



# Smart Active Label with integrated temperature sensor



## Benefits

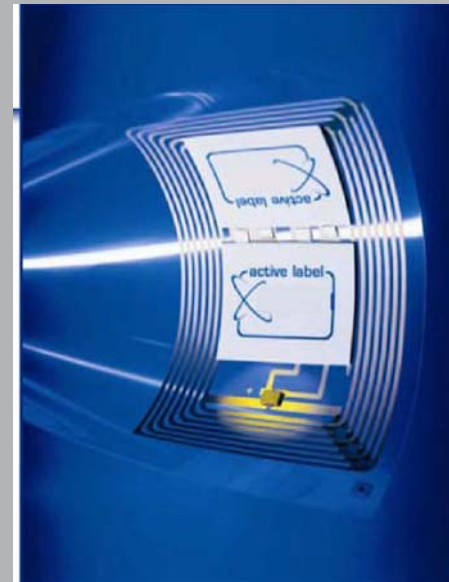
- ❑ Permanent temperature monitoring of sensitive goods
- ❑ Electronic documentation of temperature with date and time
- ❑ Single or multi useable
- ❑ Cost effective, multifunctional temperature label
- ❑ Easy handling and fast documentation of process and storage temperatures
- ❑ Flexible and self adhesive label with integrated environmental friendly battery
- ❑ Temperature range and measurement interval to be monitored is user definable



# Technical Innovation

Improvements offered by the new SAL:

- ❑ Tag memory has been increased to 8kBit EEPROM
- ❑ Calibration data are now stored internal on the chip; no additional calibration is necessary
- ❑ The new 3-level password concept ensures a higher security and protects against unauthorised access
- ❑ Timer accuracy of 5%
- ❑ Start up delay up to 776 days





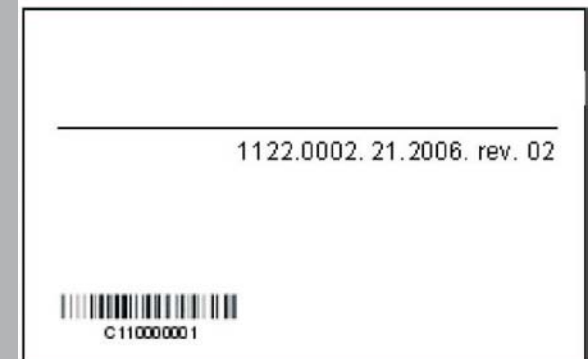
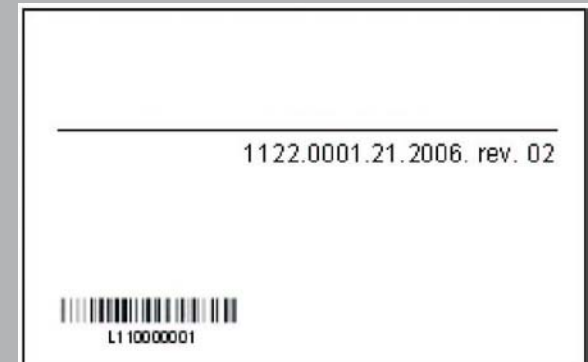
# Label and Card

## Basic Label

- Temperature transponder is ID1-format (credit card size)
- Flexible and environmental-friendly
- Single and multi use
- Self Adhesive

## Basic Card

- Temperature transponder in ID1-format (credit card size)
- Flexible and environmental-friendly
- Single and multi use





