

# 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

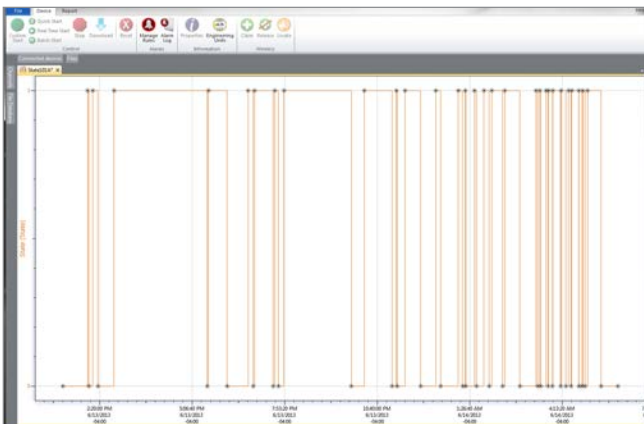
### BENEFITS

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

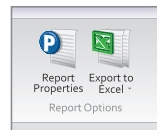
### APPLICATIONS

- Animal Behavior Studies
- Agricultural Studies
- Building Management
- Horticulture
- Zoology
- Museum & Gallery Light Studies

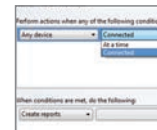
## MadgeTech 4 Software Features



Graph View



Export to Excel

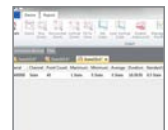


Automation



Time	Time Zone	Data
1:00:00 PM	-04:00	-04:00:00
1:00:01 PM	-04:00	-04:00:00
1:00:02 PM	-04:00	-04:00:00
1:00:03 PM	-04:00	-04:00:00
1:00:04 PM	-04:00	-04:00:00
1:00:05 PM	-04:00	-04:00:00
1:00:06 PM	-04:00	-04:00:00
1:00:07 PM	-04:00	-04:00:00
1:00:08 PM	-04:00	-04:00:00
1:00:09 PM	-04:00	-04:00:00
1:00:10 PM	-04:00	-04:00:00
1:00:11 PM	-04:00	-04:00:00
1:00:12 PM	-04:00	-04:00:00
1:00:13 PM	-04:00	-04:00:00
1:00:14 PM	-04:00	-04:00:00
1:00:15 PM	-04:00	-04:00:00
1:00:16 PM	-04:00	-04:00:00
1:00:17 PM	-04:00	-04:00:00
1:00:18 PM	-04:00	-04:00:00
1:00:19 PM	-04:00	-04:00:00
1:00:20 PM	-04:00	-04:00:00
1:00:21 PM	-04:00	-04:00:00
1:00:22 PM	-04:00	-04:00:00
1:00:23 PM	-04:00	-04:00:00
1:00:24 PM	-04:00	-04:00:00
1:00:25 PM	-04:00	-04:00:00
1:00:26 PM	-04:00	-04:00:00
1:00:27 PM	-04:00	-04:00:00
1:00:28 PM	-04:00	-04:00:00
1:00:29 PM	-04:00	-04:00:00
1:00:30 PM	-04:00	-04:00:00

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

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

**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.

## Ordering Information

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

