DATA LOGGERS

SL120 PROCESS SERIES

www.signatrol.com

- SMALL PHYSICAL SIZE BUT ROBUST
- COST EFFECTIVE 4-20mA MONITORING
- SECURITY TIE OPTION
- OVER VOLTAGE / CURRENT PROTECTED INPUT
- HIGH ACCURACY AND RESOLUTION
- IR DATA TRANSFER FOR FAST DOWNLOAD
- LED AND AUDIO ALARM ANNUNCIATION

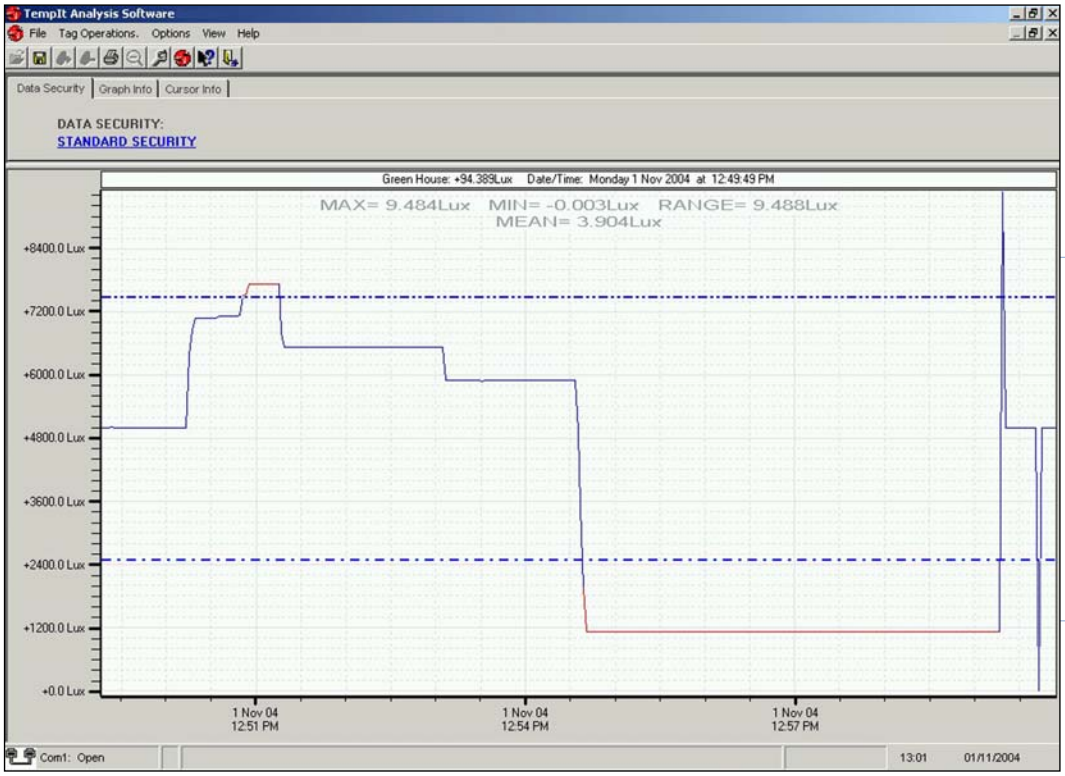
INTRODUCTION

The SL120 process series data loggers are designed to provide a cost effective method of accurately monitoring various process signals. The data logger is simply inserted into an existing 4-20mA loop or connected across the appropriate voltage measurement points (depending upon the variant) with the input lead supplied.

Up to 16000 records can be stored in the logger which uses the powerful TempIT software package, running on a PC, to download the configuration and to retrieve the data. The TempIT software platform displays the data in either electical units (mAs or Volts) or engineering units. High and Low alarms can be set with a programmable time period for which the alarm limit must be exceeded before it is recognised as an alarm. Any alarm condition detected is clearly shown on the chart and, in the case of the SL121 version, is annunciated by flashing an on-board LED visible through the front of the logger and/or an audio 'bleeper'.

The PC operating software, TempIT-Lite is free from our web site or, alternatively, the data loggers can be used with the TempIT-Pro package to provide greater functionality. Either version provides a powerful yet easy to use graphing package as well as providing a platform to set up and issue the logger. Up to 450 characters of manifest information are held within the logger for easy identification and data retrieval.

Example of a graph from the TempIT- Lite software.



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Data Logging Solutions

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Technical Specifications @ 20°C

	SL120i	SL121i	SL120V1	SL121V1	SL120V10	SL121V10
Ambient Temperature Range	-40°C to +70°C					
Measuring Range	0 to 22mA DC		0 to 1VDC		0 to 10VDC	
Accuracy	± 16uA		±0.5mV		±5mV	
Resolution	6uA - 12 Bit		0.2mV - 12 Bit		2.4mV - 12 Bit	
Response Time For 63%	<200mS					
Over Voltage / Current Protection	YES					
Reverse Connection Protection	YES					
Logging Interval	2 Sec to 24 Hours					
Max No of readings	2048	16384*	2048	16384*	2048	16384*[2]
Delayed Start	No	Yes	No	Yes	No	Yes
Programmable Alarm points*[3]	High,Low					
Alarm Indication	SL120 Series - Software only		SL121 Series Red/Green LEDS + Audio 'bleep'*[4]			
Alarm Type	SL120 Series - Software only		SL121 Series Latching / Non Latching			
Download Time (approx)	SL120 Series - 20 Seconds		SL121 Series - 100 seconds for 16000 readings			
Owner Manifest	64 Characters					
User Manifest	450 Characters					
Battery Life	5 years typ @ 20°C*[5]					
Protection	IP50 with encapsulated electronics for all others					
Material	Robust 'key fob' type, light grey ABS					
Enclosure	60 X 35 X 20 mm					
Fixing	Mounting hole to take security tie					
Communications - Logger	Short range infrared link to reader					
Communications - Reader	RS232 Port / USB (order as appropriate)					
Communications Rate	9600 Baud					
Software requirements	TempIT-Lite (FOC) or TempIT-Pro					

*1 Internal 12 bit ADC.
*2 Programmable, in the range of 100 to 16384 samples.
*3 Alarm points have programmable trigger period.
*4 LED blink and audio bleep rate both independently programmable between 2 and 10 seconds, or OFF.
*5 Non replaceable lithium battery with low battery warning via TempIT software. Battery life based on 1 min sample rate, audio bleeper and LEDs off.

MECHANICAL DETAILS
(dimensions in mm)

ORDER CODE

SL120i	Standard DC current Logger
SL121i	4-20mA Logger with Visual, Audible Alarms and Larger Memory
SL120V1	0 to 1VDC Logger
SL121V1	0 to 1VDC Logger with Visual, Audible Alarms and Larger Memory
SL120V10	0 to 10VDC Logger
SL121V10	0 to 10VDC Logger with Visual, Audible Alarms and Larger Memory

Accessories

SL120R-RS232	IR Interface with RS232 cable
SL120R-USB	IR Interface with USB cable
ACC120-03	Extra Input Cable with clips (1.5)
Security Tie	Pack of 50 security ties each uniquely numbered

Software

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

* The SL120 and SL121 can also be used with the TempIT-HS system but does not make use of the high security features.

Every effort has been taken to ensure the accuracy of this specification, however we do not accept responsibility for damage, injury, loss or expense resulting from errors and omissions, and we reserve the right of amendment without notice.