

STATE101 State Recorder

FEATURES

- Interfaces to contact closures
- Programmable engineering units
- * Real time operation
- Miniature size
- Reusable
- User-friendly
- Low cost
- CE compliant

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
- Time studies
- Status or state recording
- Replace costly strip chart recorders

State recorders are useful for collecting data on the duration of an event. The State101 can capture any event that lasts longer than one second. Some typical applications for state recorders include the monitoring of a furnace, air



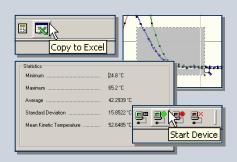
conditioner or pump turning on and off, or even how long a door is left open/closed.

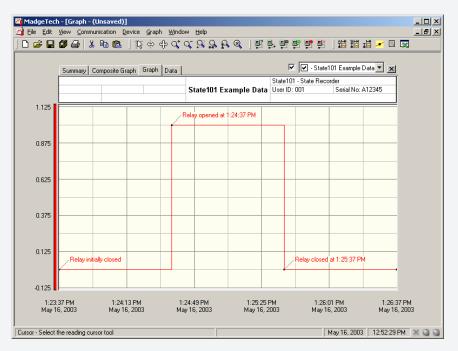
The State101 records a time-stamped value whenever a state of the input signal changes. It samples the input at a user specified time interval and records to memory only if the state had changed from the previous sample. This efficient method of writing to memory maximizes the length of time the device can record.

The State101 can store up to 13,107 time stamped state changes. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere.

SOFTWARE

MadgeTech's Data Recorder
Software is an easy to use
Windows-based software package
that allows the user to effortlessly
collect, display and analyze data.
A variety of powerful tools allow
you to examine, export, and print
professional looking data with just
a click of the mouse.





Demo our software at www.madgetech.com

STATE101 SPECIFICATIONS

Input Connection: Removable screw terminal

Input Low: < 0.4 V Input High: > 2.7 V

Input Range: 0 to 12 VDC continuous

(0 to 30 VDC peak)

Input Impedance: $> 1 \text{ k}\Omega$

Time Resolution: 1 second (reading rate dependent)

Engineering Units: User may define units up to 10 characters

in length. This value is stored within the

aevice

Scale Factor: User may program any desired scaling

factor from $\pm 1.000E-31$ to $\pm 9.999E+31$. The scaling factor is stored within the de-

vice.

Offset Value: User may program any desired offset

value from ±1.0000E-31 to

±9.9999E+31. The offset is stored in

the device.

Real Time Recording: May be used with PC to monitor and

record data in real time

Memory: 13,107 state changes

Reading Interval: 1 reading every second to 1 every 12 hours

Start Time: Software programmable start time and date, up

to six months in advance

Visual Indicator: LED flashes at selected reading rate.

User Replaceable Battery: 1 year typical life at 25 °C

Power: 3.6V lithium battery, included

Data Format: Date and time stamped state changes (on/off),

user defined engineering units

Time Accuracy: ±1 minute/month at 20 °C (RS232 cable not in

use)

Computer Interface: PC serial or RS232C COM (Interface cable re-

quired); 2,400 baud

Software: Windows 95/98/ME/NT/2000/XP based software

Operating Environment: -40 to +80 °C, 0 to 95 %RH non-condensing

Dimensions: 1.4" x 2.6" x 0.6" (36mm x 66mm x 16mm)

Weight: 0.9 oz (24 g)
Material: ABS plastic
Approvals: CE compliant

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212°F, INCINERATE OR EXPOSE CONTENTS TO WATER.

SOFTWARE FEATURES

Multiple Graphs: Simultaneously analyze data from

several units or deployments; easily

switch to a single data series

Real-Time Recording: Collect and display data in real-time

while continuing to log

Graphical Cursor: One click displays readings by time,

value, parameter or sample number

Data Table: Instantly access tabular view for de-

tailed dates, times, values, and an-

notations

Scaling Options: Autoscale function fits data to the

screen, or allows user to manually

enter their own values

Formatting Options: Change colors, line styles, plotting

options, show or hide channels in an

instant

Statistics: Calculate averages, min, max, standard devia-

tion, and mean kinetic temperature with the

touch of a button

Export Data: Export data in a variety of common formats, or

switch to Excel with a single click

Calibration: Fully digital calibration function automatically

stores parameters in device

Logger Configuration: Easy set up and launch of data loggers with

immediate or delayed start, preferred sample

rate, and device ID

Communications: Automatically sets up communications port, or

lets user set configuration

Printing: Automatically print graphical or tabular data

*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

STATE101 State Recorder

IFC110 Software, Manual & 9 pin Computer

Interface Cable

ASK ABOUT OUR OTHER DATA RECORDERS

Temperature Voltage
Humidity Current
Pressure Submersible
pH Intrinsically Safe
Level RF Transmitters
Shock/Vibration Multi-parameter

Pulse/Event



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