

**INTRODUCTION**

The SL54TH is our lowest cost temperature and relative humidity data logger. It is a self contained and self powered with the ability to record up to 8,000 data points. The SL54TH can operate in a temperature range of -20°C to +85°C and up to 100%RH. 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 user friendly, 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. The TempIT software also automatically calculates dew point from the measured temperature and relative humidity readings.



Shown with optional key fob holder

Starter kits are available. The Starter kits contain up to five data logging buttons, the communication interface, a single plastic holder and a copy of the TempIT-Pro offering savings if all items were to be purchased separately.

**SPECIFICATIONS**

Specification	SL54TH
Power	Internal Source
Battery Life	Dependant upon sample rate and temperature. Typically 5 years at 10 minute sample rate.
Temperature Range	Storage: -40°C to +85°C (-40°F to +185°F) Operating: -20°C to +85°C (-4°F to +185°F)
Temperature Accuracy	±0.5°C from -10°C to +70°C See graph overleaf outside of this range
Temperature Resolution	Low Resolution Mode: 0.5°C High Resolution Mode: 0.07°C
Relative Humidity Accuracy	5%RH
Relative Humidity Resolution	Low Resolution Mode: 0.64% High Resolution Mode: 0.04%
Number of Readings	Low Resolution Mode: 8192 (4096 temperature, 4096 RH) High Resolution Mode: 4096 (2048 temperature, 2048 RH)
Delayed Start	Yes, up to 1 year with 1 minute resolution
Sample Rate	1 per second to 1 per 24 hours
Software Alarms	Yes
Material	305 Stainless Steel
Warranty	1 Year
Dimensions	17mm diameter x 6mm high

## Computer Requirements

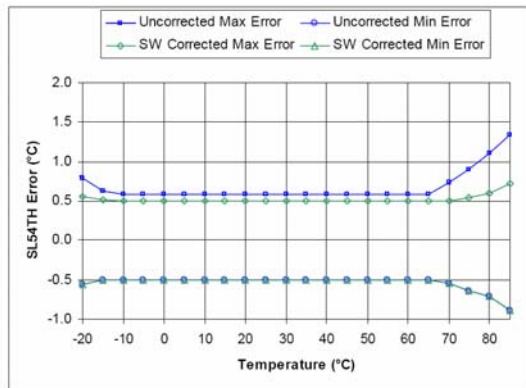
IBM PC or 100% compatible Pentium 75 (minimum) with at least one free serial port or USB interface, 16 MB of RAM memory, colour monitor & pointing device and SL50R Reader running Windows® versions 98, 2000, ME, NT & XP.

## Software Requirements

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

## Temperature Error Curve

The SL54TH actual error depends upon the ambient temperature according to the following graph:



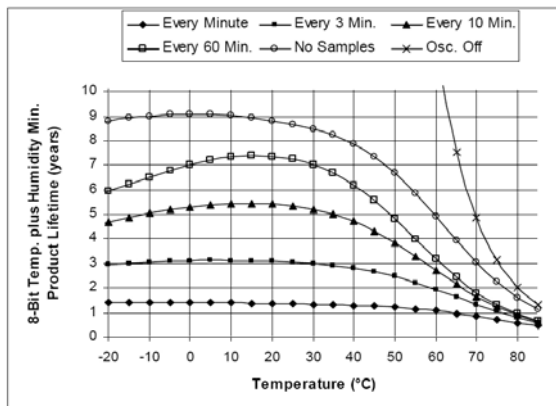
NOTE: The graphs are based on 11-bit data.

## APPLICATIONS

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

## Battery Life

### Minimum Lifetime vs. Temperature, Slow Sampling, Temperature with Humidity



## ORDER CODE

SL54TH Data Logging button

## STARTER KITS

SL54TH - KIT - [ ] - [ ]

Interface:  
USB - USB Interface  
232 - RS232 Interface

Number of Data Loggers:  
1, 2, 3, 4 or 5

Example: SL54TH-KIT-USB-5 is a starter kit containing 5 SL54TH data loggers, a USB communication interface and a copy of the TempIT-Pro software.

## ACCESSORIES

SL50-INTERFACE-232 RS232 Interface cable

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

## Operating / Storage Temperatures

