TruTrack Data Logger

100mVolt Logger
Model mV-HR mark 3

Two Channel, High Resolution (12 bit) Voltage Data Logger.

The mV-HR is a small Two Channel High Resolution (12 bit) Voltage data logger housed in a rugged 304 stainless steel case.
It also has an internal temperature sensor for convenient logging of ambient temperature if desired. 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).

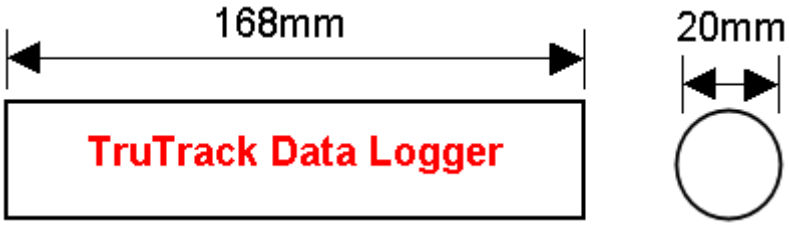
Features:

- milliVolts and Temperature can be set to any combination of Point, Average, Maximum & Minimum readings.
- milliVolts 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.

Ordering Information: **mV-HR** Voltage data logger

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

mV-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.

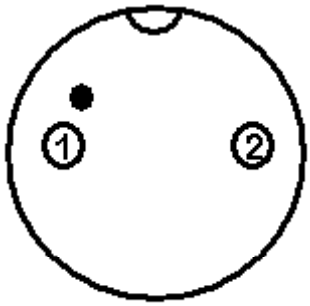
2. Connect the TruTrack Logger. Under healthy circumstances, a “Logger Control” screen will load. If the “Logger Control” screen does not load, click on the button labelled “Connect to a Logger for the first time”. The OmniLog will run a test on the serial ports and advise if the port the logger is connected 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:

100mV Input:	External Connector	2 pin Switchcraft Plug (EN3C2M)	
		Weatherproof; IP66	
	Pinout	1 Positive	
		2 Negative	
	Maximum readable input voltage		110mV
	Maximum voltage input without damaging logger		10 Volts
	Input Leakage Current		1nA
	See Note* below.		
Internal Temperature:	Sensor Type	Thermister	
	Linear accuracy over range	±0.3ºC (0ºC to 70ºC)	
	Repeatability	±0.1ºC	
	Long term stability	±0.1ºC	



Logger:	Working Temperature	-30ºC to +70ºC
	Storage Temperature	-30ºC to +70ºC
	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
		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	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

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

Note*: If the logger is connected to a computer and either input is held at mains earth potential, erroneous results can be expected due to the earth loop current.