

TEMPERATURE MONITORING AT A GLANCE



LogTag®

TREL30-16U
Ultra-Low Temperature Logger
External Probe



Introducing the new TREL30-16U, the next evolution in Ultra-low temperature monitoring.

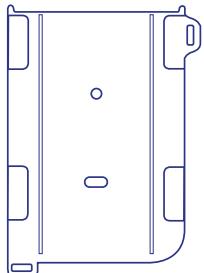
Designed for demanding Ultra-low temperature environments, the TREL30-16U delivers precise readings down to -90 °C. Ideal for monitoring sensitive samples, laboratories, and dry ice logistics.

Engineered for reliability in extreme cold environments when monitoring biological samples and pharmaceutical cold chains requiring dry ice, the TREL30-16U offers powerful functionality with effortless ease of use.

With a new software-free data downloads thanks to the USB-C connection, it combines proven reliability with modern convenience.

The TREL30-16U brings ease of use enhancements to Ultra-low temperature monitoring space.

Accessories



Wall Mount
Not Included - Optional
Order Code: WMB-01



Glycol Buffer
Not Included - Optional
Order Code: Glycol Buffer-70ml



LTI-HID Interface
Not Included - Optional
Order Code: LTI-HID



Smart Probe
Not Included (Recommended)

Compatible Smart Probes:

Order Code	Exposed Tip Length	Tip Diameter	Cable Length
CP10S-15	22.5mm	ø5mm	1.5m (4'11")
CP10S-30	22.5mm	ø5mm	3m (9'10")

OR



External Probe
Not Included

Popular Compatible Probes:

Order Code	Exposed Tip Length	Tip Diameter	Cable Length
ST10S-05	22.5 mm	ø5 mm	0.5 m (1'6")
ST10S-15	22.5 mm	ø5 mm	1.5 m (4'11")
ST10S-30	22.5 mm	ø5 mm	3 m (9'10")
ST10M-15	60 mm	ø5 mm	1.5 m (4'11")

Features



No need to send away your logger for calibration with CP10S Smart Probe compatibility



Software-free operation with USB-C connection and automatic PDF and CSV file generation



Records temperature from -90 °C to +40 °C
-130 °F to +104 °F

MIN
MAX

New simplified screen, with minimum and maximum values shown for at a glance monitoring



60 days of recording with over 17,500 sets of recordings, at 5 min logging



Built-in audible alarm so nearby staff can take action before spoilage occurs



Auto-pause function - unplugging the external probe automatically suspends the alarm and statistics processing

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3-pin interface with compatibility with existing LTI-HID installations



Inspections can be configured to record at the push of a button. Optional Inspection Alarm also available.



Comprehensive customization options including alarm settings, sample interval, and trip duration

Specifications

Product Model	TREL30-16U (Replaceable Battery)
External Temperature Sensor Measurement Range	-90 °C to +40 °C (-130 °F to +104 °F)
Operating Temperature Range	-30 °C to +60 °C (-22 °F to +140 °F)
Storage Temperature Range	-10 °C to +40 °C (14 °F to +104 °F)
Rated Temperature Reading Accuracy	Better than ± 0.5 °C for -20 °C to +10 °C (-4 °F to +50 °F) Better than ± 0.7 °C for -50 °C to -20 °C (-58 °F to -4 °F) Better than ± 0.7 °C for +10 °C to +30 °C (+50 °F to +86 °F) Better than ± 1.0 °C for -80 °C to -50 °C (-112 °F to -58 °F) Better than ± 1.0 °C for +30 °C to +40 °C (+86 °F to +104 °F) Better than ± 1.8 °C for -90 °C to -80 °C (-130 °F to -112 °F) Actual performance is typically much better than the rated values.
Rated Temperature Reading Resolution	0.1 °C (0.2 °F) for measurements -80 °C to +10 °C (-112 °F to +50 °F) 0.2 °C (0.4 °F) for measurements -90 °C to -80 °C (-130 °F to -112 °F) 0.2 °C (0.4 °F) for measurements +10 °C to +20 °C (+50 °F to +68 °F) 0.3 °C (0.5 °F) for measurements +20 °C to +30 °C (+68 °F to +86 °F) 0.5 °C (0.9 °F) for measurements +30 °C to +40 °C (+86 °F to +104 °F) LogTag Analyzer® currently displays to one decimal place of °C or °F. The native resolution is what is stored in the LogTag®.
Recording Capacity	17,526 temperature readings. 60 days @ 5min logging. Day summary statistics memory (for display on LCD): up for 30 days of Max/Min/duration and alarm trigger statistics
Sampling Interval	Configurable from 30 seconds to 18 hours
Logging Start Options	Push button start or specific date and time. Optional start delay of up to 18 hours
Recording Indication	State indicator "REC"
Download Time	Typically less than 10 seconds for full memory (17,526 readings) using USB connection, depending on your computer
Environmental	IP61 (when vertically mounted or hung)
Power Source	3V CR2032 (LiMnO ₂) coin cell battery, user replaceable
Battery Life	1 year storage, followed by 1 year of operation with normal use (6 minute logging, statistics reviewed on the display no more than once daily for no longer than 30 seconds each time, data downloaded monthly) NOTE: Continual activation of the audible alarm will reduce the working life of the battery. When an alarm is triggered, the alarm should be cleared and reset as soon as possible.
Real Time Clock	Built-in real time clock Rated accuracy ± 25 ppm @ 25 °C (equivalent to 2.5 seconds/day) Rated temperature coefficient is -0.034 ± 0.006 ppm/°C (i.e. typically +/- 0.00294 seconds/day/°C)
Standard External Probe Cable Lengths	Standard: 1.5m (4'11") Extended: 3m (9'10") (recommended maximum)
Remote Sensor Cable Type	PTFE (FDA food contact rated), coaxial
Connection Interface	USB C-type metal plug
Size and Weight	93mm (H) x 54.5mm (W) x 8.6mm (T) - 43g
Weight	43g without External Probe
Case Material	Polycarbonate



Applications

Life Sciences



The TREL30-16U is ideal for users to enhance their vaccine storage and handling practices with reliable data and simplified display.

- **Ideal for biologics, Pharmaceuticals, and Dry Ice.**
- **No Software Required** with USB-C connection plug and play design.
- **Built-in Alarm** for prompt action by local staff with visual and audio alarms.
- **Simplified Display:** showing daily Minimum and Maximum readings for easy review.

Medical Centers and Laboratories



Medical centers and laboratories can depend on the reliability and simple to use design.

- **Calibration made easy** with Smart Probe CP10S compatibility.
- **Review and download data** without the need to open transport boxes or storage locations, **maintaining product integrity**.
- **Easy to use**, and no need to involve the IT department with **no software needed**.
- **21 CFR Part 11** compliant software.

Specialty Monitoring



Engineered for accuracy and reliability in demanding ultra-low temperature environments.

- **Dry Ice Compatibility:** Specialized for stability in extreme ultra-low temperatures.
- **Software-less USB Downloads:** Allow immediate access to data for quick decision-making, even in remote locations.