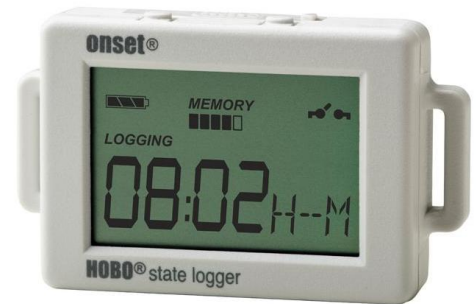# HOBO® UX90-001 Data Logger

State

The HOBO State/Pulse/Event/Runtime data logger records state changes,electronic pulses and mechanical or electrical contact closures from external sensing devices. This data logger is ideal for monitoring energy consumption, mechanical equipment operation, and water and gas flow. The HOBO UX90-001 State Data Logger is available in a standard 128 KB memory model (UX90-001) capable of 84,650 measurements and an expanded 512KB memory version (UX90-001M) capable of over 346,795 measurements.

Key Advantages:

- One logger with 4 recording modes
- Internal reed switch can be used to determine when a door or window is open or closed
- Compatible with a wide range of external sensors
- Ships with 2.5 mm input cable
- Compatible with HOBOware and HOBOware Pro software for logger setup, graphing and analysis

HOBO UX90-001 Data Logger Specifications

Internal Sensor

Maximum state, event, runtime frequency: 1 Hz
Preferred switch state: No magnet present (normally open)

External Input

External contact input: Electronic solid state switch closure or logic driven voltage output
Range: 0 to 3 V DC (USB powered), 0 to 2.5 V DC (battery powered)
Maximum pulse frequency: 50 Hz
Maximum state, event, runtime frequency: 1 Hz
Pulse, event lockout time: 0 to 1 second in 100 ms steps
Solid state switch closure: Input Low: < 10 K ; Input High: > 500 K
Internal weak pull-up: 100 K
Input impedance: Solid state switch closure: 100 K pull up

Logger

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 (77°F) (see Plot A)
Battery life: 1 year, typical with logging intervals greater than 1 minute and normally open contacts

Memory
UX90-001: 128 KB (84,650 measurements, maximum)
UX90-001M: 512 KB (346,795 measurements, maximum)

Download type: USB 2.0 interface

Download time: 10 seconds for 128 KB; 30 seconds for 512 KB

Logger Operating Range
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

LCD: LCD is visible from: 0° to 50°C (32° to 122°F); the LCD may react slowly or go blank in temperatures outside this range
Size: 3.66 x 5.94 x 1.52 cm (1.44 x 2.34 x 0.6 in.)
Weight: 23 g (0.81 oz)
Environmental rating: IP50

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

Contact Us

Sales (8am to 5pm ET, Monday through Friday)
▶ Email sales@onsetcomp.com
▶ Call 1-508-759-9500
▶ In U.S. toll free 1-800-564-4377
▶ Fax 1-508-759-9100

Technical Support (8am to 6pm ET, Monday through Friday)
▶ Contact Product Support www.onsetcomp.com/support/contact
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