

LogTag®

TEMPERATURE RECORDER with 30 day summary display and remote probe



Part codes TRED30-7R, TRED30-7F

Part code ST100S-xx

Part code ST100T-xx

Part code ST100H-xx

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 and previous alarms is an important feature in “static” 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

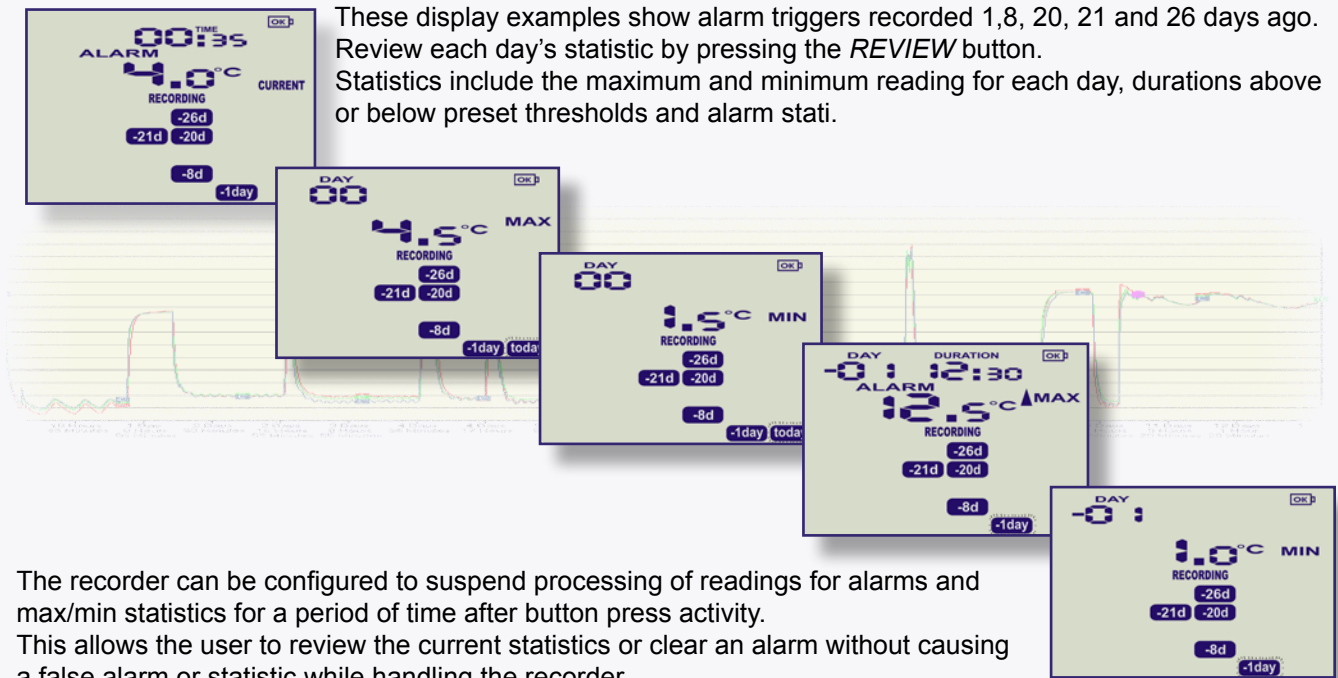
Data logging	Records time and temperature data for later download
State Indicators	Display shows current state (READY, STARTING, RECORDING, PAUSED or STOPPED)
ALARM indicator	Appears on the display to show an alarm trigger has occurred.
Day alarm summary	Displays in calendar-like format alarm triggers for up to the last 30 days
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
High Quality Connector	Gold plated remote sensor connector
Interchangeable Probes	LogTag® remote temperature ST100 probes are interchangeable.

STORAGE:
Store at +2°C ± +8°C (in a refrigerator), protect from light.





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.



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	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 ±0.5°C (±0.9°F) for -20°C~+40°C (-22°F~+104°F) - typically ±0.3°C (0.6°F) Better than ±0.8°C (±1.5°F) for -40°C~+20°C (-40°F~ -22°F) - typically ±0.5°C (0.9°F) Better than ±0.8°C (±1.5°F) for +40°C~+70°C (-104°F~+158°F) - typically ±0.7°C (0.9°F) Better than ±1.2°C (±1.5°F) for +70°C~+99°C (-158°F~+210°F) - typically ±1°C (0.9°F).
Rated temperature resolution on LCD	0.1°C(0.2°F) for measurements -40°C ~ +50°C (-22°F ~ +122°F) 0.2°C(0.4°F) for measurements +50°C ~ +70°C (+122°F ~ +158°F) 0.3°C(0.5°F) for measurements +70°C ~ +80°C (+158°F ~ +176°F) 0.4°C-0.6°C(0.7°F~1°F) for measurements +80°C~ +99°C (+176°F ~ +210°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 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
 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"))
 RoHS	Manufactured to meet the European RoHS Directive