# Applications

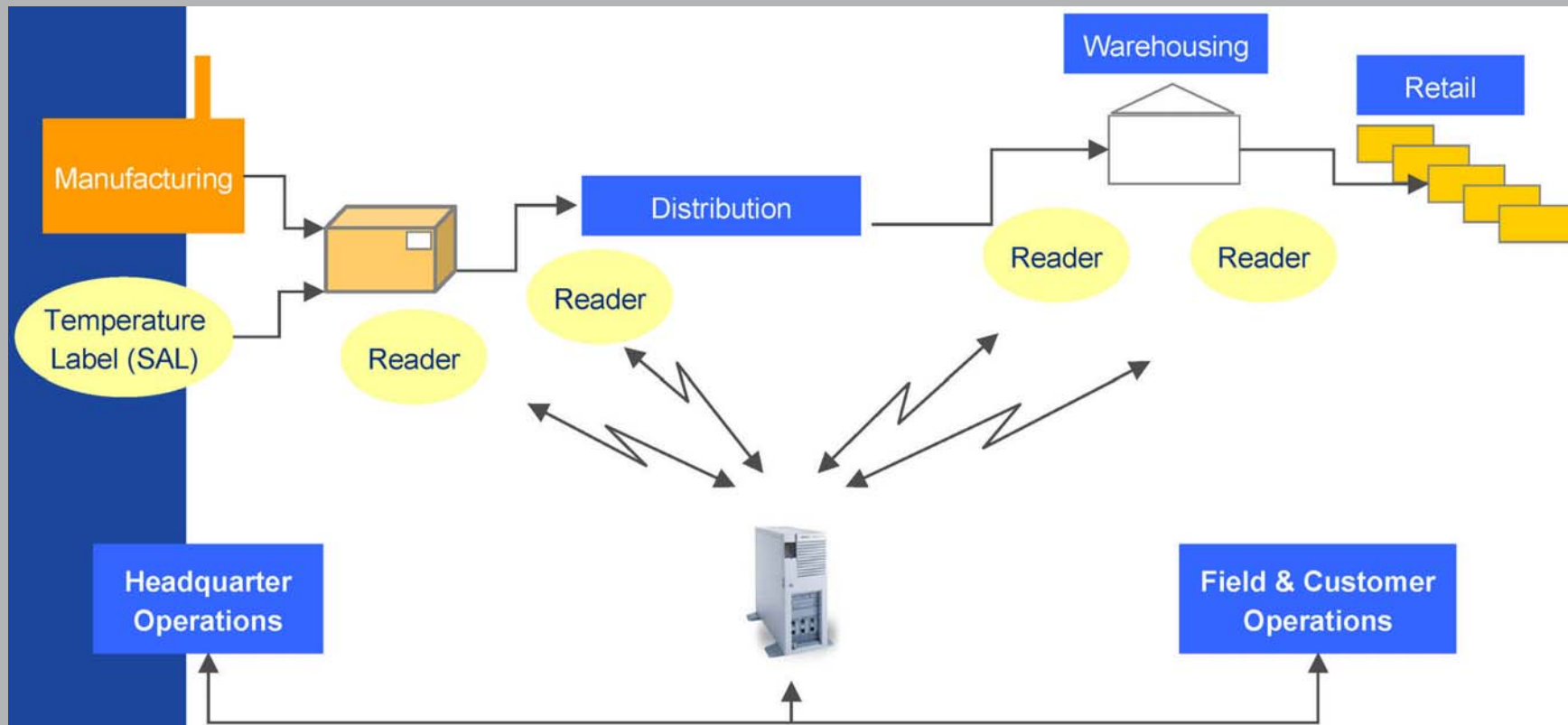
- ❑ Temperature sensitive and perishable products
- ❑ Pharmaceutical logistics
- ❑ Medical and blood tracking
- ❑ Agriculture
- ❑ Fine chemicals
- ❑ Technical equipment





