



Cleanroom Management International
Groupe Trescal

LOW TEMPERATURE AT A DISTANCE



LogTag[®]

TREL-8

Multi-Use Low Temperature
with External Probe



The TREL-8 Low Temperature Remote Probe Logger measures and stores up to 8000 temperature readings over -90°C to $+40^{\circ}\text{C}$ (-130°F to $+104^{\circ}\text{F}$) measurement range from associated interchangeable LogTag® ST10 type remote probe temperature sensor (available in lengths up to 3 meters (9'10")).

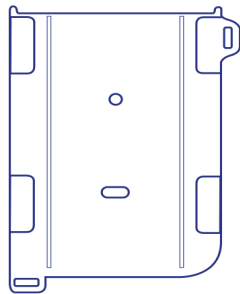
It is intended for use in monitoring of articles stored at low temperatures such as in dry ice type environments.

TREL-8 is easily configured for recording conditions including delayed start, sampling interval, number of readings and configuration of conditions to activate the ALERT indicator.

Accessories



ST10 Ext Probe
Not Included



Wall Mount
Not Included

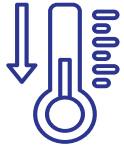


LTI HID
Not Included



Buffer assembly
Not Included
(Silica sand recommended for temperatures below -40°C)

Features



Records temperature from +40°C to as low as -90°C



A real time clock provides date/time stamps for each temperature reading.



Up to 8,000 recordings - enough for the longest trip.



Push-to-start button with optional delay or a specific time & date.



In-transit inspections can be recorded at the push of a button.



External Probe with high quality gold plated connector.



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

Applications



Vaccines Transport



Blood & Organ Transport



Chemical Transport



Manufacturing Distribution



Pharmaceutical Transport

Specifications

Product Model	TREL-8
External Temperature Sensor Measurement Range	-90°C to +40°C (-130°F to +104°F).
Operating Temperature Range	-20°C to +40°C (-4°F to +104°F).
Storage Temperature Range	-10°C to +55°C (14°F to +131°F).
Rated Temperature Reading Accuracy	With the logger case sitting in an environmental temperature between 0°C and 50°C. Better than $\pm 1^\circ\text{C}$ ($\pm 1.8^\circ\text{F}$) for -30°C to +20°C (-22°F to +68°F). Better than $\pm 1.2^\circ\text{C}$ ($\pm 2.1^\circ\text{F}$) for -45°C to -30°C (-49°F to -22°F) and +20°C to +40°C (+68°F to +104°F). Better than $\pm 1.7^\circ\text{C}$ ($\pm 3.1^\circ\text{F}$) for -80°C to -45°C (-112°F to -49°F). Better than $\pm 2.0^\circ\text{C}$ ($\pm 3.6^\circ\text{F}$) for -90°C to -80°C (-130°F to -112°F). <i>Actual performance is typically much better than the rated values. Accuracy figures can be improved by recalibration.</i>
Rated Temperature Reading Resolution	0.1°C (0.2°F) for measurements -80°C to 0°C (-112°F to 32°F), 0.2°C (0.4°F) for measurements 0°C to 18°C (32°F to 64.4°F), and -90°C to -80°C (-130°F to -112°F) 0.3°C (0.5°F) for measurements 18°C to 30°C (64.4°F to 86°F) 0.5°C (0.9°F) for measurements 30°C to 40°C (86°F to 104°F) <i>LogTag Analyzer® currently displays to one decimal place of °C or °F. The native resolution is what is stored in the LogTag®.</i>
Sensor Reaction Time	Typically less than 2 minutes (T90) in moving air (1m/s) for ST10S type
Recording Capacity	8031 temperature readings. 53 days @ 10min logging, 80 days @ 15min logging.
Sampling Interval	Configurable from 30 seconds to several hours
Logging Start Options	Push button start with optional start delay or specific date & time.
Recording Indication	Flashing 'OK' indicator / flashing 'ALERT' indicator.
Download Time	Typically less than 5 seconds for full memory (8031 readings), depending on computer or readout device used.
Environmental	IP61.
Power Source	CR2450 3V LiMnO ₂ Battery (Fixed).
Battery Life	Storage life of 1 year before 'start' (if it is hibernation mode), followed by: 2 – 3 years of normal use (based on 15 minute logging, download data monthly).
Real Time Clock	Built-in real time clock. Rated accuracy $\pm 25\text{ppm}$ @ 25°C (equivalent to 2.5 seconds/day). Rated temperature coefficient is $-0.034 \pm 0.006\text{ppm}/^\circ\text{C}$ (i.e typically +/- 0.00294 seconds/day/°C).
Standard Remote Probe Cable Lengths	Standard: 0.5m (19"). Extended: 3m (9'10") (recommended maximum).
Remote Probe Cable Type	PTFE (FDA food contact rated) coaxial.
Size	86mm(H) x 54.5mm(W) x 8.6mm(T).
Weight	34g.
Case Material	Polycarbonate.



CMI FRANCE

Ecoparc d'Affaires
F- 41210 Neung-sur-Beuvron
Tel : +33 (0)2 54 95 70 95

Agence Rhône Alpes :
F- 26160 La Bégude de Mazenc
Tel: +33 (0)4 75 54 57 26

infofr@cmitest.com
www.cmitest.com

