

TEMPERATURE RECORDER with 30 day summary display and remote probe



Part codes TRED30-7R, TRED30-7F

The LogTag[®] TRED30-7 Temperature Recorder measures and stores up to 7770 temperature readings over -40°C to +99°C (-40°F to +210°F) measurement range from a remote temperature probe.

Statistical temperature and duration readings for up to 30 days can be reviewed on the display.

The visual display of current temperature "static" previous alarms is an important feature in applications such as cool rooms and refrigerators. The display arrangement is designed to show 'at a glance' if temperature violations have occurred during the current day and up to the previous 29 days. The display also shows the current temperature reading, the current time, recording status and battery status.

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 via a standard *LogTag*[®] *Interface cradle* to *LogTag*[®] *Analyzer*.

If a reading outside the pre-set "Alarm" limits is recorded at any time, a "day alarm indicator" appears on the display.



Accepts all LogTag[®] ST100 type remote temperature probes.

Highlights

Data logging
State Indicators
ALARM indicator
Day alarm summary
Current time & temperature
Review button

Start/Clear/Stop button

Flexible start options

Flexible recording options
Rapid Download!
Thin flat case
Real time clock
7770 recordings capacity

High Quality Connector Interchangeable Probes

Records time and temperature data for later download

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

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

Displays in calendar-like format alarm triggers for up to the last 30days Shows the current time and temperature when not in review mode 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.

Push button recording start, alarm clear and recording stop

(all configurable options)

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

time & date start

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

Takes only seconds to download recordings.

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

Records time & temperature simultaneously

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

Gold plated remote sensor connector

LogTag® remote temperature ST100 probes are interchangeable.

STORAGE: Store at +2°C e +8°C (in a refrigerator), protect flight.

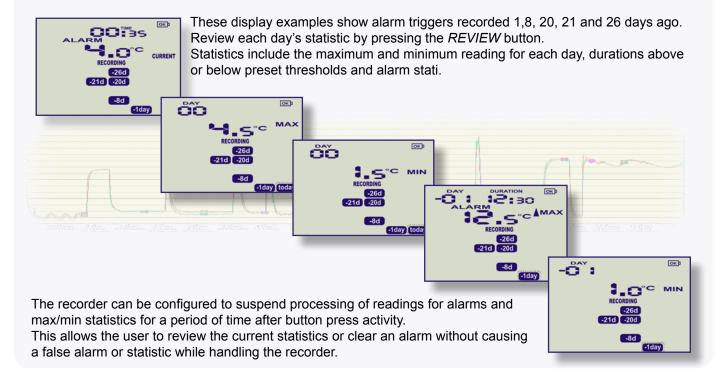




Display

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.



Specifications

LogTag® Part Codes	TRED30-7R: (replaceable battery) TRED30-7F: (fixed battery)
Measurement Temperature range with ST100 remote temperature probe	-40°C ~ +99°C (-40°F ~ +210°F)
Recorder operating temperature range	-30°C ~ +60°C (-22°F ~ +140°F)
Rated Temperature reading accuracy	Better than $\pm 0.5^{\circ}$ C ($\pm 0.9^{\circ}$ F) for -20° C~+ $\pm 40^{\circ}$ C (-22° F~+ $\pm 104^{\circ}$ F) -typically $\pm 0.3^{\circ}$ C (0.6° F) Better than $\pm 0.8^{\circ}$ C ($\pm 1.5^{\circ}$ F) for $\pm 40^{\circ}$ C~+ $\pm 20^{\circ}$ C ($\pm 1.6^{\circ}$ F) -typically $\pm 0.5^{\circ}$ C (0.9° F) Better than $\pm 0.8^{\circ}$ C ($\pm 1.5^{\circ}$ F) for $\pm 40^{\circ}$ C~+ $\pm 70^{\circ}$ C ($\pm 1.6^{\circ}$ F) -typically $\pm 0.7^{\circ}$ C ($\pm 0.9^{\circ}$ F) Better than $\pm 1.2^{\circ}$ C ($\pm 1.5^{\circ}$ F) for $\pm 70^{\circ}$ C~+ $\pm 99^{\circ}$ C ($\pm 1.5^{\circ}$ F~+ $\pm 210^{\circ}$ F) -typically $\pm 1^{\circ}$ C ($\pm 0.9^{\circ}$ F).
Rated temperature resolution on LCD	$\begin{array}{l} 0.1^{\circ}\text{C}(0.2^{\circ}\text{F}) \text{ for measurements } -40^{\circ}\text{C} \sim +50^{\circ}\text{C} \ (-22^{\circ}\text{F} \sim +122^{\circ}\text{F}) \\ 0.2^{\circ}\text{C}(0.4^{\circ}\text{F}) \text{ for measurements } +50^{\circ}\text{C} \sim +70^{\circ}\text{C} \ (+122^{\circ}\text{F} \sim +158^{\circ}\text{F}) \\ 0.3^{\circ}\text{C}(0.5^{\circ}\text{F}) \text{ for measurements } +70^{\circ}\text{C} \sim +80^{\circ}\text{C} \ (+158^{\circ}\text{F} \sim +176^{\circ}\text{F}) \\ 0.4^{\circ}\text{C}-0.6^{\circ}\text{C}(0.7^{\circ}\text{F}-1^{\circ}\text{F}) \text{ for measurements } +80^{\circ}\text{C} \sim +99^{\circ}\text{C} \ (+176^{\circ}\text{F} \sim +210^{\circ}\text{F}) \end{array}$
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 for 30 days of Max/Min and duration values
Sampling Interval	configurable from 30 seconds to hourly
Logging Modes	Supports 'continuous' wrap around or specific recording period
Real time clock accuracy	Quartz crystal locked real time clock. Rated accuracy ±25ppm @ 25°C (equiv to 2.5 seconds/day) Rated temperature coefficient is -0.034±0.006ppm/°C (i.e typically +/- 0.00294seconds/day/°C)
Download time	typically less than 5 seconds for full memory
Power Source	3V Lithium-Manganese Dioxide extended temperature chemistry
Battery Life	TRED30-7R: typically 1 year of operation TRED30-7F: typically 2+ years of operation
Size	93.0mm(H)x54.5mm(W)x8.6mm(T) (without temperature probe)
Weight without temperature probe	TRED30-7R : 41grams TRED30-7F : 44grams
Case Material	Polycarbonate
FC (EMC Compliance	Complies with EC EMC directives (EN 61000-6-3:2006 & EN 61000-6-1:2005) Complies with FCC Part 15 Subparts A and B.
Environmental	IP61 (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
Remote Temperature probes	Standard LogTag® ST100 temperature probes (Standard lengths 1.5m (4'11") or 3m (9'10"))
(N) RoHS	Manufactured to meet the European RoHS Directive