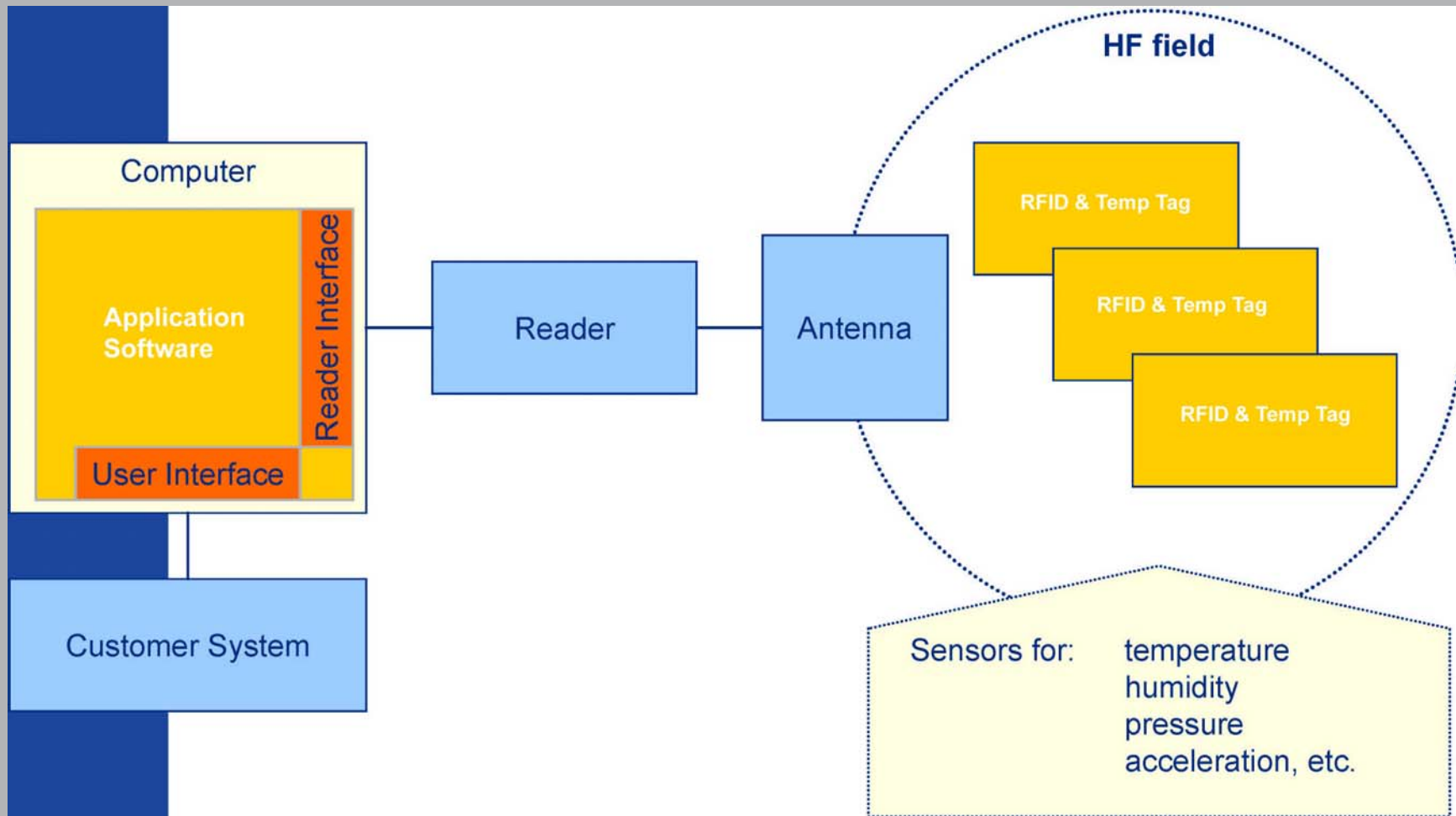
# Supply chain verification

- Attached Smart Active Labels ensure continuous monitoring of temperature history of your products along supply chain:





