

SL120/121

Instruction Sheet

Introduction

The SL120 series data loggers are designed to provide an accurate record of temperature exposure and are ideal for the monitoring of sensitive goods in transit. The temperature sensor can be internal or external via a connector. Alternatively the SL120I can monitor 4-20 mA signals and comes complete with a connecting lead and crocodile clips to connect the 4-20 mA signal.

Up to 16000 records can be stored in the logger which uses the powerful TempIT-Lite software package, running on a PC, to download the configuration and to retrieve the data. High and Low alarms can be set with a programmable time period for which the alarm limit must exceed before it is recognised as an alarm. Any alarm condition detected is clearly shown on the chart and, in the case of the SL121, is annunciated by flashing an on-board LED and audio 'bleeper'.

The PC operating software, TempIT-Lite is free from our web site alternatively, the SL120 can be used with the Standard TempIT package to provide greater functionality. Both versions provide a powerful yet easy to use graphing package as well as 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.

Hardware Requirements

IBM PC or compatible computer 266 MHz (500+ MHz recommended) with 33MB Ram (64MB Recommended)
SL120R IR Reader with RS232 or USB interface.

Software requirements

TempIT-Lite or TempIT-Pro operating software

Installing the software

Insert the Tempit software disk into the CD drive which will auto run and guide you through the installation procedure. If downloaded from the web site, use explorer to highlight the setup.exe file and double click on the file.

The software will install as TempIt-lite. This can be converted to the standard TempIt software platform by inserting the appropriate enabling code which can be obtained from Signatrol service department.

The software contains a comprehensive 'HELP' function to help guide you through the functions.

Communicating with the SL120/121

The SL120/121 has an infra red communications link that is designed to communicate with a SL120R Reader. The reader has a short range Infra Red serial communications interface that communicates directly to the SL120/121.

Plug the receiver into the relevant comms port (RS232 or USB depending upon the version). Place the SL120/121 face down on the reader in the area outlined on the reader. Power up the PC and run the operating software. Launch the TempIt software.

Operating Procedure.

The standard tag operation is a two stage procedure comprising of the issue, whereby all the relevant operating parameters are downloaded to the Tag and recording is initiated. The second stage is where the data are down-loaded from the Tag to the PC via the reader and are displayed on the Tempit software.

Issue

The relevant parameters are entered into the operating software such as sample rate, alarm parameters etc. The issue tag button is then clicked which sends the configuration data to the Tag. More details can be found in the Help within Tempit under the quick start guide.

WARNING: Issuing the tag erases all data currently stored in the tag, ensure it is saved prior to issue.

Alarms

Two time/temperature alarms are provided, one high and one low. The alarm setpoint is entered prior to issue together with time for which the temperature must be in alarm before the tag recognises it as an alarm. The alarms are 'armed' the first time the temperature goes into the non-alarm state. e.g if the ambient temperature is 20 °C when the Tag is issued and the high alarm is set for 8 °C, the alarm will not be primed until the first time the measured temperature falls below 8 °C. If the delayed start function is selected (SL121 only) this feature is disabled and the alarm becomes immediately active as soon as the future Date/time is reached.

Manifest

There are two manifest areas; owner and user. The owner manifest is entered once only the first time it is issued and remains within the tag for its entire life and is normally used to record details of the owner. The user manifest can take up to 450 characters of manifest data which can be entered and stored within the logger and can be changed for every journey. Manifest data can be free typed at issue and may be used to record such things as the shipment number, the licence number of the truck, the security tie serial number, the drivers name etc.

Data Download

Data are stored within the Tag and can be downloaded by clicking the Download Icon. More details can be found in the Help within Tempit under the quick start guide. Once data are downloaded it is immediately presented on the screen as a graph (In the case of the standard Tempit. a data-table is also displayed). Alarms appear highlighted in red. The Data are not saved at this point and if required data can be saved and printed using the appropriate icon. It is recommended that data are always saved. Mid-journey data can be save and at the end of the journey any new data will be appended to the mid-journey data.

Security Tie

The SL120/121 is equipped with a small ring mounting hole. This is designed to accept a standard security tie which is used to ensure that the logger is not tampered with. The security ties are for single use and must be cut off to remove. Each tie has a unique serial number which should be noted and/or programmed into the Tag manifest. In this way, the user can be sure that the Tag has not been moved from its intended location without the operator knowing. Spare security ties are available from Signatrol Ltd.

Previously Stored Data

Previously stored data can be displayed by selecting file and double clicking on the appropriate file. More details can be found in the Help within Tempit.

Problems?

- No communications with reader: Check red light in the reader is on, if not check connections and check that the correct comm. Port has been selected in the software.
- No communication with Tag: Ensure Tag is face down on the reader in centre lining up with graphic

More details can be found in the Help within Tempit



This Apparatus conforms with:-

The protection requirements of Council Directive 89/336/EEC on the approximation of the laws of Member States relating to electromagnetic compatibility {Article 10 (1)}, as amended by Council Directives 92/31/EEC, 93/68/EEC and changes.

STANDARD:-

BS EN 61326:1998 IEC 61326:1997

Electrical Equipment for measurement, control and laboratory use EMC requirements.

IMMUNITY

ANNEX A (Industrial Locations)

EMISSIONS

CLASS B

If all else fails call us on **08703 800 551**

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