

# TruTrack Data Logger

## SafeT Data Logger

Dual Channel Data Logger  
with Visible Alarm Indication.

The **SafeT** is an economic Dual Channel data logger with sophisticated Operational, Alarm and Communications capabilities. It features an Internal Temperature Channel and an External Channel that can be used with a range of sensors for measuring Temperature, Humidity, Pressure, Light, Wind Direction, Voltage and Current.

The SafeT logger has been designed for users who require a visual check on Alarm Conditions while the logger is running. It can be started by the user in the field. The SafeT can be controlled and interrogated over phone lines using a standard modem link and can dial a Pocket Pager when an Alarm Condition occurs.

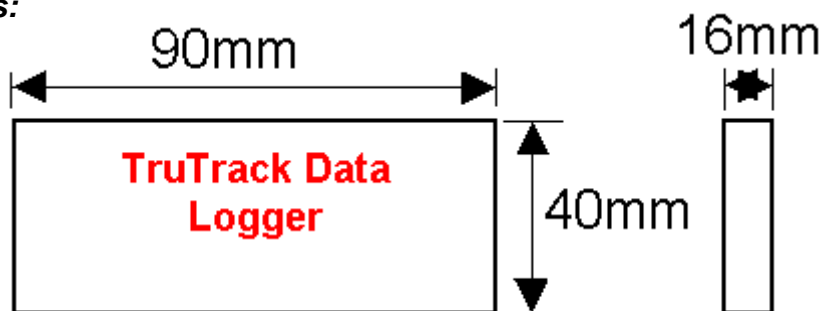


### Features:

- Temperature can be set to any combination of Point, Average, Maximum & Minimum readings.
- Temperature can be logged in high resolution or low resolution mode.
- Low resolution mode is used to increase the number of samples.
- 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 now be processed, by the OmniLog software, to give daily, weekly and monthly accumulated Grow Degree Day reports for a wide range of horticultural crops.

**Ordering Information:**     **SafeT**                      Small Temperature data logger

### SafeT Dimensions:



### Putting into service:

1. From the SWDL-DLC OmniLog software and Download cable kit, **first install the OmniLog software**, then plug the Download cable into a spare serial port on your PC.  
The OmniLog has an excellent "Help". This will need to be read to enable successful operation of the OmniLog Data Management Program and gain familiarisation of the many advanced features available.
2. Connect the TruTrack Logger. Under healthy circumstances, a "Logger Control" screen will load. If the "Logger Control" screen does not load, click on the button labelled "Connect to a Logger for the first time". The OmniLog will run a test on the serial ports and advise if the port the logger is connected to is not available, in which case, plug the logger into an available port. (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 if connecting to the pH-HR or mV-HR loggers.

Now click on the "Start Logger" tab for the final configurations, before putting the logger into service.

## Specifications:

Internal Temperature:	Sensor Type	Thermister
	Linear accuracy over range	±0.4°C (0°C to 70°C)
	Repeatability	±0.1°C
	Long term stability	±0.1°C

General Purpose Analogue Input:	Resolution	10 bit Analog to Digital Converter	
		Data can be saved in 8 bit mode to conserve memory space	
	Pin Out	2.5mm Stereo Jack	
		Ring	Switched Reference voltage
		Tip	Analog Input
	Sleeve	Common Ground	

The Analogue Input can operate in two modes, Absolute and Ratiometric. The mode of operation is determined by the probe type selected for this channel. The probe type is selected using the Channel and Probe Setup Tab of the Logger Control Screen in the Omnilog Software. Temperature (Thermister) , Pressure and Humidity probes are typically Ratiometric. Voltage and current inputs are Absolute.

Maximum readable input voltage in Ratiometric mode 3.0 Volts Nominal (see note)

Maximum readable input voltage in Absolute mode 2.048Volts

Maximum voltage input without damaging logger 5 Volts for short period

Maximum current to be drawn by the external probe 1mA

Input Leakage Current 1uA

Note: The maximum readable voltage in ratiometric mode should be derived from the logger supply (Pin 1) and will therefore decrease over the life of the battery to a minimum of 2.5 Volts.

Logger:	Operating Conditions	-30°C to +70°C		
		0 to 95%RH (relative humidity) Non-condensing		
		Indoor use. IP64		
		Time accuracy: ±5 seconds per day at 20°C		
	Sampling Rate	1 second minimum, 10 hours maximum; in 1 second intervals		
	Storage capacity	1 Channel	2 Channel	
		8 bit Mode	32000	16000
		10 bit Mode	16000	8000
	Alarms	Two independent Alarms		
		Triggered on any combination of six user configurable Alarm Conditions		
		Three alarm status indicators		
		<ul style="list-style-type: none"> <li>• Red – Alarm 1 Triggered</li> <li>• Yellow – Alarm 2 Triggered</li> <li>• Green – No Alarm has occurred</li> </ul>		
		Alarm 1 can be configured to dial a PocketPager		
		Alarms can be visually checked on the logger by pressing an Alarm Test switch		
	Start modes	Start immediately; Start on date/time; Start when user activated; A pinhole switch in the front panel of the logger is used to start the logger in the field		
	Stop modes	Stop when memory is full; Stop on date/time; Loop around (continues logging)		
	Logging modes	Each channel can be set to log any combination of:		
		- Point readings	- Average reading	
		- Maximum reading	- Minimum reading	
	Battery	User Replaceable; Typical one year life		
		The data is retained in the case of battery failure		
		Battery Status Monitor in OmniLog software		
	Weight	50g		
	Size	16mm x 40mm x 90mm		

**A DLC1 [RS232] download cable is required to connect the SafeT to a computer.**

**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, 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 independant fail-safe back-up system must always be implemented.**