2.2°C (± 4°F)
Type K glass braid insulation:	0° to 285°C (32° to 545°F)	± 2.2°C (± 4°F)
	285° to 482°C (545° to 900°F)	± 0.75%
Type T TEFLON insulation:	-200° to -65°C (-330° to -85°F)	± 1.5%
	-65° to 130°C (85° to 270°F)	± 1.0°C (± 1.8°F)
	130 to 180°C (270° to 356°F)	± 0.75%



**High-temperature
Stainless Steel Probe**
— Type K
TCP6-K12
30.5 cm (12 in)

Temperature Ranges	Accuracy
0° to 293°C (32° to 559°F)	±2.2°C (±4°F)
293° to 900°C (559° to 1650°F)	±0.75%**

** **Percentage is of degrees above or below 0°C (32°F)**

- 12 in 304 stainless-steel probe; 3/16in diameter with isolated thermocouple
- 1 in Handle with spring-type strain relief
- 6 ft 19-AWG cable



**Subminiature
Thermocouple Connectors**
SMC-J, SMC-K, SMC-T

- Accept stranded or solid wire up to 20 AWG Internal silicone grommet for strain relief
- Captive cover screws
- Write-on window
- Type J, K, and T versions available

Complete system requires logger, temperature probe(s), and software.

Ordering Information

Thermocouple Logger

HOBO U12 J, K, S, T

U12-014

Thermocouple Probes and Wires

1.8 m (6 ft) Beaded Thermocouple with connector—J Type

TC6-J

1.8 m (6 ft) Beaded Thermocouple with connector—K Type

TC6-K

1.8 m (6 ft) Beaded Thermocouple with connector—T Type

TC6-T

30.5 cm (12 in) Stainless-Steel Probe Thermocouple—K Type

TCP6-K12

30.5 m (100 ft) of 24-AWG Thermocouple wire—J Type

TCW100-J

30.5 m (100 ft) of 24-AWG Thermocouple wire—K Type

TCW100-K

30.5 m (100 ft) of 24-AWG Thermocouple wire—T Type

TCW100-T

Thermocouple Connectors

Subminiature Type J

SMC-J

Subminiature Type K

SMC-K

Subminiature Type T

SMC-T

Software

HOBOware Pro Software (Windows/Mac)

BHW-PRO-CD

Optional Communications

HOBO U-Shuttle*

U-DT-1

*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.



HOBO Time-of-Use Loggers come in a choice of four models that record state changes, light on/off, motor run-times, and/or events.

Key Advantages:

- Compact size for easy deployment
- Internal light, motor field, or magnetic reed switch sensors
- State and event channels with external inputs provides extra reliability

Memory: 26,000 to 43,000 measurements
(based on state-change interval)
Battery: 1-year (typical) – user-replaceable



State Logger

Options for monitoring:

- Internal magnetic reed switch and external magnet
- External input cable for monitoring DC voltages up to 15V contact closure, open collector output, or presence of positive DC
- Can be used with the CSV-A8 Current Switch for motor on/off

Spacing between magnet and logger:
Contact closure resistance:

Open ≥ 0.75 in, Closed ≤ 0.25 in
Open > 300 k ohms, Closed < 15 k ohm

Light On/Off Logger

Internal light sensor monitors on/off of fluorescent or incandescent lamps. The light sensitivity is peaked in the forward range and can be utilized to minimize the effect of other light sources when trying to determine the on/off state of a particular light source.

Light intensity threshold:

10 to 100 lumens/m² [0.93 to 9.3 footcandles (lumens/ft²) (fluorescent light)], adjustable. For incandescent lamps the threshold is about ten times greater than above.

Motor On/Off Logger

Internal sensor monitors the AC field generated by motors, transformers, or a single wire carrying a large AC current. The logger can be conveniently mounted directly on a motor housing without requiring access to the motor internals.

Note that this logger must be mounted very close to the field source as magnetic intensities fall off rapidly with increasing distance from their source.

AC magnetic field threshold:

750 m Gauss @ 60 Hz (depending on distance and orientation)

3-State Logger/1-Event

Simultaneously monitors and logs state changes in up to three locations, as well as one time/date-stamped event. Can be used with CSV-A8 Current Switch.

State channels (3)

External contact input: Passive relay switch or contact closure
Minimum duration: 1 second (open or closed)

Event channel (1)

External contact input: Passive relay switch or contact closure
Event resolution: 1 second
Minimum pulse length: 2.5 milliseconds
Maximum total cable: 32 m (105 ft) (if using state and event channels)
64 m (210 ft) (if using state channels only)

Contact closure resistance:

Open > 300 k ohms
Closed < 10 k ohms



AC Current Switch

- Can be used with any state channel on U9-001 or U11-001 loggers
- Installs around a current-carrying wire to provide a relay signal indicating equipment on/off
- Adjustable threshold provides maximum application flexibility
- UL listed



AC Current Switch

CSV-A8

5.9 x 5.1 x 2.3 cm
(2.32 x 2.0 x 0.92 in)

Amperage range: 0.5 to 175 Amps continuous
 Sensor supply voltage: Induced from monitored conductor, with no external power required
 Isolation: 600 VAC rms (max voltage when monitoring an uninsulated conductor)
 Status output ratings: N.O. 1.0A @ 30 VAC/DC max, not polarity-sensitive

HOBO Time-of-Use Logger Comparison

		State	Light On/Off	Motor On/Off	3 State/1 Event
		U9-001	U9-002	U9-004	U11-001
Number of Channels		1	1	1	4
Internal Sensors	State Open/Closed	yes	--	--	3 State /1 Event
	Light On/Off	--	yes	--	--
	Motor On/off	--	--	yes	--
External Sensor	Motor On/Off	yes	--	--	yes
Size	cm	6.0 x 4.7 x 1.9	6.0 x 4.7 x 1.9	6.0 x 4.7 x 1.9	5.8 x 7.4 x 2.2
	inches	2.4 x 1.9 x 0.8	2.4 x 1.9 x 0.8	2.4 x 1.9 x 0.8	2.3 x 2.9 x 0.9
Weight	grams	25	25	29	50
	ounces	0.8	0.8	1	1.8

Complete system requires logger and software.

