



Revolutionizing the Cold Chain

Use our traceability solution with **temperature monitoring** to be **FSMA Section 204 compliant**

The FDA Food and Safety Modernisation Act (FSMA) is transforming the nation's food safety system by shifting the focus from responding to foodborne illness to preventing it. The cold chain is a critical link in ensuring the safety and quality of perishable goods, but traditional monitoring methods often fall short.



The Cold Chain Challenge: Key figures



1/3 of produced food is wasted, half at supply chain



Up to half of global food emissions are due to food waste



1 in 6 people get sick due to contaminated food, >400K death/year worldwide

>900M \$ of annual economic impact



Sensory RFID: a transformative solution

Maintaining food freshness hinges on accurate temperature monitoring. Traditional methods like manual checks or battery-powered IoT solutions are often inconvenient and costly. Battery-less sensory RFID offers a compelling alternative, enabling precise, real-time, and cost-effective temperature tracking.

Benefits :

Reduced spoilage | Enhanced traceability
Improved safety

AS3213T Chip: Enhancing RFID Capabilities

The AS3213T chip from Asygn is the heart of the solution and is a game-changer in this field. This battery-free, EPC Gen2 compliant RFID chip is designed specifically for sensing applications, with a key focus on temperature.

- Battery free
- RFID EPC Gen 2 compatible
- Monitor temperature from -40 to 125C°
- Compatible with a wide range of existing RAIN RFID infrastructure and readers.
- Temperature data is easily retrieved through standard RFID read commands.

How it works ?



1. RFID Tags with Integrated AS3213T Chip

Real-time temperature data and unique identification for each item.

2. Strategically Positioned RFID Readers and antennas

Installed at critical checkpoints such as loading docks, warehouses, and receiving areas.

3. Data Management System

A centralised data management system, either cloud-based or on-premise, provides a secure repository for storing temperature data.