

DATA SHEET

TMELOG 1040 Data Logger - for underwater temperature logging



Description

The TMELOG 1040 is specifically designed for long term liquid immersion and is waterproof to a depth of 500m. This logger is ideal for environmental monitoring in rivers and oceans. The unit is fully encapsulated and comes supplied in a highly visible yellow case with attachment point so the logger can be secured into position.

Suitable applications

- Environmental monitoring
 - Fisheries
 - Aquaculture
 - Rivers
- Food processing

Features

Total Reading Capacity	32,000 readings
Memory type	Non Volatile
Trigger Start	Magnetic Switch
Delayed Start	Relative/Absolute (up to 45 days)
Stop Options	When full, After Readings, Never (overwrite oldest data)
Reading Types	Actual, Min, Max
Logging Interval	1 sec to 10 days
Offload	While stopped or when logging in minutes mode
Alarms	2 fully programmable; latchable

Reading Specification

Temperature

Reading Range	-40°C to +70°C
Sensor Type	10K NTC Thermistor (Internally mounted)
Response Time	20 minutes to 90% FSD in moving water
Reading Resolution	0.01°C or better

Physical Specification

IP Rating	IP68 waterproof (see notes)
Operational Range*	-40°C to +70°C
Case Dimensions	
Diameter	51 mm/2.01"
Height	50mm/1.97"
Weight	90g/3.17oz

*The Operational Range indicates the physical limits to which the unit can be exposed, not the reading range over which it will record

Notes

This logger should only be opened when a battery replacement is required.

Battery Type	Renata CR2450N
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Replacement Interval	Annually*
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*If deployed for long periods, the loggers battery should be replaced annually to prevent the loss of data during a recording run. If the logger is being used frequently, the battery should be changed when prompted by a low battery warning from the Tinytag software.

Before replacing the battery the logger must be stopped.

Data stored on the logger will be retained after a battery is replaced.

Please refer to the service instruction sheet for batter replacement instructions.

If used at low temperatures the logger should be allowed to warm to room temperature before it is opened to avoid condensation forming inside of the unit.

The IP68 rating is valid only when the units lid is securely fitted and is valid to a depth of 500m (1640ft)

The gasket fitted in this unit must be replaced every time it is opened.

The position of the units trigger start switch is indicated by the --- marking on its base. The switch itself is positioned on the side of the unit, just above the base-lid join, on the edge indicated. When a magnet is held in the correct location, the status LED will light until the magnet is removed.

LED Flash Patterns

When logging, a status LED is visible through the base of the unit. The flash patterns of this indicator are as follows:

Status LED Flash Pattern	Indication
1 flash every 4 seconds	Logging
1 flash every 8 seconds	Waiting to Log (trigger or delayed start set)
A double flash every 4 seconds	Alarm limit breached