OM-50 Series Portable Low Cost Data Loggers Part of the NOMAD® Family

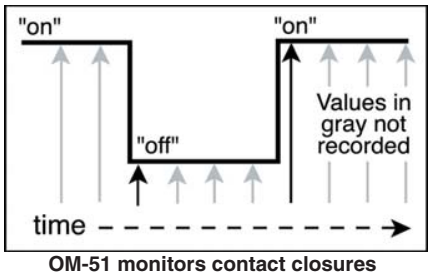
OM-50 Series

$76

Basic Unit

- **Model OM-51 Monitors Contact Closures**
- **Model OM-52 for Motor On/Off Applications**
- **Model OM-53 Monitors Light On/Off Conditions**
- **Easy-to Use Windows Software**

OM-50 Series data loggers record when devices change between on and off or open and closed states and store the time, date and state for each change (the black arrows in the diagram below show when data is recorded).



OM-51 monitors contact closures

These data loggers have two LED indicator lights, one red and one green. One of these LED's will blink every two seconds. If the contact is open or the device is off, the red LED will blink. If the contact is closed or the device is on, then the green LED will blink. Although the LED's blink every other second, the state is checked every half second, with state changes recorded as detected. Simply connect the data logger to your PC using the RS-232 cable and download stored data using the Windows software.

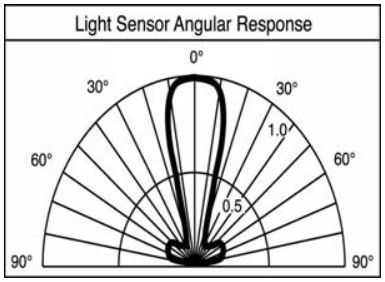
Model OM-51 State Data logger has two inputs, a magnetic reed switch located in the middle of the hinge of the case (opposite the connectors), and an external contact closure input. The data logger records contact closures/openings of its internal magnetic reed switch and contact closures (open/shorted) in a cable connected to its 2.5 mm stereo jack.

OM-51 data logger, $76, shown larger than actual size

The OM-51 data logger detects the cable's open/shorted condition by applying a positive voltage pulse to the tip (white wire in the cable).

Model OM-52 Motor On/Off data logger uses an AC magnetic field threshold sensor to determine if a motor is on or off. The AC magnetic field threshold is approximately 2 Gauss at 60 Hz. Position the logger so that its green LED blinks when the motor is on. It is usually best to mount the datalogger on the side of the motor.

Model OM-53 Light On/Off Datalogger has a light intensity threshold that is adjustable from approximately 10 to 100 lumens.



MADE IN USA 1 YEAR WARRANTY

The threshold is adjusted by turning a light sensitivity control on the front of the data logger.

The OM-53's light sensitivity is peaked in the forward direction as shown in the light sensor angular response plot below.

This directionality can be taken advantage of to minimize the effect of other light sources when trying to determine the on/off state of a particular light source. The light sensor is on the side of the case next to the green LED. Note, however, that the sensor detects light directed at the front of the case.

Specifications

GENERAL

Measurement Capacity: 2000 state changes
Time Resolution: 0.5 seconds
Minimum State Duration: 0.5 seconds
Memory Modes: Stop when full, wrap-around when full (user selectable)
Memory: Non-volatile EEPROM memory retains data even if battery fails
Operation: Blinking LED lights show current state
Time Accuracy: ±1 minute per week at 20°C (68°F)
Operating Temperature: -20 to 70°C (-4 to 158°F)
Operating Humidity: 0 to 95% non-condensing
Storage Temperature: -20 to 70°C (-4 to 158°F)
Power: 3.6 V lithium battery
Battery Life: 1 year
Dimensions: 68 x 48 x 19 mm (2.4 H x 1.9 W x 0.8 D)
Weight: 29 g (1 oz)

Measurement Specifications

OM-51 STATE DATA LOGGER

Inputs (two inputs):
A magnetic sensor mounted in the datalogger and an external cable for detecting contact closures (external cable is included).

Spacing Between Data logger and External Magnet:
Closed, less than or equal to 3/4"; open, greater than or equal to 3/4" (external magnet is included)

External Contact Input:
Passive relay switch or contact closure

OM-52 MOTOR ON/OFF DATA LOGGER

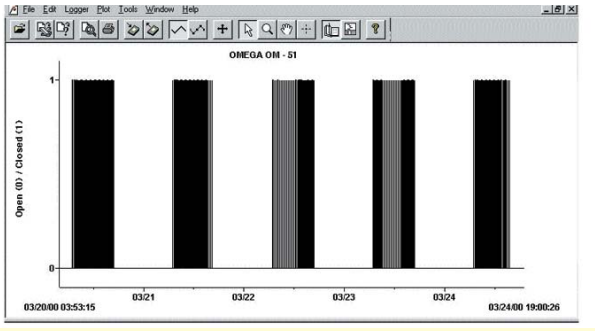
Sensor Type:
AC field sensor Magnetic Field Threshold: approx. 2 Gauss at 60 Hz; the logger will typically work with AC motors drawing 1A or more

Mounting:
Mount the data logger on or close to the motor housing or to one phase of the power line to the equipment being monitored

Angular Response:
The data logger is sensitive to that part of the AC field that is perpendicular to the datalogger's face

OM-53 LIGHT ON/OFF DATA LOGGER

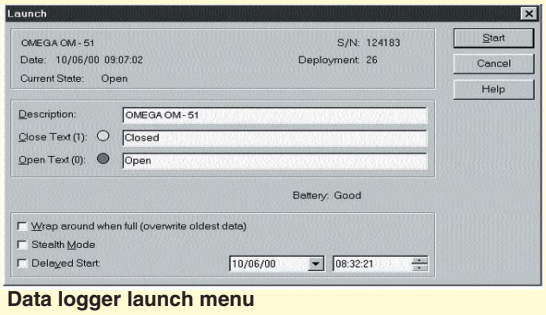
Light Threshold Adjustment Range:
Approx. 10 to 300 foot-candles (fluorescent light); the data logger's sensitivity to incandescent light is about ten times greater (see plot on previous page)



OM-51 Time-based data plot

OM-52, $76, shown larger than actual size

OM-53, $69, shown larger than actual size



Data logger launch menu

ALL MODELS AVAILABLE FOR FAST DELIVERY!

To Order *(Specify Model Number)*		
Model No.	**Price**	**Description**
OM-51	**$76**	State data logger
OM-52	**76**	Motor on/off data logger
OM-53	**69**	Light on/off data logger
RD-TEMP-SW-A	**55**	Windows 98/NT/2000/XP software and RS-232 interface cable with DB9F termination for OM-50 Series data loggers
OM-40-BATT	**15**	Replacement 3.6V lithium battery for OM-50 Series (package of 10)

Data loggers are supplied with complete operator's manual and mounting kit (hook/loop, magnet and tape). Model OM-51 State Data logger includes external magnet and external input cable for detecting contact closures.

Ordering Example: OM-51** state data logger and **RD-TEMP-SW-A** Windows software, $76 + 55 = **$131.

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• pH and Conductivity

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