



Measurement, Control, and Datalogging Solutions

A 4-channel energy data logger combining the functionality of four separate loggers

-- easily track building energy consumption, equipment runtimes, water and gas flow rates using appropriate sensors.



T-VER-E50B2
(Order separately)

UX120

HOBO® UX120 Pulse Data Loggers

The HOBO UX120 Pulse Logger is a highly versatile, 4-channel energy data logger that combines the functionality of four separate data 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. The HOBO UX120 Pulse Logger is available in a standard memory model (UX120-017) capable of 500,000 measurements and an expanded memory version (UX120-017M) capable of over 4,000,000 measurements.

Features:

- Simultaneously measures and records pulse signals, events, state changes, and runtimes
- Stores up to over 4 million measurements, enabling longer deployments with fewer site visits
- Maximum pulse rate – 120 Hz
- Pulse input range – 0 to 24VDC
- Streamlines deployment via a range of start/stop options, logger status LEDs, and high-speed USB 2.0 data offload
- Works with Onset's Energy & Power Meter to measure Power Factor (PF), Reactive Power (VAR), Watt Hours (Wh) and more.

Measurements:

The UX120-017 Data Logger supports the following measurements (sensors sold separately): AC Current, AC Voltage, Amp Hour (Ah), Amps (A), Event, Kilowatt Hours (kWh), Kilowatts (kW), Motor On/Off, Power Factor (PF), Pulse Input, Run-time, Volt-Amp Reactive (VAR), Volt-Amp Reactive Hour (VARh), Volt-Amps (VA), Volts (V), Watt Hours (Wh), Watts (W)

- The T-VER-E50B2 Power & Energy Meter combines exceptional performance and easy installation. Measures Power Factor (PF), Reactive Power (VAR), Watt Hours (Wh) and more. Range: 90-600VAC – Wye or Delta configuration (order separately).

Minimum System Requirements



The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).



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Inputs:

External Contact Input:	Electronic solid state switch closure or logic driven digital signals to 24 V
Maximum Pulse Frequency:	120 Hz
Maximum State, Event, Runtime Frequency:	1 Hz
Bits:	4–32 bits depending on pulse rate and logging interval
Maximum Pulses Per Interval:	7,863,960 (using maximum logging rate)
Driven Logic Signal:	Input Low: ≤ 0.4 V; Input High: 3 to 24 V
Absolute Maximum Rating:	Maximum Voltage: 25 V DC Minimum Voltage: -0.3 V DC
Solid State Switch Closure:	Input Low: < 10 K Ω ; Input High: > 500 K Ω
Internal Weak Pull-Up:	100 K Ω
Input Impedance:	Solid state switch closure: 100 K Ω pull up; Driven signal: 4.5 K Ω
Minimum Pulse Width:	Contact closure duration: 500 μ S; Driven logic signal: 100 μ S
Lockout Time:	0 to 1 second in 100 ms steps
Edge Detection:	Falling edge, Schmitt Trigger buffer
Preferred Switch State:	Normally open or Logic "1" state

Logging:

Resolution:	Pulse: 1 pulse, Runtime: 1 second, State and Event: 1 State or Event
Logging Rate:	1 second to 18 hours, 12 minutes, 15 seconds
Time Accuracy:	± 1 minute per month at 25°C (see Plot A on next page)
Battery Life:	1 year, typical with logging intervals greater than 1 minute and normally open contacts

Memory:

Memory	UX120-017: 520,192 measurements (assumes 8-bit) UX120-017M: 4,124,672 measurements (assumes 8-bit)
Download Type	USB 2.0 interface
Download Time	30 seconds for UX120-017, 1.5 minutes for UX120-017M

Physical:

Operating Range	Logging: -40° to 70°C; 0 to 95% RH (non-condensing) Launch/Readout: 0° to 50°C per USB specification
Weight/Size/Environment	149g / 11.4 x 6.3 x 3.3 cm / IP50
Environment	Indoor

Description

HOBO UX120 Pulse Logger
HOBO UX120 Pulse Logger (Extended Memory)
HOBOWare Software
(sensors sold separately)

Order Code

UX120-017
UX120-017M
BHW-PRO-CD



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