

Motor On/Off Data Logger



Records motor on/off conditions within an AC magnetic field with its internal sensor, or mechanical dry contact closures from external sensing devices. This logger is ideal for tracking the usage and runtimes of motors, pumps, compressors, and other equipment.

Features:

- Dual internal motor sensors gives better sensitivity for well-shielded motors
- External input for measuring mechanical contact closures when signal strength is low
- Auto-calibration of ON and OFF thresholds ensures reliable readings
- Compatible with HOBOware and HOBOware Prosoftware for logger setup and graphing & analysis

What's In The Box

- HOBO UX90-004 Motor On/Off Data Logger
- Command[™] strip
- Double-sided tape
- Hook & loop strap





Motor On/Off Data Logger

Technical Specifications:

Internal Motor Sensor

AC Magnetic Field Threshold : >40 mGauss at 60 Hz

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 State and Runtime

Frequency : 1 Hz

Solid State Switch Closure : Input Low: $< 10 \text{ K}\Omega$; Input High: $> 500 \text{ K}\Omega$

Internal Weak Pull-Up : 100 KΩ

Input Impedance : Solid state switch closure: $100 \text{ K}\Omega$ pull up

Logger

Resolution : Pulse: 1 pulse, Runtime: 1 second, State and Event: 1 State or

Event

Memory : Modes Wrap when full or stop when full

Start Modes : Immediate, push button, date & time, or next interval

Stop Modes : When memory full, push button, or date & time
Time Accuracy : ±1 minute per month at 25°C (77°F) (see Plot A)

Power Source : One 3V CR2032 lithium battery and USB cable

Battery Life : 1 year, typical with logging intervals greater than 1 minute and

normally open contacts

Memory : UX90-004: 128 KB (84,650 measurements, maximum) UX90-

004M: 512 KB (346,795 measurements, maximum)

Download Type : USB 2.0 interface

Full Memory 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 8.48 x 1.52 cm (1.44 x 3.34 x 0.6 in.)

Weight : 30 g (1.06 oz)

Environmental Rating : Ip50

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