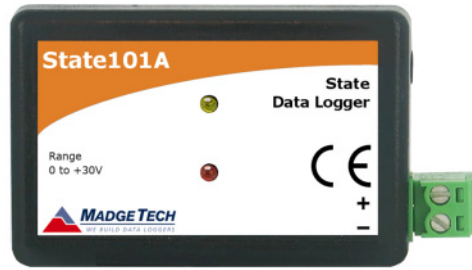


# STATE101A

## STATE DATA LOGGER



The State101A is one of MadgeTech's newest data loggers. It is part of a new series of low cost, state-of-the-art data logging devices. MadgeTech has taken the lead in offering the most advanced, low cost, battery powered data loggers in the world today.

### Features

- 10 Year Battery Life
- 4Hz Second Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- 406,323 Reading Storage Capacity
- Memory Wrap
- Battery Life Indicator
- Optional Password Protection
- Field Upgradeable

### Benefits

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

### Applications

- Heating and Cooling Systems
- Security Systems
- Power Supply On/Off
- Relay or Dry Contact Closure
- TTL High/Low
- Monitoring Gas, Water or Electric Pumps
- Status or State Recording
- Replace Costly Strip Chart Recorders

The State101A offers a 10 year battery life, 4Hz reading rate, a multiple start/stop function, ultra-high speed download capability, 406,323 reading storage capacity, optional memory wrap, battery life indicator, optional password protection and more. The State101A is priced at \$99 each and can be delivered from stock now. Our research has shown that the State101A is second to no other data logger when it comes to price and performance.

Using the MadgeTech Software, starting, stopping and downloading from the State101A is simple and easy. Graphical, tabular and summary data is provided for analysis and data can be viewed in multiple units, using the Engineering Units function. The data can also be automatically exported to Excel® for further calculations.

As the leader in low power data logger technology, MadgeTech continuously improves its products and develops solutions to meet ever-changing challenges. The State101A was designed with our customers in mind. MadgeTech offers free firmware upgrades for the life of the product so that data loggers already deployed in the field can grow with new technological developments. Units do not need to be returned to the factory for upgrades. The user can do this automatically from any PC.

## MADGETECH DATA LOGGER SOFTWARE

**Key**

- A Graph View
- B Tabular Data View
- C Statistics
- D Digital Calibration
- E Copy to Excel®

The screenshot displays the MadgeTech software interface. At the top, there's a window titled 'MadgeTech - [Graph] [Minimized]' showing a graph of 'State' over time. Below the graph is a window titled 'MadgeTech - [Data] [Minimized]' showing a table of data points. To the right, there's a window titled 'State101A Calibration' with fields for 'Device Type', 'Serial Number', and 'Last Calibration Date'. Below that is a window titled 'General Statistics' showing various parameters like 'Start Time', 'End Time', and 'Statistics'. A 'Copy to Excel' button is visible on the right side of the graph window.

- Software Features:**
- Multiple graph overlay
  - Statistics
  - Digital calibration
  - Zoom in/ zoom out
  - Full time zone support
  - Data annotation
  - Min./Max./Average lines
  - Data table view
  - Automatic report generation
  - Summary view
  - Multilingual

# STATE101A SPECIFICATIONS\*

**Input Connection:** Removable screw terminal

**Input Range:** 0 to 30V

**Input Low:** <0.4V

**Input High:** >2.8V

**Internal Weak Pull-Up:** <60µA

**Input Impedance:** >60 KΩ

**Time Resolution:** 4Hz (reading rate selectable in software)

**Reading Rate:** 4Hz to 1 every 24 hours

**Memory:** 406,323 readings; software configurable memory wrap

**Wrap Around:** Yes

**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

**Multiple Start/Stop Mode Activation:** To start the device:  
Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.

To stop the device:  
Press and hold the pushbutton for 5 seconds, the red LED will flash for three seconds and then the green LED will flash for two seconds. The device has stopped logging.

**Real Time Recording:** The device may be used with PC to monitor and record data in real-time

**LED Functionality:** Green LED blinks:  
10 second rate to indicate logging  
15 second rate to indicate delay start mode

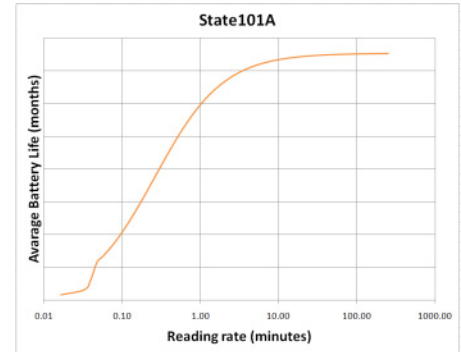
Red LED blinks:  
10 second rate to indicate low battery and/or full memory

**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.

**Engineering Units:** Native measurement units can be scaled to display measurement units of another type such as on/off, open/closed and more.

**Battery Type:** 3.6V lithium battery included; **user replaceable**

**Battery Life:** 10 years typical, dependent upon frequency and duty cycle



Graph display of the device recording in a 25°C environment.

**Time Accuracy:** ±1 minute/month (at 20°C/68°F, stand alone data logging)

**Computer Interface:** USB (interface cable required); 115,200 baud

**Software:** XP SP3/Vista/Windows 7

**Operating Environment:** -40°C to +80°C (-40°F to +176°F), 0%RH to 95%RH non-condensing

**Dimensions:** 1.4" x 2.2" x 0.6" (36mm x 56mm x 16mm)

**Weight:** 0.9 oz (24 g)

**Materials:** ABS Plastic

**Approvals:** CE

**BATTERY WARNING:** WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80°C (176°F).

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY AND REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

## ORDERING INFORMATION

MODEL	DESCRIPTION	PRICE (U.S.)
STATE101A	State Data Logger	\$99.00
IFC200	Software, manual and USB interface cable	\$119.00
LTC-7PN	Replacement battery for State101A	\$10.00

For Quantity Discounts call 603-456-2011 or email [sales@madgetech.com](mailto:sales@madgetech.com)

ASK ABOUT  
OUR OTHER  
DATA  
LOGGERS

Temperature  
Humidity  
Pressure  
pH  
Level  
Shock  
LCD Display  
Pulse/Event/State  
Current  
Voltage  
Wireless  
Intrinsically Safe  
Spectral Vibration  
Motion