

DATA SHEET

TMELOG 1010 Data Logger - temperature and humidity logger with display



Description

The TMELOG 1010 has the ability to record temperature and humidity and comes supplied with a LCD display to view you readings.

Suitable applications

- Environmental monitoring
- Pharmaceutical storage
- Document and archive monitoring

Features

Total Reading Capacity	30,000 readings
Memory type	Non Volatile
Display	4 digits + indicators
Display Modes	°C or °F / %RH
Display Refresh Rate	Every 2 seconds (alternating temperature/humidity)
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	-25°C to +50°C (-13°F to 122°F)
Sensor Type	10K NTC Thermistor (Integral)
Response Time	10 mins to 90% FSD in moving air
Logger Resolution	0.02°C or better
Display Resolution	0.1 °C or 0.1°F

Reading Specification

Relative Humidity

Reading range	0 to 100% RH
Sensor Type	Capacitive (Integral)
Accuracy	±3.0% RH at 25°C/ 77°F
Reading Resolution	Better than 0.3% RH
Response Time	40 seconds to 90% FSD
Display Resolution	0.1% RH

Physical Specification

IP Rating	IP65 splash proof (see notes)
Operational Range*	-25°C to +70°C
Case Dimensions	
Diameter	60mm/2.36"
Length	90mm/3.54"
Width	65mm/2.56"
Depth	35mm/1.38"
Weight	85g/3oz

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

Notes

Battery Type	Tekcell SBAA02P SAFT LS14250 or LST14250
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The logger will operate with other ½ AA 3.6V Lithium (Li-SOCl₂) batteries but performance cannot be guaranteed.

Replacement Interval	Annually
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Before replacing the battery the data logger must be stopped.

When replacing the battery, wait at least one minute after removing the old battery before fitting the new one.

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

The clarity of the display may change at extremes of temperature.

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

The IP65 rating is valid only when the unit's connector cap is securely fitted.

The coated sensor used on this unit provides good protection from moisture and condensation, but in some cases – where the sensor becomes saturated – the readings may become unpredictable. Once the sensor has dried out, and provided no residue is left behind, the unit should return to normal reading within 30 minutes.

Any dust, salts or residue that is allowed to build up on the RH sensor will affect the units reading accuracy.

The sensor may be cleaned with de-ionised water but not with pure isopropanol or abrasive detergents as these may damage the sensors coating and affect its accuracy.

The RH sensor will resist small amounts of the following chemicals: formaldehyde, ammonia, carbon monoxide, ethylene oxide, hydrogen chloride, hydrogen fluoride, hydrogen peroxide, nitrogen dioxide, methyl chloride, chlorine, Freon, methanol, ethanol, isopropanol and ozone. It also offers resistance to ultraviolet rays.