

# **TIMSEN Ascending Time/ Temperature Indicators**



actual size (19mm x 40mm)

How long has my product been kept above its maximum recommended storage temperature?

What if you need to know how long your product has spent above a defined temperature? What if your product can tolerate a number of exposures to an elevated temperature provided they are short lived?

TIMSEN indicators provide simple, quick and cost effective answers. They record elapsed time at or above a specified threshold temperature; for example at 8°C/46°F for up to 8 hours.

TIMSEN indicators are small and self-adhesive so they can be attached directly to a product, package or shipment. They can be stored inert at room temperature and then activated without pre-conditioning when required.

## Benefits & Features

Flexible Use and Storage	Inert until activated so it can be stored at room temperature and activated when required in the field. Products with thresholds from -20°C to +20°C can be activated at room temperature and don't need any pre-conditioning. Products with thresholds of +25°C or above need preheating to activate.
Reliable Evidence	Single use, irreversible and accurate to within +/-1°C/2°F.
Targeted Decision Making	Small, light and cost effective enough to support the monitoring of many packs within a consignment; pockets of temperature abuse can be identified.
Easy to Read	Visually clear and easy to interpret so handlers can quickly and confidently recognise temperature abuse. Clear and visible monitoring may also encourage a greater duty of care.
Quality Assured	Manufactured to ISO9001:2008, and process and batch validated. Each indicator has a unique serial number. It is patented, safe and disposable.
Cost	A low cost solution that requires no power. It is a cost effective and practical replacement for data loggers.



## The Standard Range

From -20°C / -4°F to +38°C / 100°F. The most popular temperatures can be ordered from distributor stocks and the rest can be ordered subject to minimum volumes.

## **Most Popular Indicators:**

-20°C, 0°C, 8°C, 10°C, 25°C (-4°F,32°F,46°F, 50°F, 76°F)

#### Frozen Product







TIMSEN015 0°C / 32°F

#### Cold Chain







TIMSEN017 10°C / 50°F

#### **High Temp**







TIMSEN019 30°C / 86°F



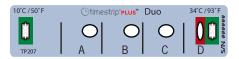
### **Industry Specific Indicators:**

Four temperature indicators for specific sectors and uses are available: Seafood, Food, Blood Temp 10 for blood bags and Duo, a 2 in 1 indicator for vaccines.









#### Standard Application

TIMSEN indicators are supplied with an adhesive backing so they can be stuck directly onto product packaging or onto a carrying card which clearly explains to the end user how to interpret the display windows and what action to take.

The example shown can be customized for your specific application.



TIMSEN indicators are used by leading brands, from consumables to industrial and analytics to medical.

- Farmotag use a (+20°C) /2 hour indicator for a parenteral feeding test kit
- Xeikon use a +35°C /100 hour indicator for laser jet toner cartridges
- Minafarm use a +20C/48 hours indicator integrated into Reiferon pharmaceutical packaging
- · British Ministry of Defence use an 8°C for monitoring blood bags in the field
- British National Health Service (NHS) use an 8°C for drugs that get dispensed into the ward
- Choice Lunch use a Timestrip® PLUS Food indicator to monitor the temperature of school pre-packed lunch deliveries
- Siemens use an 8°C for monitoring reagents

## Customising TIMSEN Indicators

Subject to minimum order size, minimum technical specifications and additional cost, we can customise TIMSEN indicators to suit your needs.

- · Different time markers
- · New ascending temperature thresholds
- · Customised print colours & logos
- Integration into devices
- Factory production line application

## Specification

For every indicator, a full technical Specification, MSDS, Testing Protocol and FAQ sheet are available.

Туре	Irreversible, single use
Activation Feature	A manual activation button on the top – the 'On' window turns blue to confirm it is armed.
Indication	A blue colour appears in the viewing window if a breach of the threshold temperature has occurred. The duration of one or more breaches is shown by how far the blue colour has progressed along the time markers.
Accuracy of Temperature	+/-1°C/2°F
Accuracy of Time	+/- 15% in isothermal conditions
Quality Assurance	Produced under ISO9001:2008
Size	40mm x 19mm

## Shipping & Handling

Recommended Storage	Room temperature: 22°C/72°F at 20-80% humidity. Cool dark environment
Packaging	100 indicators per bag Labelled with expiry and batch number
Shipping Package Requirements	No special requirements as inert until activated
Protection	Splash proof
Traceability	Unique serial number on each indicator
Shelf Life	Pre-activation: 2 years from shipping for most lines, otherwise 2 years from manufacturing date.  Active life: up to 1 year.