

HOBO UX120 Plug Load Logger

Measures power and energy consumption of 120V office equipment plug loads

Onset's HOBO Plug Load Logger is a high-accuracy, easy-to-deploy data logger that measures and records the power and energy consumption of 120V plug loads from office equipment, vending machines, and other devices.

The logger provides 0.5% measurement accuracy with a measurement resolution of 1 watt, making it an ideal choice for building audits where detailed energy use data is required. The rugged housing is designed to withstand the rigors of real-world handling, providing reliable performance despite bumps, drops, and use under desks.

Supported Measurements: RMS voltage, RMS current, active power, active energy, apparent power, and power factor

Key Advantages:

- 0.5% measurement accuracy enables more reliable plug load energy use data
- "Meter Mode" provides instant viewing of real-time plug load variables
- Large memory enables faster logging intervals for more comprehensive plug load profiles
- Battery back-up ensures logged data remains intact in the event of a power outage or load failure
- Full-featured LCD display provides visual diagnostics for easy deployment
- Factory calibrated (see user's manual for details)



Minimum System Requirements:



Software



USB cable*

Part number	UX120-018
RMS Voltage Accuracy, RMS Current Accuracy, Active Power Accuracy, Power Factor Accuracy	0.5% up to 14 Amp continuous; up to 1.0% over 14 Amp when equipment being monitored is at 100% duty cycle
Power Factor Accuracy	±0.02
Drift	Up to 0.5% typical within 1 year
Memory	4 MB (1.4 million measurements, maximum)
Logging rate	1 second to 18 hours, 12 minutes, 15 seconds
Sampling rate	60 Hz or 16.67 mS single-cycle
Battery life	2 years with line power; 6 months battery only (no line power) with logging rate of 1 minute or greater operating at 25°C (77°F)
Power source	Line-powered with 0.92 m (3 ft) AC power cord or two AAA 1.5 V alkaline batteries, user replaceable
Resolution	1 Watt Load at 120 V AC 15 Amp
Operating temperature range	Logging: 5° to 40°C (41° to 104°F); 0 to 95% RH (non-condensing)
Dimensions	13.97 x 7.62 x 4.75 cm (5.5 x 3 x 1.87 in.)

*USB cable included with software

HOBO UX120 4-Channel Analog Logger

Flexible, Accurate, 4-channel Analog Logger

The HOBO UX120-006M Analog Logger is a high-performance, LCD display data logger for building performance monitoring applications.

As Onset's highest-accuracy data logger, it provides twice the accuracy of previous models, a deployment-friendly LCD, and flexible support up to four external sensors for measuring temperature, current, CO₂, voltage, and more.

Supported Measurements: Temperature, 4-20mA, AC Current, AC Voltage, Air Velocity, Carbon Dioxide, Compressed Air Flow, DC Current, DC Voltage, Gauge Pressure, Kilowatts, Volatile Organic Compound (sensors sold separately)



Key Advantages:

- Twice the accuracy over previous models
- 16-bit resolution
- Flexible support for a wide range of external sensors
- LCD confirms logger operation and displays near real-time measurement data
- Provides minimum, maximum, average, and standard deviation logging options
- On-screen alarms notify you when a sensor reading exceeds set thresholds
- Stores 1.9 million measurements for longer deployments between offloads

Minimum System Requirements:



Software



USB cable*

Part number	UX120-006M (4-Channel Analog)
Memory	1.9 Million
Logging Rate	1 second to 18 hours, user selectable
Logging Modes	Normal, Burst, Statistics
Memory Modes	Wrap when full or stop when full
Time Accuracy	±1 minute per month at 25°C (77°F)
Battery Life	1 year typical with logging rate of 1 minute and sampling interval of 15 seconds or greater, user replaceable, 2 AAA
Dimensions	10.8 x 5.41 x 2.54 cm (4.25 x 2.13 x 1 in.)
Operating Range	Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing)
Accuracy	±0.1 mV ±0.1% of reading
CE Compliant	Yes

*USB cable included with software

HOBO® UX120 4-Channel Thermocouple Logger

Log type J, K, T, E, R, S, B, or N thermocouples

The HOBO UX120 Thermocouple Logger is a four-channel LCD data logger for measuring and recording temperature in a range of monitoring applications. The logger makes it easy and convenient to record temperatures over a broad range (-260 to 1820° C) and can accept up to four J, K, T, E, R, S, B, or N type probes.

