

SINGLE CHANNEL TEMPERATURE DATA LOGGER

Miniature

SL55T BUTTON DATA LOGGERS LOGGERS

Sample Rates from 2 seconds to 24 hours

Monitor from +15°C to +140°C

www.signatrol.com

Self Contained Temperature Data Logger

Splashproof

TempIT Compatible

INTRODUCTION

The SL55T is a self contained single channel temperature data loggers with the ability to record up to 8,000 data points. The SL55T will measure from +15°C to +140°C with a typical accuracy of $\pm 1.5^\circ\text{C}$. The SL55T-A has an improved accuracy of $\pm 0.5^\circ\text{C}$ over the range +80 to +140°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 main advantage over the SL53T is the ability to measure temperatures up to +140°C.

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, FO, A0 and PU Calculations etc.



SPECIFICATIONS

Description	SL55T / SL55T-A
Sensor - Internal Temperature Sensor	+15°C to +140°C
Sensor Accuracy	SL55T: $\pm 1.5^\circ\text{C}$ from +110°C to +140°C $\pm 7.0^\circ\text{C}$ from +15°C to +110°C SL55T-A: $\pm 0.5^\circ\text{C}$ from +80°C to +140°C $\pm 1.0^\circ\text{C}$ from +15°C to +80°C
Battery Life	Typically 300 hours over 50°C
Sample Rates (User Selectable)	2 seconds to 24 hours* ¹ & ²
Memory Size	8192 - Low Resolution Mode 4096 - High Resolution Mode
Battery	3.0V Lithium: Non Replaceable
Resolution	8 Bit - Low Res Mode (0.5°C) 11 Bit - High Res Mode (0.07°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 Accuray	± 2 Minutes per Month
Sampling Methods	Continuous (First in First Out) or Stop When Full* ²
Alarms	High and Low
Start Delay	Up to 12 months, 1 Minute Resolution
Start on Alarm	Yes
Owner Manifest Data	Up to 32 Characters
User Manifest Data	Up to 64 Characters

*Notes:

1. Sample rate affects battery life as does high temperature exposure - see charts overleaf
2. "Stop when full" is the only option for sample rates less than 1 minute
3. Resolution is programmable as 8 or 11 bit. More data is stored in 8 bit mode and battery life is enhanced
4. Application pending
5. With ambient temperature less than 50°C

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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

ORDER CODE

SL55T Data Logging button 15°C to +140°C

STARTER KITS

SL55 - KIT - [] - []

Interface:
USB - USB Interface
232 - RS232 Interface

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

ORDER CODE

SL55T-A Data Logging button 15°C to +140°C ±0.5°C Accuracy

STARTER KITS

SL55A - KIT - [] - []

Interface:
USB - USB Interface
232 - RS232 Interface

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

SOFTWARE

TempIT-Lite Operating Software (Free from website)

TempIT-PRO Standard Operating Software

ACCESSORIES

SL50-INTERFACE-USB USB Interface cable

SL50-WALL Wall Mounting Bracket - Pack of 5

SL50-CLIP Plastic Snap-in Fob - Pack of 5