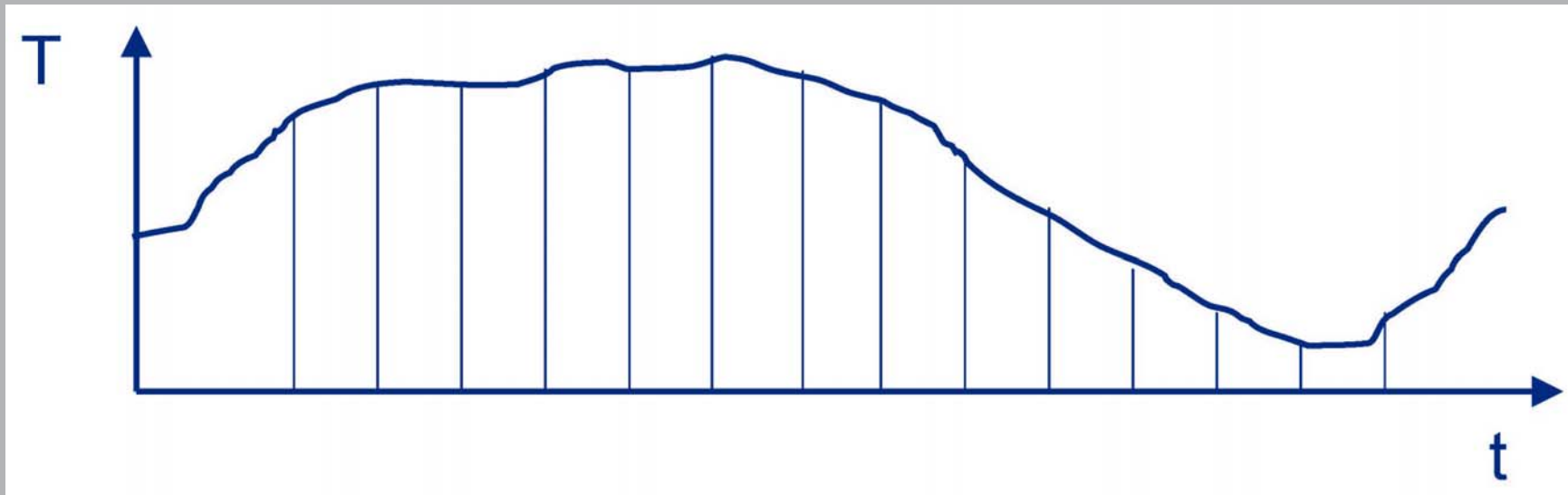
# System design





# Operation mode 0

## Operation mode 0: "All Values"



All temperature values will be recorded

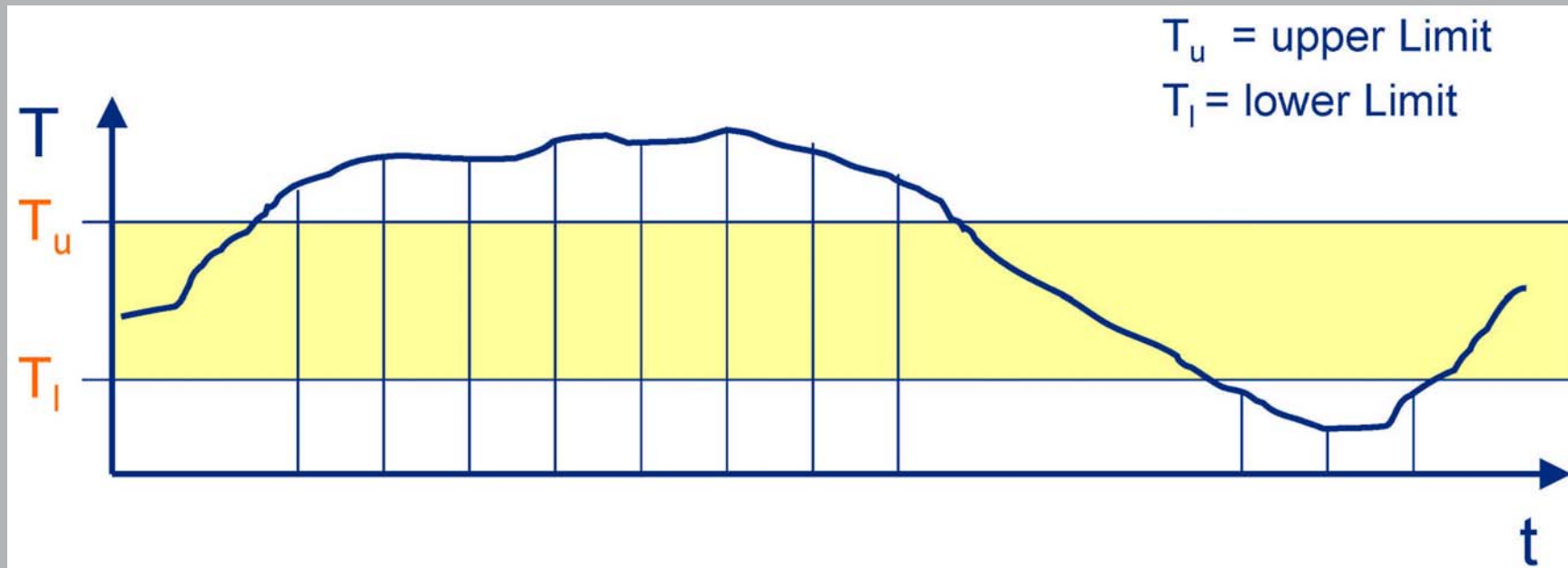
⇒ Disadvantage: High memory requirements!





