

SINGLE CHANNEL TEMPERATURE DATA LOGGER

Miniature

SL51T BUTTON DATA LOGGERS

Sample Rates from 1 minute

Monitor from -40°C to +85°C

www.signatrol.com

Self Contained Temperature Data Logger

Splashproof

TempIT Compatible

INTRODUCTION

The SL51T is self contained single channel temperature data logger with the ability to record up to 2,048 data points. The SL51T will measure from -40°C to +85°C with a typical accuracy of $\pm 1^\circ\text{C}$. They are very small (about the same size as a watch battery) which enables them to be inserted into small items and packages.

The SL50R Button Reader™ interfaces to the RS232 or USB port of a PC and is totally compatible with the TempIT-lite operating software which enables the logger to be set up and the data read and displayed in graphical format. Data can be stored and retrieved at a later time. The software can be up-graded to TempIT-Pro which provides various additional features such as data table view, export data to spreadsheet, email graphs, and automated MKT Calculations etc.



SPECIFICATIONS

| Description | SL51T |
|--------------------------------------|---|
| Sensor - Internal Temperature Sensor | -40°C to +85°C |
| Sensor Accuracy | $\pm 1^\circ\text{C}$ from -30°C to +70° $\pm 1.3^\circ\text{C}$ Outside this band |
| Battery Life | 10 Years or 1 million samples*5 |
| Sample Rates (User Selectable) | 1 to 255 Minutes |
| Memory Size | 2048 Readings |
| Battery | 3.0V Lithium: Non Replaceable |
| Resolution | 8 Bit (0.5°C) |
| Response Time | Typically 90 seconds in circulating air |
| Size | 17mm Diameter x 6mm Height |
| Case Material | 305 Stainless Steel |
| Weight | 4 grams |
| Sealing | IP55 - Water Resistant See protective enclosures for waterproof applications. |
| Communication | RS232 Serial or USB |
| Clock Accuracy | ± 2 Minutes per Month |
| Sampling Methods | Continuous (First in First Out) or Stop When Full*2 |
| Alarms | High and Low |
| Start Delay | Up to 45 days, 1 Minute Resolution |
| Start on Alarm | No |
| Owner Manifest Data | Up to 32 Characters |
| User Manifest Data | Up to 64 Characters |

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Data Logging Solutions

Computer Requirements

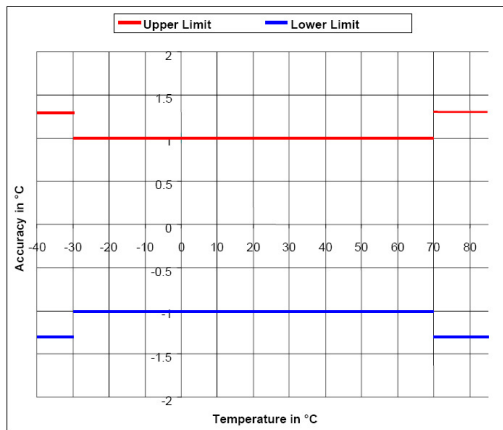
Operating System: Windows 2000, WinXP or Vista32.
IBM PC or compatible computer 500 MHz (1GHz recommended) with 256MB Ram (512MB Recommended)

Software Requirements

TempIT-Lite (free from Signatrol website: www.signatrol.com) or TempIT-Pro

Error Curve

The SL51T actual error depends upon the ambient temperature according to the following graph:

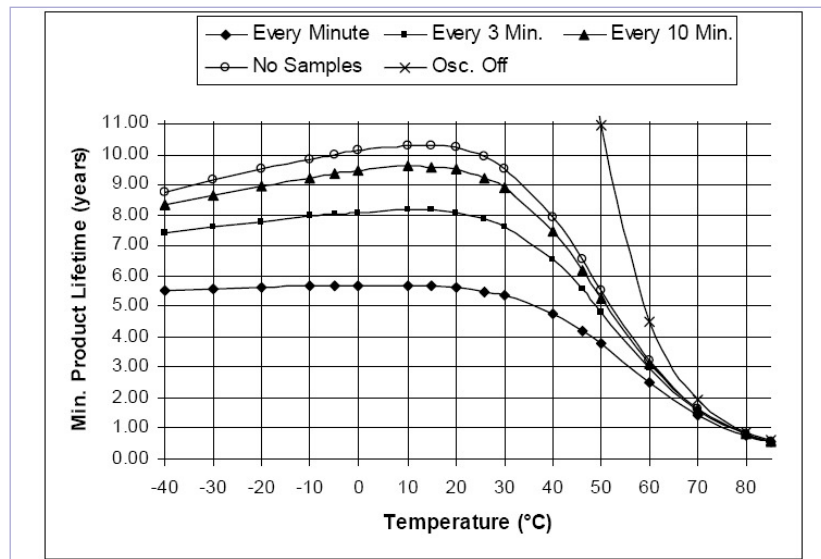


APPLICATIONS

Food processing verification, pharmaceutical storage, laboratories, transportation of temperature sensitive goods, equipment run time, HVAC system testing and balancing, etc.

Battery Life

Battery life is considerably shortened by logging at temperatures in excess of 30°C. The following graph shows the effect of temperature on the battery life of the SL51T.



SL51T Battery life, in years.

ORDER CODE

SL51T Low Cost Data Logging button -40°C to +85°C

STARTER KITS

SL51 - KIT - [] - []

Interface:
USB - USB Interface
232 - RS232 Interface

Number of Data Loggers:
2,3,4 or 5

ACCESSORIES

- SL50-INTERFACE-USB USB Interface cable
- SL50-WALL Wall Mounting Bracket - Pack of 5
- SL50-CLIP Plastic Snap-in Fob - Pack of 5

SOFTWARE

- TempIT-Lite Operating Software (Free from website)
- TempIT-PRO Standard Operating Software