



Zebra's Integrated Real-Time Task Management Solution Featuring the ZS300 Sensor

Food waste is an intractable problem.

30+%

of all food is thought to be lost or thrown away annually

greenly

270,000

tonnes of food discarded by UK supermarkets

allactive.co.uk

40%

of food waste in the US attributed to retail and hospitality

rts.com

Several issues contribute to food waste in grocery stores. Validating the temperature of perishable items often relies on frequent manual checks. But associates are busy and recording data can be error-prone. Similarly, ensuring products are marked down correctly (first-in / first out) can be overlooked. And, when it comes to hot cabinets or fridges and freezers, customers often leave doors ajar and it's impossible to know how long their contents have been exposed. The retail sector is acutely aware of the challenge, with grocers adopting new solutions and donation services to reduce food loss.

Technology can, and must, play a key role too by creating a better way to monitor foods.

¹ Research And Markets



Smart Retail Environments

Two developments combined make a dramatic difference to the effectiveness of food monitoring:

- Creating 'smart' furniture the ZS300 Electronic Sensor is a compact, robust, fully customizable and accurate datalogger with a wide monitoring range (-40°C to +85°C / -40°F to 185°F). ZS300 dataloggers can send data sent via Bluetooth® to the equally compact Zebra ZB200 data Bridge which is expressly designed to securely transfer data to the cloud. The bridge can stream data from multiple ZS300 Sensors within range, approx. 100 ft (30.5 m). It reads through packages, containers and vehicles, without manual intervention. There is also the option of using Bluetooth to send the data to Android® mobile devices running the ZSFinder app. The ZS300 comes with our cloudenabled developer tools to accelerate custom app development, along with APIs to easily integrate data with your existing systems of record. When the sensor is attached to fridges, freezers and cabinets these items effectively become smart, internet of things (IoT) connected devices.
- Zebra's Integrated Real-Time Task Management Solution Zebra Workcloud Task
 Management has been integrated with the ZS300 providing the ability to monitor food
 cabinets and generate task-based exceptions surfaced to the right associate, in the right
 store. Associates are also advised on any actions to take, and any necessary context.
 Frontline teams can report on the incident and arrange maintenance or service calls too.

Monitor Food Items

With the ZS300 in play, food can be continually monitored, with records securely retained for audit purposes, to oversee:

- Refrigerator / chillers track the temperature inside refrigerators or chillers to ensure contents are at the appropriate cold temperature.
- Hot cabinets monitor the temperature in cabinets to ensure food is maintained at the proper warm temperatures to prevent bacterial growth and maintain the quality of cooked foods.
- Coffee machines check if the coffee pod is hot or not for both optimal brewing conditions and safety.

Reduce Waste. Enhance Efficiency

The cost-efficient sensor and bridge are easily fixed to items, and similarly simple to deploy and maintain. And, with a better view over the status of all temperature sensitive food items, you can:

- Comply with food processing requirements
- Validate workflows
- Minimize product waste
- Avoid liability issues caused by damage that goes unnoticed
- Maintain customer confidence
- Feed into pricing graduation systems to sell stock approaching sell-by dates
- Improve the bottom line and accelerate ROI

A Sustainable Solution

Just as the ZS300 is designed to reduce waste, it's a sustainable solution too. It's supplied in recycled packaging and is reusable throughout its 12-month lifecycle. When you have finished with your ZS300s they can be returned via Zebra's recycling programme with less than 1% reaching landfill.



For more information, please contact your local team at the numbers below.

