

LogTag Recorders

iS0°Tag® Tamper-Proof Freeze Indicator



The LogTag® iS0°Tag® is a tamperproof, 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 iS0°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.

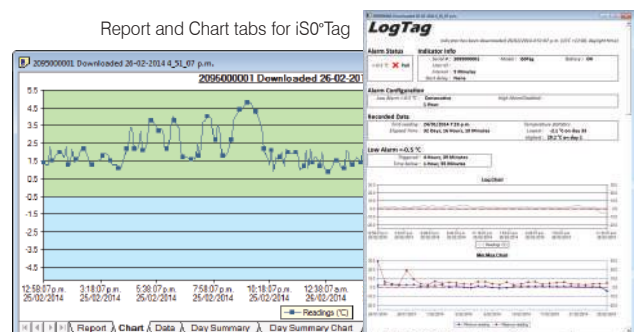
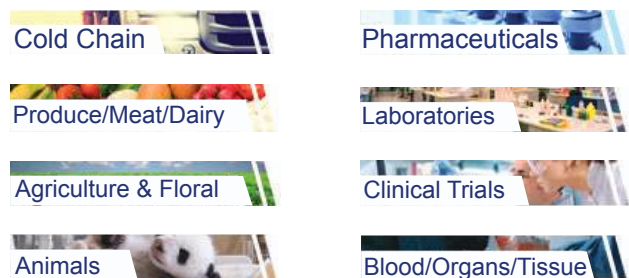
The iS0°Tag® is factory configured with a low temperature limit of -0.5°C for a duration of 60 minutes.

Designed to meet WHO PQS performance specification E06/IN03.1 for irreversible freeze indicators.

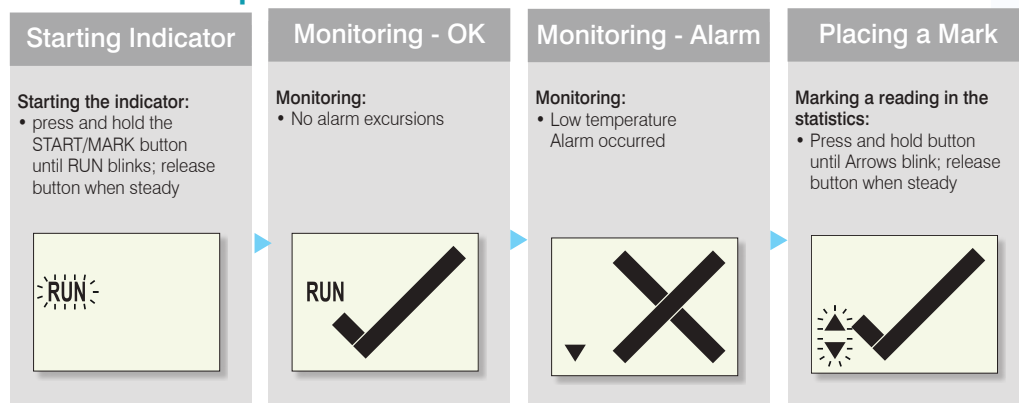
Product Highlights

- 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.

Recommended Applications



Function Examples



Specifications

Product Model	iS0°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 ±0.5°C for -10°C to +25°C Better than ±1°C for -25°C to -10°C Better than ±1°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 to 5 minutes.
Logging modes	1096 day statistics with temperature/time excursions and a mark entry. 540 real time readings.
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	3 years (includes storage, operating time and minimum accessibility period after 'stop')
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.
Alarms function & display	Single alarm event when recording temperatures lower than -0.5°C for 60 minutes or longer indicated on the display. Display always active to instantly show load status. Display is static allowing photocopying.
	Designed to support Digital Signatures in accordance to FDA CFR21 Part 11.
	Tested and complies with FCC Part 15 Subparts A and B. Tested and complies with EC EMC directives (EN 50081-1:1992 & EN 61000-6-1:2001)
	Conforms to RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) EU Directive.

Modes of Operation

Starting the Indicator

Press and hold the START/MARK button. "RUN" will flash. Release button when flashing stops.

Monitoring

When "RUN" appears on the display, the indicator is taking a temperature reading at the factory-configured interval (every 5 minutes).

If an Alarm occurs, the ✓ symbol is replaced by an ✗ symbol.

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.

Configuration

Sampling Interval:
5 minutes

Stop Button:
Disabled

Freezer Alarm:
≤ -0.5°C Consecutive for 1 hour