

LogTag

TEMPERATURE RECORDER with 30 day summary display



Part codes TRID30-7R, TRID30-7F

The LogTag TRID30-7 temperature recorder features a display together with data logging function storing up to 7770 temperature readings and a separate rolling 30 day statistical max/min reading and duration memory which can be reviewed on the display.

Suitable for applications requiring a visual display of current temperature and history such as coolrooms, refrigerators etc but also can be used in transit applications where a direct readout of the statistical data is required without use of a computer or readout device.

The display arrangement is designed to provide 'at a glance' if temperature violations have occurred for both the current reading and up to the last 30days.

Details of any excursions can be checked directly by inspecting the statistics history on the recorder's display or in more detail by downloading the logged data. If a reading outside the pre-set "Alarm" limits is recorded at any time, a "day alarm indicator" appears on the display.

Logged data can be downloaded via a standard LogTag Interface to the companion software *LogTag Analyzer* which provides facilities for displaying data in chart, table or statistical formats and allows electronic archiving, export or transmission of the data in support of sophisticated data management systems.

The recorder incorporates an external temperature sensor uniquely arranged in a recess in the case. This arrangement protects the sensor from physical damage while retaining the faster response time normally associated with remote sensors.

Highlights

Data logging

Records time and temperature data for later download

State Indicators

Display shows current state (READY, STARTING, RECORDING, PAUSED or STOPPED)

ALARM indicator

Appears on the display to show an alarm trigger has occurred.

Day alarm summary

Displays in calendar-like format alarm triggers for up to the last 30days

Current time & temperature

Shows the current time and temperature when not in review mode

Review button

Allows review of current day and up to 29 previous days of statistical data and also adds an 'inspection mark' into the recordings log during recording.

Start/Clear/Stop button

Push button recording start, alarm clear and recording stop (all configurable options)

Flexible start options

Push button recording start with optional delayed start (up to 18 hours) or specific time & date start

Flexible recording options

Either record for a fixed time or record continuously with 'wrap around logging'

Rapid Download!

Takes only seconds to download recordings.

Thin flat case

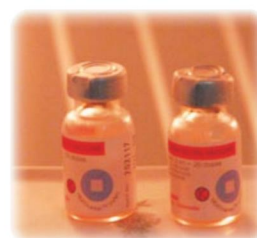
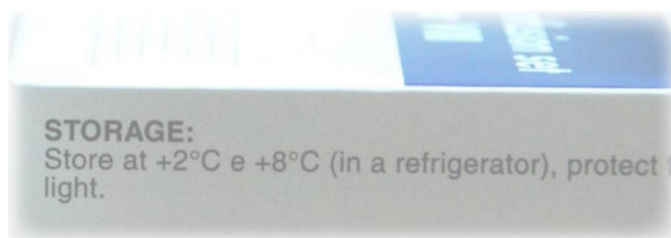
Fits easily into packaging and thin enough to be easily mailed "letter rate".