# Operation mode 1

## Operational mode 1: "Outband"



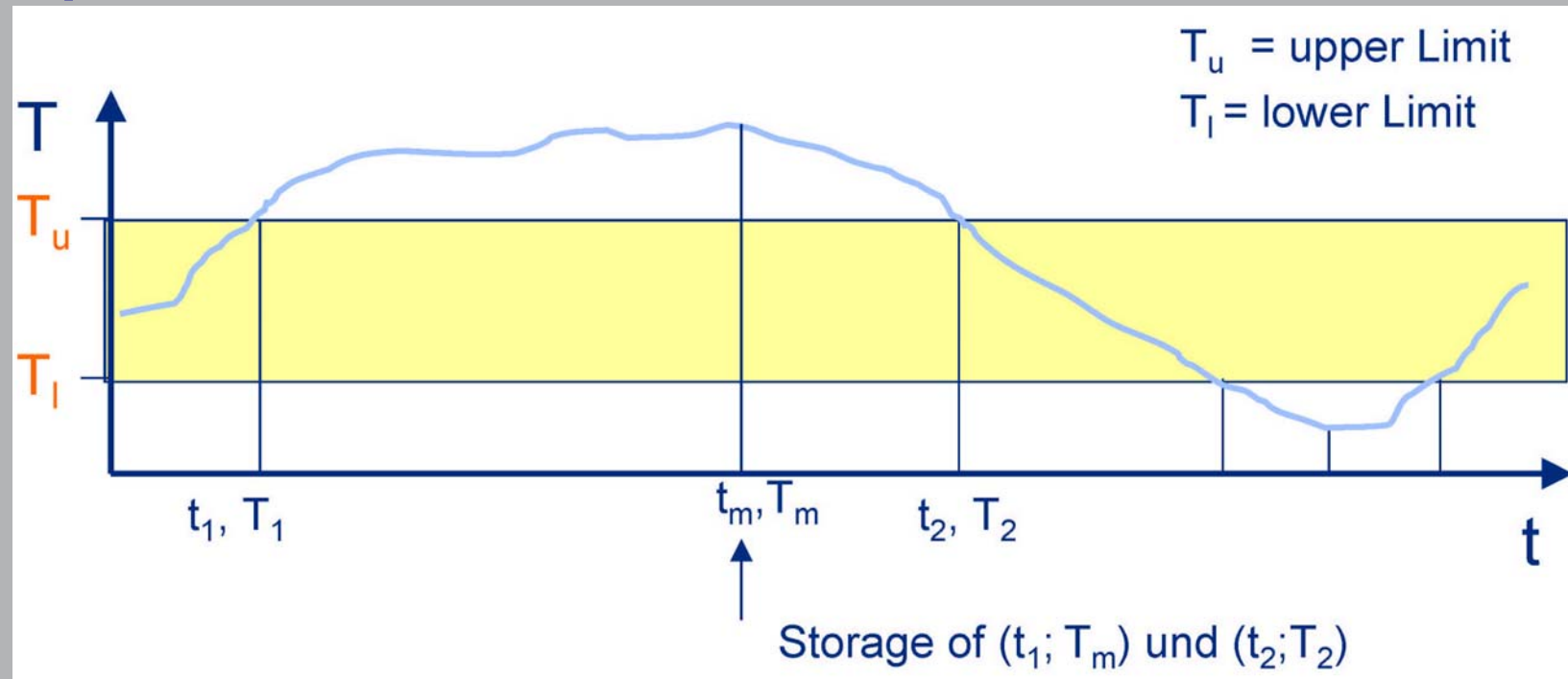
All temperature values outside the user-defined limit will be recorded

⇒ Better usage of memory!



# Operation mode 2

## Operational mode 2: "Externa"



First value outside and the first value inside of the user-defined limit as well as the extremes will be recorded

⇒ Optimal usage of memory, but not suited for all applications!



# Contact

## Electro-Com Australia Pty Ltd

PO Box 190, Mt Waverley VIC 3149

12 Bastow Place, Mulgrave VIC 3170

p. 1300 130 806 / +613 9535 0700

[www.rfid.com.au](http://www.rfid.com.au)

[sales@electrocom.com.au](mailto:sales@electrocom.com.au)

