



## SL500 Series

### Data Loggers with LCD Real Time Display

The SL500 series of temperature and temperature/humidity data loggers are simple to use, versatile test instruments which can be used in a multitude of applications. Each data logger includes Windows® based software, operator's manual on CD and 3' USB interface cable and battery. Flexible sample rates range from one second to 9 hours.

Windows® based software is easy to set up and use. All functions include sample rate, logging duration, start mode, logging mode and visual high/low temperature alarms. Once logging is complete the data can be downloaded from the logger, plotted & exported to an Excel or text file format for analysis.

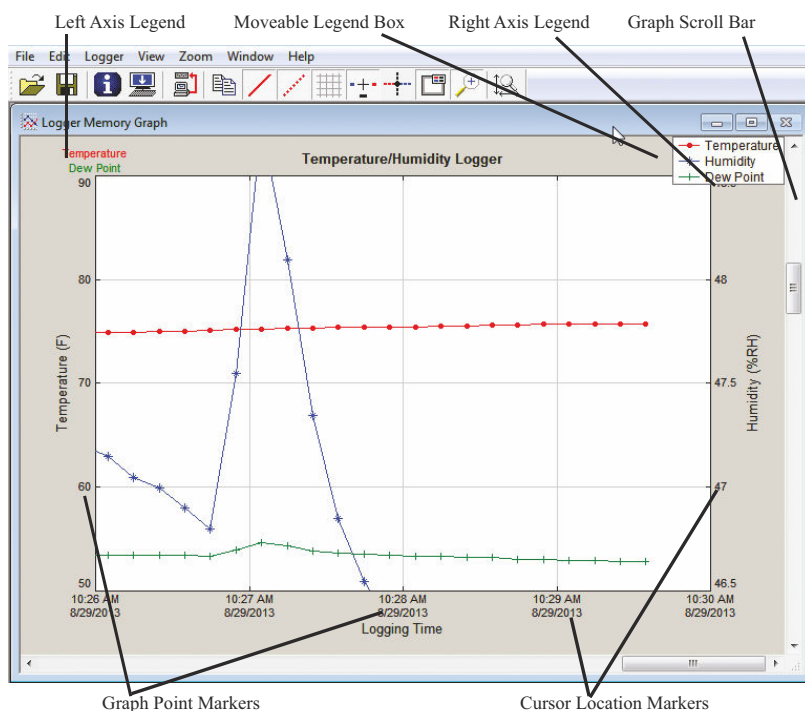
#### Standard Data Logger Features

- LCD real time display of temperature (°F or °C), relative humidity (SL500TH only), time, date, alarm status, logging status and battery life
- User selectable stop on memory full or memory rollover for continuous logging
- Delayed start or push button logging control
- Read data on Logger Display
- Displays alarm icon for high/low alarm status
- Non-volatile EEPROM memory retains data even if battery fails
- USB interface for fast data transfer
- Compact, light-weight, simple to use
- 1-year warranty
- Optional NIST (National Institute of Standards & Technology) calibration available



#### Working the Data Graph

Clicking anywhere within the graph window activates the graph



PART NO.	DESCRIPTION
SL500TC	Thermocouple Temperature Data Logger

## SL500TC Specifications

<b>Sample Point Capacity:</b>	32,638 temperature points.
<b>Includes:</b>	Type K insulated beaded wire thermocouple 40" (1m).
<b>Other Supported Thermocouples:</b>	J, E, N, T, S, R, B, C
<b>Display:</b>	Current reading and time, logging status, alarm status, recorded sample history, battery level, thermocouple type. Displays temperature up to 1999°F or 1999°C.
<b>Alarms:</b>	Visual over and under temperature alarms.
<b>Display Temperature Resolution:</b>	0.2°F (0.1°C) up to 199.9°F or °C. 1°F or 1°C above 200°F or 200°C
<b>Logged Temperature Resolution:</b>	0.2°F (0.1°C)
<b>Thermocouple Impedance:</b>	50 Ohms maximum for specified accuracy
<b>Cold Junction Temperature Accuracy:</b>	+/- 0.5°F (0.3°C)
<b>Calibration:</b>	User single point offset calibration is available through software. Calibration is password protected.
<b>Operating Temperature:</b>	0°F to 131°F (-18°C to 55°C)
<b>Storage Temperature:</b>	-20°F to 175°F (-30°C to 80°C)
<b>Time Accuracy:</b>	+/- 100 ppm @ 75°F (24°C)
<b>Dimensions:</b>	2.15" x 2.25" x 1.2" (5.5cm x 5.7cm x 3.0cm)
<b>Power Source:</b>	3-AAA batteries (Alkaline or Lithium recommended), included.
<b>Battery Life:</b>	2-years average use

## SL500TC Temperature Range

THERMOCOUPLE	ACCURACY	SL500TC TEMPERATURE RANGE
<b>K</b>	+/- 1.3°F (0.7°C)	-418 to 2372°F (-250 to 1300°C)
<b>J</b>	+/- 1.0°F (0.6°C)	-274 to 1832°F (-170 to 1000°C)
<b>E</b>	+/- 0.8°F (0.4°C)	-328 to 1508°F (-200 to 820°C)
<b>N</b>	+/- 1.5°F (0.8°C)	-328 to 2372°F (-200 to 1300°C)
<b>T</b>	+/- 1.3°F (0.7°C)	-328 to 752°F (-200 to 400°C)
<b>S</b>	+/- 5.0°F (2.8°C)	-58 to 3200°F (-50 to 1760°C)
<b>R</b>	+/- 5.0°F (2.8°C)	-58 to 3200°F (-50 to 1760°C)
<b>B</b>	+/- 6.0°F (3.3°C)	68 to 3308°F (20 to 1820°C)
<b>C</b>	+/- 3.0°F (1.7°C)	32 to 4208°F (0 to 2320°C)

