

# LogTag® TICT *ISO°Tag®*

## FREEZE INDICATOR

The LogTag® **TICT** *ISO°Tag®* is a tamper-proof, irreversible electronic indicator which shows if the temperature has been at or below freezing point (0°C or 32°F) for 60 minutes.

While the temperature remains above freezing point, the display shows a ✓ symbol. If the temperature drops below freezing point for 60 minutes or more, the display shows a ✗ symbol, which cannot be reset or deleted.

The *ISO°Tag®* can be used to monitor the temperature of any freeze-sensitive product such as vaccine, food, or specialty chemicals for up to 3 years. If a freezing event occurs the ✗ symbol is displayed and the indicator is locked. Once locked, the indicator cannot be re-used.

The *ISO°Tag®* is factory configured with a low temperature limit of -0.5°C for a duration of 60 minutes. The *ISO°Tag®* can also be factory configured for a different low temperature limit down to -5.0°C for monitoring items with lower freezing points. An optional upper Alarm limit is also available.

## LogTag® Recorders

[www.logtagrecorders.com](http://www.logtagrecorders.com)



### Features

- Factory pre-configured to monitor a range of products including standard vaccines.
- Clear indication of alarm status at all times.
- Monitors temperature and records daily statistics for up to 3 years
- Push button Start and Stop.
- Data can be downloaded via an interface cradle and LogTag Analyzer if required.
- Robust and Accurate. Data collected is secure and cannot be manipulated.
- Fits easily into packages and can be mailed via letter rate.
- Up to three days of logged real time

### Modes of Operation

#### Starting the Indicator

Press and hold the START/MARK button. "RUN" will flash. Release button when flashing stops. The Indicator enters factory preset delay or begins taking readings.

#### Monitoring

When "RUN" appears on the display, the indicator is taking a temperature reading at the pre-configured interval (typically every 5 minutes). If an Alarm occurs, the ✓ symbol is replaced by an ✗ symbol and the corresponding alarm arrow is also displayed.

#### Stopping

Press and hold the START/MARK button. First the arrows will flash, then "RUN". Release button when flashing stops. Indicator also stops when battery is empty or an alarm occurs.

### Factory Configurations

LogTag *ISO°Tag®* can be factory configured to support a range of different monitoring and alarm configurations (see specifications over page for details).

#### Example configuration

Sampling interval : 5 minutes  
Start delay: 2 hours  
Stop button: disabled  
Above temperature alarm:  $\geq 10^\circ\text{C}$  instant  
Freezer Alarm:  $\leq -1^\circ\text{C}$  consecutive for 1 hour

## TICT - ISO°Tag®

### Product Specifications



#### Model-Number

TICT-ISO°Tag®

#### Operating Temperature Range

-25°C to +60°C

#### Storage Temperature Range

-25°C to +65°C

#### Ambient humidity range during transport and use

0 to 95%RH

#### Resolution

0.1°C or better in range of -25°C to +60°C

#### Accuracy

- Better than  $\pm 0.5^{\circ}\text{C}$  for -10°C to +25°C
- Better than  $\pm 1^{\circ}\text{C}$  for -25°C to -10°C
- Better than  $\pm 1^{\circ}\text{C}$  for +25°C to +60°C

#### Capacity

- Minimum & Maximum temperature for each of the 1096 days
- Duration of excursion beyond alarm limits for each day
- Up to 270 recorded real time temperature values each before and after the alarm has triggered

#### Memory type

Non volatile

#### Sampling Interval

Factory set from 5 to 15 minutes, typically set to 5 minutes.

#### Logging modes

1096 day statistics with temperature/time excursions and a mark entry  
540 real time readings

#### Logging Start delay

Factory configuration, typically set to 60 minutes

#### Sensor

Precision thermistor

#### Sensor Reaction time

T90 less than 7 minutes by method detailed in EN12830:1999

#### Vibration

Withstands vibration specification as detailed in EN12830:1999

#### Shock

- Withstands shock specification as detailed in EN12830:1999
- Withstand 5 drops 1m to smooth concrete floor without loss of function or calibration

#### Environmental

IEC 60529: IP64

#### Power source

3V Lithium battery – non replaceable

#### Battery life

- Minimum storage life of 12 Months before 'start'
- Monitoring period: 1096 days (includes storage time)

#### Size

71.5mm(H) x 33.0mm (W) x 8.6mm (T) (Volume < 21cm³)

#### Weight

19g

#### Case Material

Polycarbonate

#### Calibration

Covered by Certificate of Traceability. Calibration traceable to an ISO/IEC 17025 accredited testing laboratory.

#### EMC compliance

- EC EMC directives (EN 61000-6-1:2005 & EN 61000-6-3:2006)
- Includes electrostatic discharge as prescribed in EN 61000-4-2
- Complies with FCC Part 15 Subparts A and B

#### Alarms function & display

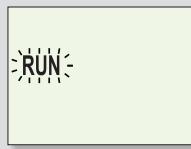
- One low and one high alarm, indicated on the display
- Display always active to instantly show load status
- Display is static allowing photocopying

## TICT-ISO°Tag®

### Function examples

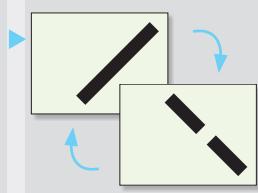
#### Starting Indicator

Starting the indicator:  
• press and hold the START/MARK button until RUN blinks; release button when steady



#### Start Delay

Start Delay Configured:  
• Bars blink alternating to indicate Start Delay



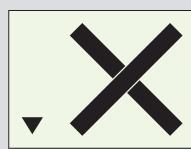
#### Monitoring - OK

Monitoring:  
• No alarm excursions



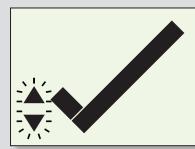
#### Monitoring - Alarm

Monitoring:  
• Low temperature Alarm occurred

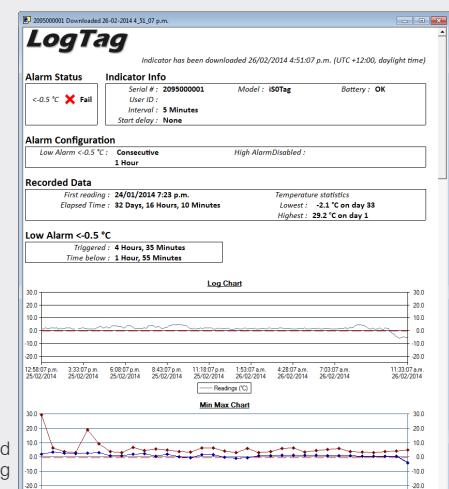


#### Placing a Mark

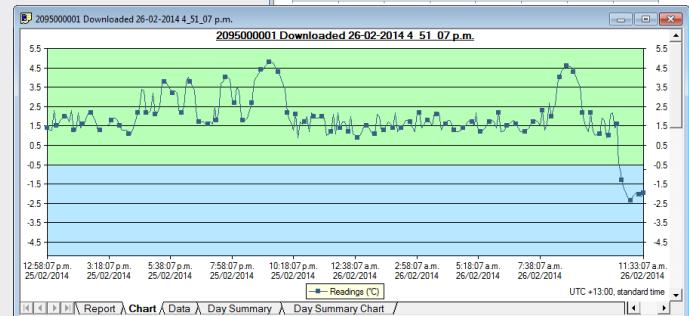
Marking a reading in the statistics:  
• Press and hold button until Arrows blink; release button when steady



### Software and Reporting



Report and Chart tabs for ISO°Tag



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