## **ROBUST TEMPERATURE DATA LOGGERS**

SECURE DATA -

COMPACT AND ROBUST -

FULLY SEALED CONSTRUCTION -

- WINDOWS SOFTWARE -
- UNIQUE WIRELESS DOWNLOADING -
- 1 YEAR UNCONDITIONAL WARRANTY -

## INTRODUCTION

signatrol

The SL151T data loggers are single channel temperature data loggers that can be used to record the precise temperature of goods in transit or storage, warehouse monitoring or any application where temperature monitoring is critical. Each data logger is battery powered, takes over 24,000 readings and has red or green alarms to indicate if temperature bounds have been exceeded without the need for a computer at the remote end.

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 data logger 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 SL151T features a magnetic swipe start facility where the data logger is pre-programmed but left in a dormant state until a magnet is swiped down the side of the data logger.

The readings are stored in a secure 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 on 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  $6^{\circ}$ C to ensure that it does not ripen too quickly. The data showed that the cargo had been loaded at  $9^{\circ}$ C and that during the voyage the ships refrigeration system had reduced the temperature of the consignment to 7.5°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  $6^{\circ}$ 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 limits. Later, when the fruit went on sale it was discovered that there was a problem with food quality and there was a significant loss of product but as a result of interrogating the data logger, a successful insurance claim was made.

## 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 SL151T for a period of 12 months against failure and will replace any unit found to have failed irrespective of the cause of the failure.





## Technical Specifications @ 20°C

Power: Battery Life: Temperature Range: Accuracy: Resolution: No. of Readings: Reading rate: Ingress protection: Measuring range:	SL151T Internal battery 4 years -30°C to +60°C ±0.5°C 0.06°C (12 bit) 100 to 24,576 30 Secs to 100 hrs IP68 -30 to +60°C
Alarms: Green Active LED: Red Alarm LED:	Yes (Flash Rate 2 to 10 seconds)*2 Yes (Flash Rate 2 to 10 seconds)*2
Manifest Data: Response time (TC 63%) Delayed Start: Stop when full:	450 Characters 7 Mins Yes Yes
MECHANICAL DETAILS Material: Dimensions:	Food grade ABS 117mm x 57mm x 10mm with Mounting Hole

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





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.