Real time clock

Records time & temperature simultaneously

7770 recordings capacity

Enough memory for 53 days @ 10min logging or 80 days @ 15min logging



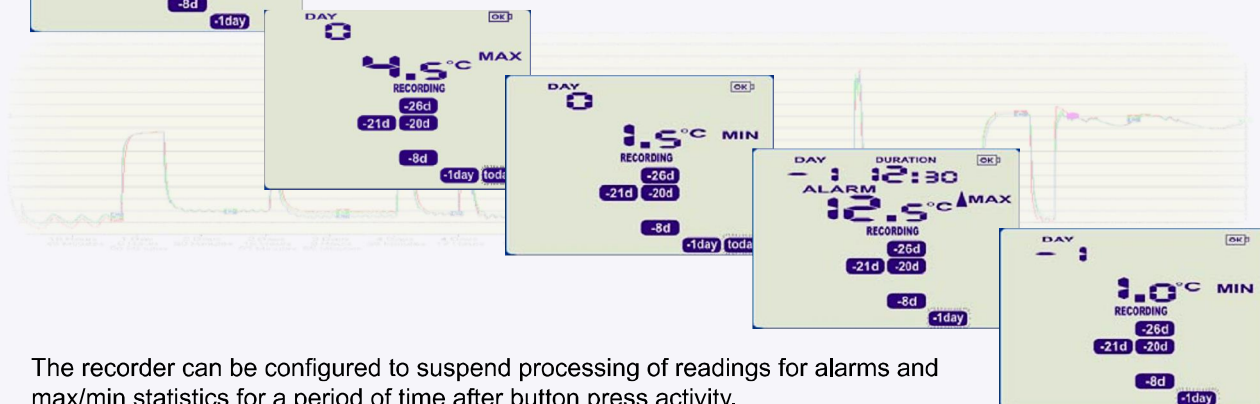
Display

The normal *recording* display shows the current temperature reading, the time and the alarm trigger day summary. A visual alarm trigger is displayed if one or more of the configured alarm trigger conditions have been met. An alarm trigger condition can be a single reading above the upper or below the lower threshold values, a set of consecutive violating readings or an accumulation of violation readings encountered.



These display examples show alarm triggers recorded 1, 8, 20, 21 and 26 days ago. Review each day's statistic by pressing the *REVIEW* button.

Statistics include the maximum and minimum reading for each day, durations above or below preset thresholds and alarm status.



The recorder can be configured to suspend processing of readings for alarms and max/min statistics for a period of time after button press activity. This allows the user to review the current statistics or clear an alarm without causing a false alarm or statistic while handling the recorder.

Specifications



LogTag Part Codes	TRID30-7R : (replaceable battery) TRID30-7F : (fixed battery)
Rated Operating Temperature range	-30°C ~ +60°C (-22°F ~ +140°F)
Rated Temperature reading accuracy	Better than $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$) for measurements from -20°C ~ +40°C (-22°F ~ +104°F) - typically $\pm 0.3^{\circ}\text{C}$ (0.6°F) Better than $\pm 0.8^{\circ}\text{C}$ ($\pm 1.5^{\circ}\text{F}$) for other measurements - typically $\pm 0.5^{\circ}\text{C}$ (0.9°F).
Rated temperature resolution on LCD	0.1°C (0.2°F) for measurements -30°C ~ +40°C (-22°F ~ +104°F) 0.2°C (0.4°F) for measurements above +40°C (+104°F)
Recording capacity	Data logging memory : 7770 logs - eg 53 days @ 10min logging, 80 days @ 15min logging Day summary statistics memory (for display on LCD): up to 30 days of Max/Min and duration values
Sampling Interval	configurable from 30seconds to hourly
Logging Modes	Supports 'continuous' wrap around or specific recording period
Real time clock accuracy	Quartz crystal locked real time clock. Rated accuracy $\pm 25\text{ppm}$ @ 25°C (equiv to 2.5 seconds/day) Rated temperature coefficient is $-0.034 \pm 0.006\text{ppm}/^{\circ}\text{C}$ (i.e typically $\pm 0.00294\text{seconds/day}/^{\circ}\text{C}$)
Download time	typically less than 5 seconds for full memory
Power Source	3V Lithium-Manganese Dioxide extended temperature chemistry
Battery Life	TRID30-7R : typically 1 year of operation TRID30-7F : typically 2 years of operation
Size	93.0mm(H)x54.5mm(W)x8.6mm(T)
Weight	TRID30-7R : 39grams TRID30-7F : 43grams
Case Material	Polycarbonate
EMC Compliance	Complies with EC EMC directives (EN50081-1:1992 & EN 61000-6-1:2001) Complies with FCC Part 15 Subparts A and B.
Environmental	IP65 (when vertically mounted or hung)
FDA 21CFR Part 11 Compliance	Designed to comply with FDA 21CFR Part 11 (Digital signatures)
Reader interface	Standard LogTag Interface cradle
	Manufactured to meet the European RoHS Directive