

# TruTrack Data Logger

## Temperature / pH Logger Model pH-HR mark 3

Three Channel High Resolution (12 bit) pH and Temperature Data Logger.

The pH-HR is a small Three Channel High Resolution (12 bit) pH and Temperature data logger housed in a rugged 19.05mm 304 stainless steel case. The logger connects to an external pH probe. As many pH probes have a built in Pt-100 temperature sensor there is a logger input for this sensor. It also has an internal temperature sensor inside the logger. Logging can be configured to; start on time, immediate start, stop when full, loop around (over write oldest data).

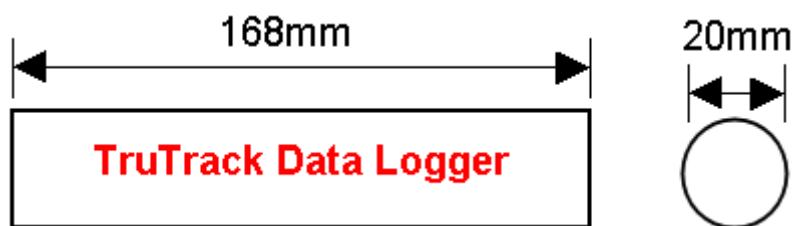


### Features:

- pH and Temperature can be set to any combination of Point, Average, Maximum & Minimum readings.
- pH and 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:**    pH-HR    pH / Temperature data logger

### pH-HR Dimensions:

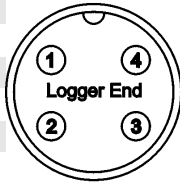
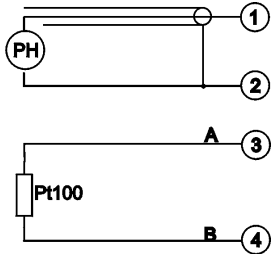


### Putting into service:

1. From the SWDL-DLC OmniLog software and Download cable kit, **first install the OmniLog software**, then plug the Download cable into a spare USB or serial port on your PC (depending on which type you have). 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:

pH Input:	External Sensor Connector	4 pin Switchcraft Plug (EN3C4M)
		Weatherproof; IP66
		1 pH Probe Positive
		2 pH Probe Negative
		3 Pt-100 A
		4 Pt-100 B
	pH range	0 to 14 pH
	Accuracy	±0.1pH
	Resolution	±0.1pH
		
		
Pt-100 Input:	External Sensor Connector	Same 4 pin Switchcraft Plug as pH input
	Pinout	See pH
		1 pH Probe Positive
		2 pH Probe Negative
		3 Pt-100 A
		4 Pt-100 B
	Accuracy	±1°C
	Resolution	±0.5°C
Internal Temperature:	Sensor Type	Thermister
	Linear accuracy over range	±0.3°C (0°C to 70°C)
	Repeatability	±0.1°C
	Long term stability	±0.1°C
Logger:	Working Temperature	-30°C to +70°C
	Storage Temperature	-30°C to +70°C
	Sampling Rate	1 second minimum, 10 hours maximum; in 1 second intervals
	Storage capacity	64,000 8 bit samples; 32,000 12 bit samples
	Alarms	Two independent Alarms
		Triggered on any combination of six user configurable Alarm Conditions
		One alarm can be configured to dial a PocketPager
		Alarms can be visually checked using the OmniLog Software
	Start modes	Start immediately
		Start on date/time
	Stop modes	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
		- Average reading
		- Maximum reading
	- Minimum reading	
Battery	One to Five year life depending on usage	
	One ½AA 3.6V lithium cell; Factory Replaceable	
	The data is retained in the case of battery failure	
	Battery Status Monitor in OmniLog software	
Download time	35 seconds for Full Logger	
Case material	304 Stainless tube	
Screw on end cap	Plated brass	
Weight	110g	
Size	20mm diameter X 168 mm long	

**Please Note:** *The pH-HR data logger is not supplied with a pH sensor. These can be ordered separately from Intech Instruments Ltd if required.*

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