

# TruTrack Data Logger

## Single Temperature Logger Model T-HR mark 4

Single High Resolution (12 bit)  
Temperature Data Logger.



The T-HR is a small Single Channel High Resolution (12 bit) Temperature data logger with an internal sensor housed in a rugged 304 stainless steel case. The temperature sensor is mounted under a 0.6mm dome to give a relatively fast response time.

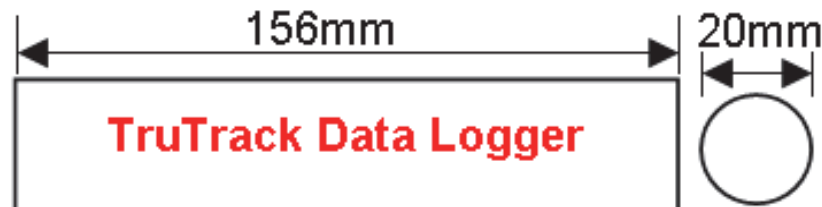
Logging can be configured to: start on time, immediate start, stop when full, loop around (overwrite oldest data).

### Features.

- Over 500,000 samples can be logged!
- Temperature can be set to any combination of Point, Average, Maximum & Minimum readings.
- The battery voltage of the logger can be logged if required.
- The logger can be run in either “Stop when memory is Full”, “Loop Around” mode or set to stop at a future time.
- The logger can be started “Now” or started at a given time in the future.
- The data from any logger that records Temperature can be processed, by the Omni7/OmniLog software, to give daily, weekly and monthly accumulated Grow Degree Day reports for a wide range of horticultural crops.

**Ordering Information.** T-HR Temperature data logger

### T-HR Dimensions.



### Putting into service (Using Omni7 - the original OmniLog differs slightly).

1. From the SWDL-DLC Omni7 software and Download cable kit, **first install the Omni7 software**, then plug the Download cable into a spare USB or serial port on your PC (depending on which type you have). The Omni7 has an excellent “Help”. This will need to be read to enable successful operation of the Omni7 Data Management Program and gain familiarisation of the many advanced features available.
2. Connect the data logger to the download cable. Select the correct connection type on the Omni7 screen. Omni7 requires manual connection and disconnection to the data logger using the Green 'Connect' and Red 'Disconnect' buttons. It will not connect to a data logger automatically. (Refer to “Help” for further assistance.)
3. On the “Logger Control” screen, click on “Channel and Probe Setup” button, and check the Battery Condition, plus other configurations.
4. Now click on the “Start Logger” tab for the final configurations, before putting the logger into service.

**Product Liability.** This information describes our products. It does not constitute guaranteed properties and is not intended to affirm the suitability of a product for a particular application. Due to ongoing research and development, designs, specifications, and documentation are subject to change without notification. Regrettably, omissions and exceptions cannot be completely ruled out. No liability will be accepted for errors, omissions or amendments to this specification. Technical data are always specified by their average values and are based on Standard Calibration Units at 25C, unless otherwise specified. Each product is subject to the 'Conditions of Sale'.

**Warning:** These products are not designed for use in, and should not be used for patient connected applications. In any critical installation an independent fail-safe back-up system must always be implemented.

## Specifications.

Temperature:	Sensor Type	Thermister
	Resolution	See Graph [12 Bit] below
	Absolute accuracy	See Graph below
	Linear accuracy over range	$\pm 0.3^{\circ}\text{C}$ ( $0^{\circ}\text{C}$ to $70^{\circ}\text{C}$ )
	Repeatability	$\pm 0.1^{\circ}\text{C}$
Logger:	Working Temperature	$-30^{\circ}\text{C}$ to $+70^{\circ}\text{C}$
	Storage Temperature	$-30^{\circ}\text{C}$ to $+70^{\circ}\text{C}$
	Sampling Rate	1 second minimum, 10 hours maximum; in 1 second intervals
	Storage capacity	522,240 samples 362 days with 1min logging interval; 4.9 years with 5min logging interval
	Alarms	Two independent Alarms
		Triggered on any combination of six user configurable Alarm Conditions
		Both alarms can be configured to send SMS messages
	Start modes	Alarms can be visually checked using the Omni7/OmniLog Software
		Start immediately / Start on date/time /
	Stop modes	Start on condition (e.g. temperature $> 20^{\circ}\text{C}$ )
		Stop when memory is full / Stop on date/time /
	Logging modes	Loop around (continues logging)
		Each channel can be set to log any combination of:
- Point readings                      - Maximum reading - Average reading                      - Minimum reading		
<b>Warning:</b> When using the Average, Maximum or Minimum reading(s), the logger reads the attached sensor(s) every second. <b>This will reduce battery life.</b>		
Battery	One to Five year life depending on usage as above	
	Using the logger in temperatures below $-5^{\circ}\text{C}$ ( $23^{\circ}\text{F}$ ) will reduce battery life	
	One TruTrack 7.2V lithium battery; User Replaceable	
	The data is retained in the case of battery failure	
Download time	Battery Status Monitor in Omni7/OmniLog software	
	9 minutes 30 seconds for Full Logger	
Case material	304 Stainless tube	
Screw on end cap	Plated brass	
Weight	110g	
Size	20mm diameter X 156mm long	

A **DLC3USB** [USB] or **DLC3** [RS232] **download cable** is required to connect the T-HR to a computer.

