



Unique sensing labels – based on Thinfilm's printed technology – bring new functionality and crystal-clear reads to temperature controlled supply chains.

# Thinfilm Smart Label for Temperature Threshold Detection

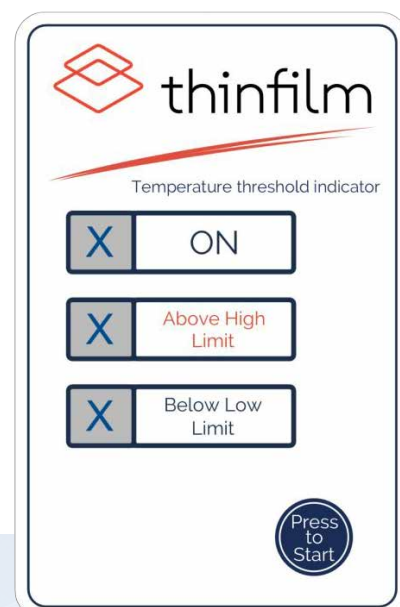
## Low-Cost Safety and Security for Temperature Sensitive Shipments

From fresh food to pharmaceuticals, proper handling and transportation can have a direct impact on quality, usability, safety, and customer satisfaction.

There are also profitability implications for retailers, distributors, and logistics providers working with temperature-sensitive products.

Cold-chain and controlled temperature logistics systems are expanding to distribute insulin, vaccines, and other products to new geographies far from the point of manufacture.

Thinfilm's printed electronics technology enables additional functionality and simplified reading compared to many conventional solutions.





# ThinFilm Smart Label for Temperature Threshold Detection

## Features & Benefits

- Crystal clear display
- No pre-conditioning required prior to use
- Start button to activate the label
- Very thin, flexible label for integration into packages of different shapes and curvatures
- Multiple readout options for clear, definitive results
- Stand-alone – no external power supply or wiring required
- Temperature and excursion times factory programmable

## Key Specifications

- Single or dual thresholds available
- Upper threshold and lower threshold detection possible. Direction of excursion does not matter.
- No stringent storage requirements
- Thresholds as low as -3°C
- Thresholds as high as +30°C
- Temperature accuracy  $\pm 1^\circ\text{C}$  or  $\pm 2^\circ\text{C}$  available

## Markets & Applications

- Meat and fish
- Dairy products
- Flowers
- Fresh fruits and vegetables
- Life science (pharmaceuticals, blood bags)
- Industrial applications including temperature and time-sensitive chemicals
- Temperature sensitive liquids, including wine



## ThinFilm Electronics, Inc.

2581 Junction Ave.  
San Jose, California 95134

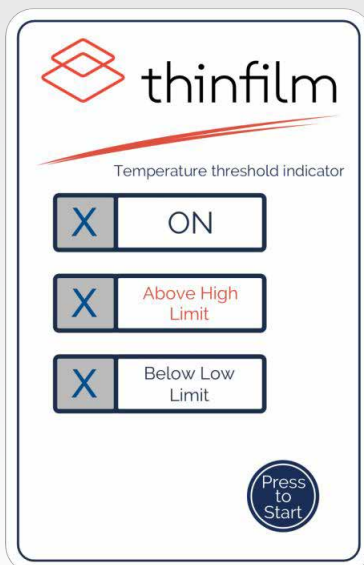
USA  
+1 408 503 7300

[www.thinfilm.no](http://www.thinfilm.no)

Norway  
+47 22 42 45 00

© 2017, Thin Film Electronics. All rights reserved. Thinfilm and the Thinfilm logo are registered trademarks of Thin Film Electronics. All other brand and product names are trademarks or registered trademarks of their respective holders.

**CONTACT SALES: +1 408 503 7300**  
**sales@thinfilm.no | @thinfilmmemory**



Meat



Dairy products



Blood bags



Fish



Wine



Vaccines



Fresh produce



Flowers



Chemicals