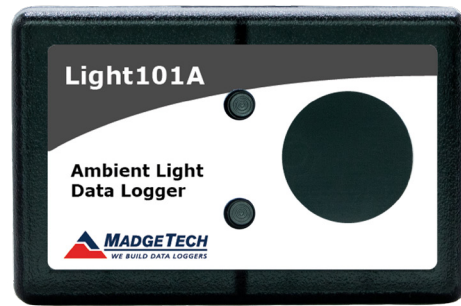# Light101A
Ambient Light Data Logger

The Light101A data logger is specifically engineered to record photoperiods, tracking the duration and occurrence of light being on or off. This makes it an essential tool for studies requiring precise measurements of light cycles, such as plant growth research, animal behavior studies, and controlling light exposure in controlled environment facilities.

Ideal for use in a variety of settings, the Light101A offers an efficient alternative to manual recording, providing reliable and automatic documentation of light cycles.

Featuring a compact design, the Light101A supports a programmable reading rate, boasts a long battery life of up to 3 years, and can store more than 400,000 state changes.

The MadgeTech Data Logger Software enhances the functionality of the Light101A by facilitating easy device configuration, data download, and comprehensive analysis through graphical displays and customized reports, ensuring detailed and accurate monitoring of photoperiods.

FEATURES

- 3 Year Battery Life
- Simple Photoperiod Records
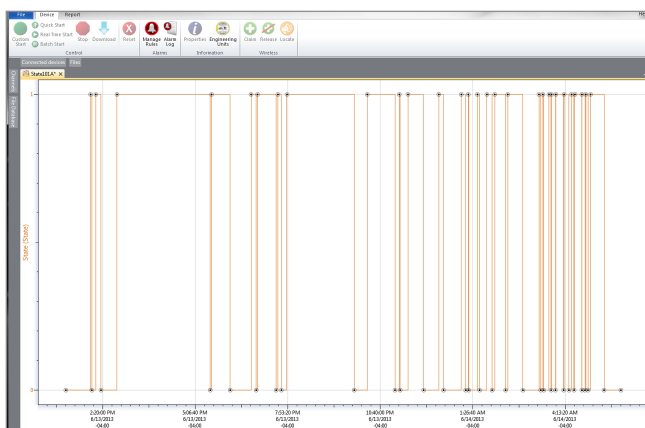- Create automatic documentation of light cycles
- 465,578 Reading Storage Capacity

BENEFITS

- Long-Term Field Deployment
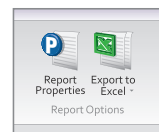- Simple Setup and Installation
- Minimal Long-Term Maintenance

APPLICATIONS

- Animal Behavior Studies
- Agricultural Studies
- Building Management
- Horticulture
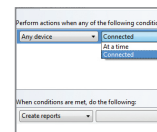- Zoology
- Museum & Gallery Light Studies
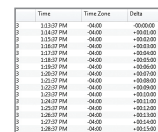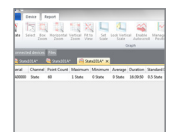
MadgeTech 4 Software Features

Graph View

Export to Excel

Automation

Tabular Data View

Statistics

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)

- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Summary view

Specifications

Specifications are subject to change without notice. Specific warranty remedy limitations apply.

LIGHT

Sensor Type	Digital

Input is sampled only at time of reading rate. State change between reading rates is undetectable. State is recorded only if changes at input since last reading.

GENERAL

Start Modes	Immediate start Delay start up to 18 months Multiple pushbutton start/stop
Stop Modes	Manual through software Timed (specific date and time)
Multiple Start/Stop Mode	Start and stop the device multiple times without having to download data or communicate with a PC
Real Time Recording	May be used with PC to monitor and record data in real time
Password Protection	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password
Memory	465,578 readings; software configurable memory wrap
Wrap Around	Yes
Reading Rate	1 reading every 1 second up to 1 reading every 24 hours
Engineering Units	Native measurement units can be scaled to display measurement units of another type such as on/off, open/closed and more

BATTERY WARNING: Fire, explosion and severe burn hazard. Do not recharge, disassemble, heat above 100 °C (212 °F), incinerate, crush, or expose contents to water.

LED Functionality	**Green LED Blinks:** 10 seconds to indicate logging and 15 seconds to indicate Delay or Manual Start Mode - Standby (waiting to start) **Red LED Blinks:** 10 seconds to indicate low battery and/or full memory
LEDs	2 status LEDs
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	3.6 V lithium battery included; user replaceable
Battery Life	3 years typical, dependent upon frequency and duty cycle
Time Accuracy	±1 minute/month at 25 °C (77 °F) (Stand alone mode)
Computer Interface	USB (interface cable required); 115,200 baud
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 4.2.25.16 or later Secure Software version 4.2.24.16 or later
Operating Environment	-40 °C to +80 °C (-40 °F to +176 °F) 0 %RH to 95 %RH non-condensing
Dimensions	1.4 in x 2.1 in x 0.6 in (35 mm x 54 mm x 15 mm)
Weight	0.8 oz (24 g)
Material	Polycarbonate
Approvals	CE

Ordering Information

Light101A	PN 902458-00	Ambient Light Data Logger
IFC200	PN 900298-00	USB interface cable
LTC-7PN	PN 900352-00	Replacement battery for the Light101A