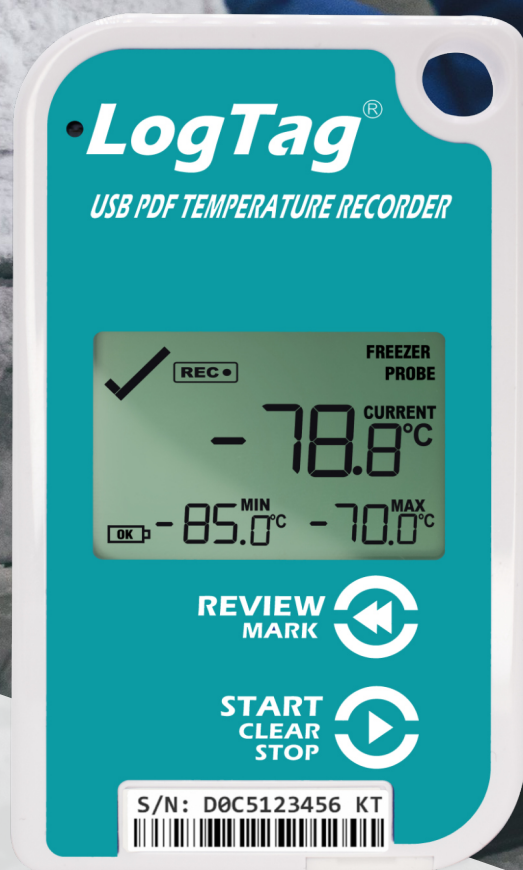


# TEMPERATURE MONITORING AT A GLANCE



**LogTag®**

**TREL30-16U**  
Ultra-Low Temperature Logger  
External Probe



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

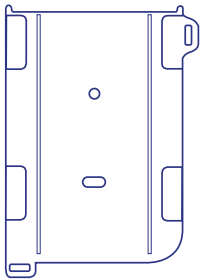
Designed for demanding Ultra-low temperature environments, the TREL30-16U delivers precise readings down to -90 °C. Ideal for monitoring sensitive samples, laboratories, and dry ice logistics.

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



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

<b>Product Model</b>	TREL30-16U (Replaceable Battery)
<b>External Temperature Sensor Measurement Range</b>	-90 °C to +40 °C (-130 °F to +104 °F)
<b>Operating Temperature Range</b>	-30 °C to +60 °C (-22 °F to +140 °F)
<b>Storage Temperature Range</b>	-10 °C to +40 °C (14 °F to +104 °F)
<b>Rated Temperature Reading Accuracy</b>	<p>Better than <math>\pm 0.5</math> °C for -20 °C to +10 °C (-4 °F to +50 °F)</p> <p>Better than <math>\pm 0.7</math> °C for -50 °C to -20 °C (-58 °F to -4 °F)</p> <p>Better than <math>\pm 0.7</math> °C for +10 °C to +30 °C (+50 °F to +86 °F)</p> <p>Better than <math>\pm 1.0</math> °C for -80 °C to -50 °C (-112 °F to -58 °F)</p> <p>Better than <math>\pm 1.0</math> °C for +30 °C to +40 °C (+86 °F to +104 °F)</p> <p>Better than <math>\pm 1.8</math> °C for -90 °C to -80 °C (-130 °F to -112 °F)</p> <p>Actual performance is typically much better than the rated values.</p>
<b>Rated Temperature Reading Resolution</b>	<p>0.1 °C (0.2 °F) for measurements -80 °C to +10 °C (-112 °F to +50 °F)</p> <p>0.2 °C (0.4 °F) for measurements -90 °C to -80 °C (-130 °F to -112 °F)</p> <p>0.2 °C (0.4 °F) for measurements +10 °C to +20 °C (+50 °F to +68 °F)</p> <p>0.3 °C (0.5 °F) for measurements +20 °C to +30 °C (+68 °F to +86 °F)</p> <p>0.5 °C (0.9 °F) for measurements +30 °C to +40 °C (+86 °F to +104 °F)</p> <p>LogTag Analyzer® currently displays to one decimal place of °C or °F. The native resolution is what is stored in the LogTag®.</p>
<b>Recording Capacity</b>	<p>17,526 temperature readings. 60 days @ 5min logging.</p> <p>Day summary statistics memory (for display on LCD): up for 30 days of Max/Min/duration and alarm trigger statistics</p>
<b>Sampling Interval</b>	Configurable from 30 seconds to 18 hours
<b>Logging Start Options</b>	Push button start or specific date and time. Optional start delay of up to 18 hours
<b>Recording Indication</b>	State indicator "REC"
<b>Download Time</b>	Typically less than 10 seconds for full memory (17,526 readings) using USB connection, depending on your computer
<b>Environmental</b>	IP61 (when vertically mounted or hung)
<b>Power Source</b>	3V CR2032 (LiMnO <sub>2</sub> ) coin cell battery, user replaceable
<b>Battery Life</b>	<p>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)</p> <p>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.</p>
<b>Real Time Clock</b>	<p>Built-in real time clock</p> <p>Rated accuracy <math>\pm 25</math>ppm @ 25 °C (equivalent to 2.5 seconds/day)</p> <p>Rated temperature coefficient is <math>-0.034 \pm 0.006</math>ppm/°C (i.e. typically +/- 0.00294 seconds/day/°C)</p>
<b>Standard External Probe Cable Lengths</b>	<p>Standard: 1.5m (4'11")</p> <p>Extended: 3m (9'10") (recommended maximum)</p>
<b>Remote Sensor Cable Type</b>	PTFE (FDA food contact rated), coaxial
<b>Connection Interface</b>	USB C-type metal plug
<b>Size and Weight</b>	93mm (H) x 54.5mm (W) x 8.6mm (T) - 43g
<b>Weight</b>	43g without External Probe
<b>Case Material</b>	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.