In addition to accepting four thermocouple probes, the logger features an internal temperature sensor for logging ambient temperatures, further extending the application possibilities.

Supported Measurements: Temperature

Key Advantages:

- Easy-to-view LCD display confirms logger operation and battery status
- Near real-time readout of current temperatures as well as minimum, maximum, average and standard deviation statistics
- On-screen alarms notify you if temperatures exceed high or low thresholds
- Large memory capacity capable of storing 1.9 million measurements
- Start, stop, and restart pushbuttons
- User-upgradeable firmware



Minimum System Requirements:



Software



USB cable*

Part number	UX120-014M (Thermocouple)		
Internal Temperature			
Range	-20° to 70°C (-4° to 158°F)		
Accuracy	±0.21°C from 0° to 50°C (±0.38°F from 32° to 122°F)		
Resolution	0.024°C at 25°C (0.04°F at 77°F)		
Drift	<0.1°C (0.18°F) per year		
Logger			
Logging Rate	1 second to 18 hours, 12 minutes, 15 seconds		
Logging Modes	Normal, Burst, Statistics		
Memory Modes	Wrap when full or stop when full		
Time Accuracy	±1 minute per month at 25°C (77°F)		
Battery Life	1 year typical with logging rate of 1 minute and sampling interval of 15 seconds or greater, user replaceable, 2 AAA		
Dimensions	10.8 x 5.41 x 2.54 cm (4.25 x 2.13 x 1 in.)		
Operating Range	Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing)		
CE Compliant	Yes		
Thermocouple			
(probes sold separately)	Range	Accuracy	Resolution
Type J	-210° to 760°C (-346° to 1,400°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.03°C (0.06°F)
Type K	-260° to 1,370°C (-436° to 2,498°F)	±0.7°C (±1.26°F) ± thermocouple probe accuracy	0.04°C (0.07°F)
Type T	-260° to 400°C (-436° to 752°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.02°C (0.03°F)
Type E	-260° to 950°C (-436° to 1,742°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.03°C at (0.05°F)
Type R	-50° to 1,550°C (-58° to 2,822°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)
Type S	-50° to 1,720°C (-58° to 3,128°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)
Type B	+60° to 1,820°C (1,022° to 3,308°F)	±2.5°C (±4.5°F) ± thermocouple probe accuracy	0.1°C (0.18°F)
Type N	-260° to 1,300°C (-436° to 2,372°F)	±1.0°C (±1.8°F) ± thermocouple probe accuracy	0.06°C (0.11°F)

*USB cable included with software

HOBO® UX120 Pulse Logger

Log pulse signals, events, state changes, and runtimes

The HOBO UX120 4-Channel Pulse 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.

Supported 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

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 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, Reactive Power, Watt Hours, and more

Minimum System Requirements:



Software



USB cable*



Sensor



Part number	UX120-017	UX120-017M
Memory	520,000 measurements	4,000,000 measurements
Sampling rate	1 second to 18 hours	
Battery life	1 year typical, user replaceable, 2 AA	
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)	
Dimensions	11.4 x 6.3 x 3.3 cm (4.5 x 2.5 x 1.3 inches)	
CE compliant	Yes	

*USB cable included with software

Contact:
Industrial Process Measurement, Inc.
3910 Park Avenue, Unit 7
Edison, NJ 08820
732-632-6400
support@instrumentation2000.com
<http://www.instrumentation2000.com>