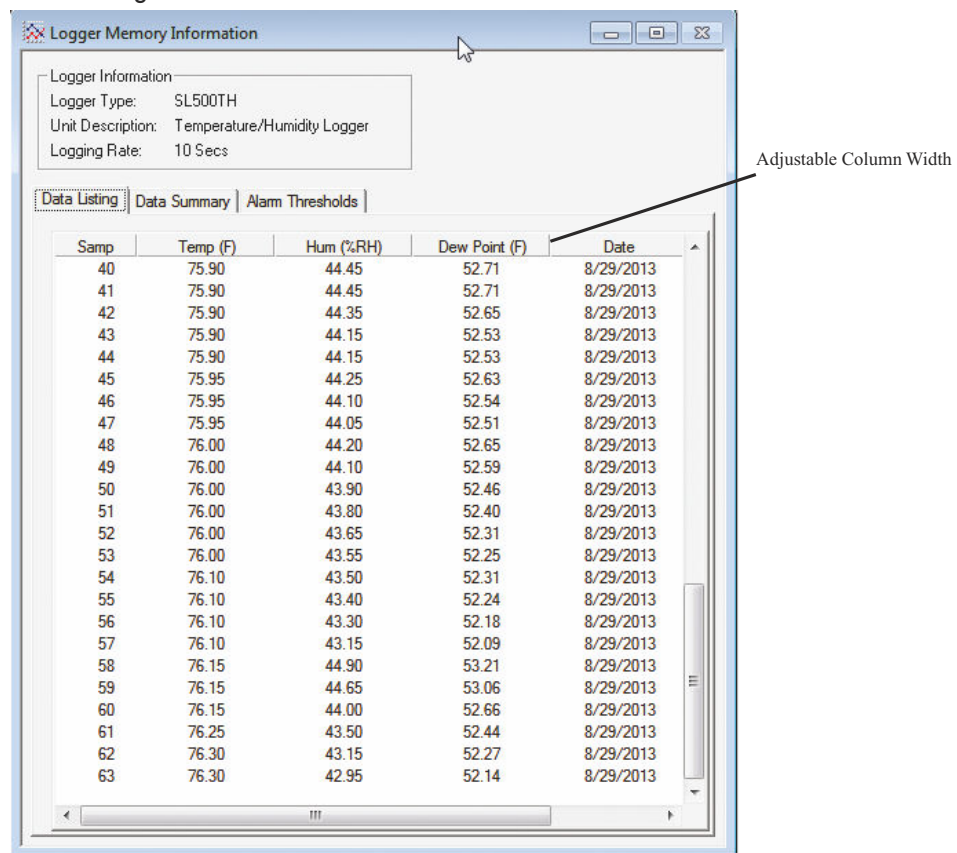
The accuracy stated is for the SL500TC only. Inaccurate readings increase based on the thermocouple wire grade being used. The logger supported range is for stored temperature.

## Features

- Selectable language (English/French/Spanish)
- Software compatibility: Windows® XP / VISTA / 7 / 8
- Minimum system requirements: 800 x 600 resolution, 1 free USB port
- Complete data summary to read statistics and alarm information in a simplified format
- Tabular view of data including detailed dates, times and values of recorded data
- Graph function displays data in graphical format
- Cursor displays exact data of any point in the graphical display
- Magnify data with powerful zoom and auto scale functions
- Auto scale function fits data to screen or allows user to manually enter their own values
- Export data in Excel or text format
- Print graph or text data with print preview and set up options
- Set up and launch data loggers with immediate or delayed start, preferred sample rate, alarm set up and custom ID up to 30 characters
- Password protected calibration function. A calibration window is included in the software to simplify the calibration procedure
- Convenient status displays ID of logger, battery life, memory used, sample rate, duration, alarm condition and logging status
- Menu Bar provides one click access to most software functions

## Data Listing Window

The data listing window is shown below.



Logger Memory Information

Logger Information  
Logger Type: SL500TH  
Unit Description: Temperature/Humidity Logger  
Logging Rate: 10 Secs

Data Listing | Data Summary | Alarm Thresholds

Samp	Temp (F)	Hum (%RH)	Dew Point (F)	Date
40	75.90	44.45	52.71	8/29/2013
41	75.90	44.45	52.71	8/29/2013
42	75.90	44.35	52.65	8/29/2013
43	75.90	44.15	52.53	8/29/2013
44	75.90	44.15	52.53	8/29/2013
45	75.95	44.25	52.63	8/29/2013
46	75.95	44.10	52.54	8/29/2013
47	75.95	44.05	52.51	8/29/2013
48	76.00	44.20	52.65	8/29/2013
49	76.00	44.10	52.59	8/29/2013
50	76.00	43.90	52.46	8/29/2013
51	76.00	43.80	52.40	8/29/2013
52	76.00	43.65	52.31	8/29/2013
53	76.00	43.55	52.25	8/29/2013
54	76.10	43.50	52.31	8/29/2013
55	76.10	43.40	52.24	8/29/2013
56	76.10	43.30	52.18	8/29/2013
57	76.10	43.15	52.09	8/29/2013
58	76.15	44.90	53.21	8/29/2013
59	76.15	44.65	53.06	8/29/2013
60	76.15	44.00	52.66	8/29/2013
61	76.25	43.50	52.44	8/29/2013
62	76.30	43.15	52.27	8/29/2013
63	76.30	42.95	52.14	8/29/2013