LogTag Recorders

TRIL-8 Multi-Use Dry Ice Low Temperature Recorder

Suitable Applications

Cold Chain

Pharmaceuticals

Blood/Organs/Tissue

Laboratories

Manufacturing

Clinical Trials

Chemicals

Product Highlights

- Records temperature from +40°C to as low as -80°C
- A real time clock provides date/time stamps for each temperature reading.
- Push-to-start button with optional delay or a specific time & date.
- Comprehensive customization options including alert settings, sample interval and trip duration.
- Robust and durable polycarbonate case with lug for secure mounting.
- Up to 8,000 recordings - enough for the longest trip.
- In-transit inspections can be recorded at the push of a button.
- Industry best download time - less than 5 seconds for fully memory.

The LogTag® Dry Ice "Probe-less" Temperature Recorder operates, measures and stores up to 8000 temperature readings in temperature environments ranging from -80°C to +40°C (-112°F to +104°F).

Intended for use in transit monitoring of articles stored in packaging incorporating dry ice cooling agents.

Available in single trip (SRIL-8) version as well.

Using the LogTag® Interface and LogTag's freely available companion software LogTag Analyzer, the LogTag® Dry Ice Temperature Recorder is easily configured for recording conditions including delayed start, sampling interval, number of readings and configuration of conditions to activate the ALERT indicator.

The Red Alert indicator provides an immediate indication, without access to a PC, if any readings are outside the limits specified at the time the unit was configured.

Green OK indicator provides immediate visual confirmation, without access to a PC, that the unit is operating.

Readings are downloaded using LogTag Analyzer which provides facilities for charting, zooming, listing data statistics and allows exporting the data to other applications such as Excel.

Accessories

Protective Enclosure

Wall Mount Bracket

Interface Cradle

LogTag's unique interface cradle design provides rapid & reliable transfer for logged data. It accepts all non-USB recorder models, allowing a single interface to be used across the entire range.

Product Specifications

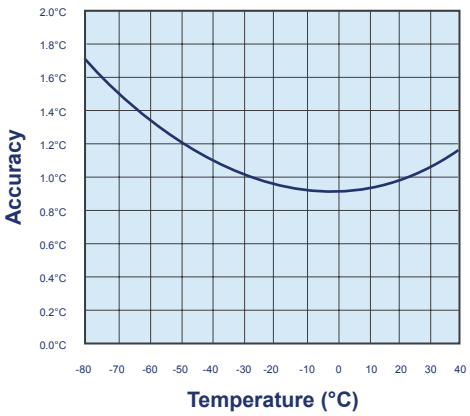
Product Model	TRIL-8 - Multi-use: up to 1000hrs @ -80°C (-112°F)
Sensor Measurement Range	-80°C to +40°C (-112°F to +104°F).
Operating Temperature Range	-80°C to +40°C (-112°F to +104°F).
Storage Temperature Range	-20°C to +40°C (-4°F to +104°F).
Rated Temperature Reading Accuracy	Better than ±1.0°C for -30°C to +20°C Better than ±1.2°C for -45°C to -30°C and +20°C to +40°C Better than ±1.7°C for -80°C to -45°C *Actual performance is typically much better than the rated values. Please see the Rated Absolute Accuracy chart below.* *Accuracy figures can be improved by recalibration.*
Rated Temperature Reading Resolution	Less than 0.1°C for -80°C to 0.0°C, Less than 0.2°C for 0.0°C to +20°C, Less than 0.5°C for +20°C to +40°C *Please see the Rated Native Resolution chart below.* *LogTag Analyzer® currently displays to one decimal place of °C or °F. The native resolution is what is stored in the LogTag®.*
Sensor Reaction Time	Typically less than 5 minutes (T90) in moving air (1m/s).
Recording Capacity	8031 temperature readings. 53 days @ 10min logging, 80 days @ 15min logging.
Sampling Interval	Configurable from 1 minute to several hours
Logging Start Options	Push button start or specific date & time.
Recording Indication	Flashing 'OK' indicator / flashing 'ALERT' indicator.
Download Time	Typically less than 5 seconds for full memory (8031 readings), depending on computer or readout device used.
Environmental	IP65 (roughly equivalent to NEMA 4).
Power Source	3V Li-Mg Battery.
Battery Life	Minimum storage life of 12 months before 'start'. Single use version rated for a typical trip of 2 weeks duration at dry ice temperatures. Multi-use version is rated for up to a total accumulative exposure of 1000hrs @ -80°C across multiple trips.
Real Time Clock	Built-in real time clock. Rated accuracy ±25ppm @ 25°C (equivalent to 2.5 seconds/day). Rated temperature coefficient is -0.034 ±0.006ppm/°C (I.e typically +/- 0.00294 seconds/day/°C).
Size	86mm(H) x 54.5mm(W) x 8.6mm(T).
Weight	33g.
Case Material	Polycarbonate.

Compliance & Certifications

designed for 21CFR Part 11	Designed to support Digital Signatures in accordance with FDA CFR21 Part 11.
FC CE	Tested and complies with FCC Part 15 Subparts A and B. Tested and complies with EC EMC directives (EN 50081-1:1992 & EN 61000-6-1:2001).
Pb RoHS COMPLIANT 2002/95/EC	Conforms to RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) EU Directive.

Accuracy / Resolution Charts

Rated Absolute Accuracy



Rated Native Resolution