

# IN-TRANSIT TEMPERATURE DATA LOGGERS

SL150 and SL151

SECURE DATA -

COMPACT AND ROBUST -

FULLY SEALED CONSTRUCTION -

WINDOWS SOFTWARE -

UNIQUE WIRELESS DOWNLOADING -

1 YEAR UNCONDITIONAL WARRANTY -

[www.signatrol.com](http://www.signatrol.com)

## INTRODUCTION

The SL150 and SL151 loggers record the precise temperature of goods in transit or storage for later retrieval and analysis. The loggers are used in the QA departments of food, pharmaceutical and other industries to guarantee food safety where vulnerable or high value products are sensitive to incorrect environmental conditions, which in turn could cause irreparable damage to goods that might not be obvious on receipt.

The data logger is sealed in a crevice free and robust plastic tag with no 'bug traps', connections or entries of any kind. The tag can be conveniently located in a packing case, on a pallet or attached directly to the product.

The manifest concerning all the details of the shipment and cargo, together with alarm thresholds, are simply downloaded to the Tag by a wireless interface. The same reader retrieves the stored data which are transferred to a suitable PC or laptop where the flexible software displays all the information in an easy to read format, showing clearly if the consignment has been subjected to alarm conditions.

The data are stored in a form that cannot subsequently be altered or manipulated whilst the tag also records who has read the information thereby ensuring their integrity.



## TYPICAL APPLICATION

A containerised cargo of star fruit was due to arrive direct in to Felixstowe, but the consignment went into Rotterdam and was then put in to a smaller vessel. The consignment arrived at Felixstowe three days later and was transferred to road transport for delivery to its destination.

Star fruit should be carried at 6°C to ensure that it does not ripen too quickly. The data showed that the cargo had been loaded at 9°C and that during the voyage the ships refrigeration system had reduced the temperature of the consignment to 7.5°C to 8°C. When the container was loaded on to the vehicle and the refrigeration system in the container switched on the temperature of the consignment reduced to the specified 6°C. When the consignment was received the temperature was checked and initially the recipient was satisfied because the consignment had arrived within the specified temperature. Later, when the fruit went on sale it was discovered that there was a problem and a significant loss of product but as a result of interrogating the data logger, a successful insurance claim was made.

\* 10 secure, serial numbered, single use security ties are included with each order.

### The Signatrol Unconditional Warranty

So confident are we in the robustness of this product, and its suitability for the rough handling it is likely to receive in transport, that we guarantee the SL150 & SL151 for a period of 12 months against failure and will replace any unit found to have failed irrespective of the cause of the failure.



**Signatrol.com**  
Data Logging Solutions

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## Technical Specifications @ 20 °C

**Power:**  
**Battery Life:**  
**Temperature Range:**  
**Accuracy:**  
**Resolution:**

**SL150**  
 Internal battery  
 4 years  
 -30°C to +70°C  
 ±0.5°C  
 0.06°C (12 bit)

**SL151**  
 Internal battery  
 4 years  
 -30°C to +70°C  
 ±0.5°C  
 0.06°C (12 bit)

**No. of Readings:**  
**Reading rate:**  
**Maximum journey:**  
**Ingress protection:**  
**Measuring range:**  
**Alarms:**  
**Green Active LED:**  
**Red Alarm LED:**  
**Manifest Data:**  
**Response time (TC 63%):**  
**Delayed Start:**  
**Stop when full:**

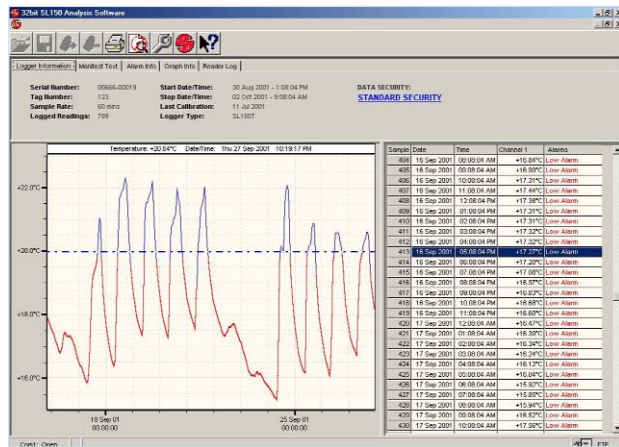
1948  
 1 min to 225 mins  
 11 months  
 IP68  
 -30 to +70°C  
 2  
 No  
 No  
 67 Characters  
 7 Mins  
 No  
 Yes

100 to 16384  
 30 Secs to 100 hrs  
 > 4 Years  
 IP68  
 -30 to +70°C  
 2  
 Yes (Flash Rate 2 to 10 seconds)<sup>\*2</sup>  
 Yes (Flash Rate 2 to 10 seconds)<sup>\*2</sup>  
 450 Characters  
 7 Mins  
 Yes  
 Yes

## MECHANICAL DETAILS

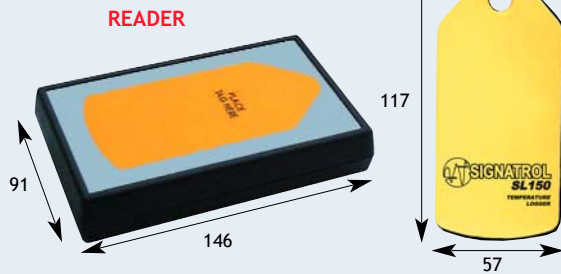
**Material:** Food grade Polystyrene  
**Dimensions:** 117mm x 57mm x 10mm with Mounting Hole

<sup>\*2</sup> Flash Rate < 6 seconds will reduce the overall battery life of this product.



The SL150 reader connects to a standard PC serial port. Easy to use software running under Windows 95, 98, 2000, ME or NT4.0 or WinXP can be used by an operator with minimal training to display data in text or graphical form and be printed on any connected printer.

## MECHANICAL DETAILS (dimensions in mm)



## ORDER CODE

- SL150-KIT** Includes 6 Data Logger tags, 1 wireless reader and software for Windows (includes 12 months software support - Single user)
- SL151-KIT** Includes 6 SL151T Data Logger tags, 1 wireless reader and software for Windows (includes 12 months software support - Single user)
- SL150T** Data Logger tag only
- SL151T** Data Logger tag only
- SL150R** 1 wireless reader and software for Windows supports SL150 and SL151 (includes 12 months software support - Single user)
- TEMPIT** Software for Windows
- TEMPIT LITE** LITE Software for Windows - Free From Website
- SL150-TIE** Pack of 100 security ties