Ordering Information

Data Loggers

HOBO U9 State U9-001
 HOBO U9 Light On/Off U9-002
 HOBO U9 Motor On/Off U9-004
 HOBO U11 3 State/1 Event U11-001

Software

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

Sensors

AC Current Switch CSV-A8

Optional Communications

HOBO U-Shuttle* U-DT-1

*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.



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The HOBO UX120 4-Channel Pulse Input Data Logger is a highly versatile, 4-channel energy data logger that combines the functionality of four separate energy loggers into one compact unit. It enables energy management professionals – from energy auditors to building commissioners – to easily track building energy consumption, equipment runtimes, and water and gas flow rates.

Key Advantages:

- Simultaneously measures and records pulse signals, events, state changes, and runtimes
- Stores over 4 million measurements, enabling longer deployments with fewer site visits
- Streamlines deployment via a range of start/stop options, logger status LEDs, and high-speed USB 2.0 data offload
- Works with Onset’s E50B2 Power & Energy Meter to measure Power Factor (PF), Reactive Power (VAR), Watt Hours (Wh) and more

Measurements:

- Pulse Signals
- Event
- Runtime
- State
- AC Current
- AC Voltage
- Amp Hour
- Kilowatt Hours
- Kilowatts
- Motor On/Off
- Power Factor
- Volt-Amps
- Watt Hours
- Watts
- Volt-Amp Reactive
- Volt-Amp Reactive Hour

Unparalleled Flexibility

The HOBO UX120 offers unparalleled energy measurement flexibility at a fraction of the cost of current multi-channel pulse logging solutions. It is an ideal toolbox product for energy monitoring applications where fast deployment and a range of energy measurements are needed. For example, while the logger is monitoring power use on one channel, it can independently track gas flow on another, pump runtimes on another, and the open and closed status of a door on yet another.

Streamlined Deployment

The HOBO UX120 Pulse Logger provides a number of features that provide users with greater control over their deployments. For example, users can start and stop the logger via software or push buttons, and set the logger so it continues to log/overwrite data when the memory is full. It also provides diagnostics via on-board LEDs to assure logger operation/status which aids the installation process, and enables high-speed data offloads via its USB 2.0 interface.



HOBO 4-Channel Pulse Input		
	UX120-017	UX120-017M
Memory	520,192 measurements (assumes 8-bit)	4,124,672 measurements (assumes 8-bit)
Sampling Rate	1 second to 18 hours	
Battery life	1 year, typical with logging intervals greater than 1 minute and normally open contacts 2 AA (user replaceable)	
External Contact Input	Electronic solid state switch closure or logic driven digital signals to 24V	
Max Pulse Frequency	120 Hz	
Max State, Event, Runtime Frequency	1 Hz	
Resolution	Pulse: 1 pulse, Runtime: 1 second, State and Event: 1 state or event	
Bits	4 - 32 bits depending on pulse rate and logging interval	
Lockout time	0 to 1 second in 100 ms steps	
Operating temperature range	Logging: -40° to 70°C (-40° to 158°F); 0 to 95% RH (non-condensing)	
Weight	149 g (5.26 oz)	
Size	11.4 x 6.3 x 3.3 cm (4.5 x 2.5 x 1.3 inches)	
Measurements logged	AC Current (A), AC Voltage (V), Amp Hour (Ah), Event, Kilowatt Hours (kWh), Kilowatts (kW), Motor On/Off, Power Factor (PF), Pulse Input, Runtime, Volt-Amp Reactive (VAR), Volt-Amp Reactive Hour (VARh), Volt-Amps (VA), Watt Hours (Wh), Watts (W)	

Ordering Information			
Logger			
HOBO UX120 Pulse Logger (standard memory)	UX120-017	KWh	WattNode Wye config 208/240 T-WNB-3Y-208
HOBO UX120 Pulse Logger (expanded memory)	UX120-017M		WattNode Wye 208/240 opt P3 T-WNB-3Y-208P
			WattNode Delta/Wye config 208/240 T-WNB-3D-240
			WattNode Delta/Wye config 480 T-WNB-3D-480
Software			"B" Series Voltage Lead Set A-WNB-LEADSET
HOBOware Pro Software (Windows/Mac)	BHW-PRO-CD		Veris 1-phase, 300 Amp T-VER-8051-300
			Veris 3-phase, 800 Amp T-VER-8053-800
Optional Communications			
HOBO U-Shuttle*	U-DT-1	Water Flow	
		Water Flow Meter	T-MINOL-130
Sensors			
E50B2 Power & Energy Meter	T-VER-E50B2	Motor on/off	
Measurements: AC Current, AC Voltage, Amp Hour, Amps, Kilowatt Hours, Kilowatts, Power Factor, Volt-Amp Reactive, Volt-Amp Reactive Hour, Volt-Amps, Volts, Watt Hours, Watts		AC Current Switch Sensor	CSV-A8
		Accessories	
		For HOBO UX120 Pulse Logger	
		Spare terminal blocks	A-UX120-TERM-BLOCK
		For E50B2 Power & Energy Meter	
		Single phase fuse kit	T-VER-AH02
		Wiring kit	A-E50B2-LEADSET

*Requires HOBOWare Pro software, see page 52 for details.
HOBOWare includes USB interface cable.

