

Automating Food Safety Assurance with Zebra Touch Screen Computers and Tablets

Real-time Wireless Food Safety Technology for Grocery Stores

THE CHALLENGE:

Assure Food Safety with Real-Time Measurement and Troubleshooting

Fundamental to successful food and beverage operations is the ability to ensure food safety. Improper food handling puts both employees and customers at risk of potentially serious foodborne illness and disease. Poor food handling protocols can also increase liability and undermine the bottom line. Over the years – and in many cases still today – the norm for executing food safety procedures has been built on a process of using paper logs. In an industry where safety is both paramount and could be easily compromised, these delays can lead to significant problems, potentially including outbreaks of serious illnesses such as salmonella and E-coli.

THE SOLUTION:

Automate Food Safety Procedures Powered by Zebra Ruggedised Handheld Mobile Computers

In the grocery industry, what's needed are real-time food safety solutions that allow managers to recognise issues before they become a problem and at the same time, have the ability to simultaneously improve operational efficiency. To accomplish this, progressive food service operators up and down the supply chain are coupling food safety applications with powerful Zebra mobile computers and tablets.

Providing highly advanced wireless technology, including Bluetooth, Zebra devices are used around the globe to automate and improve food safety procedures. A growing number of grocery stores are relying on the TC51, TC70 and ET50 to collect and record measurements ranging from cooking and storage temperatures to employee sanitation procedures such as hand and ware washing.

Enhanced food safety protocols lead to more productive employees, more delighted customers and more profitable, sustainable businesses.



TC51, TC70 and ET50 Benefits

- Automate measurements at crucial food safety control points
- Recognise and rectify food safety issues in real time
- Prompt and document employee safety protocols such as hand washing
- Reduce or eliminate opportunity for foodborne illnesses
- Create easily accessible databases for accountability and traceability
- Deliver on your brand promise and ensure customer satisfaction

Zebra Enterprise Touch Screen Computers and Tablets Ensure HACCP Compliance

HACCP (Hazards Analysis at Critical Control Points) is a globally accepted process for assuring food safety. By following HACCP procedures, grocers are able to control critical temperatures, measurements and other factors that make food safe for customers and employees alike.

Non-Compliance issues

Paper-based systems can compromise HACCP compliance. Logs are filled in and checked manually at the end of the day or the next morning. When safety-related errors – such as imprecise refrigeration and cooking temperatures, incorrect holding temperatures at various stations in a food service line, and lack of compliance with sanitary procedures – are discovered, corrective action can be taken, but usually not until the next day at the earliest. These delays can be both dangerous and costly.

Bottom Line Impact

Non-compliance with health department regulations affects more than food safety alone; it also negatively impacts the bottom line. Industry statistics show that annual food losses from errors in temperature control and other food safety protocols are staggering. Training costs are also adversely affected. Enterprises spend thousands of hours training employees in proper procedures. This is especially significant when employee turnover is exceptionally high and training must be continually repeated to account for staff changes. Automated systems are proven to help reduce food losses and training costs significantly.

Mobility and Automation

A growing number of grocery stores are finding the antidote to the inefficiencies of paper-based systems in the use of TC51 and TC70 mobile computers and the ET50 tablet with integrated food safety software. Zebra revolutionises the way we look at food safety. Through the use of technology, grocers can streamline the auditing and technical skills required to drive the right behaviour, at the right time and place to the right person. Powerful Zebra mobile computers and tablets effectively automate the process of collecting and recording measurements ranging from cooking and storage temperatures to employee sanitation procedures such as hand and ware washing.



48,000,000

Food-borne pathogens make 48 million Americans sick every year

Annual cost of medical treatment, lost productivity and illness-related mortality:



Source: http://fortune.com/food-contamination/

APPLICATION BRIEF AUTOMATING FOOD SAFETY ASSURANCE GROCERY STORES

Ruggedised Performance

Zebra enterprise touch screen computers and tablets are durable handheld computers designed for food and beverage environments. Ruggedised to MIL-STD 810G, IP65 and IP67 and able to withstand the fast pace of food service operations and exposure to issues such as drips, spills and splashes, temperature extremes and drops, the TC51 and TC70 boast a 1.8 GHz hexa-core 64-bit processor and the ET50 has a powerful 1.59 GHz Intel quad core. The TC51 supports up to 32 GB flash memory and the TC70 is available with up to 16 GB flash memory. The ET50 has 64 GB eMMC flash memory. They also feature Bluetooth technology and touch screen displays for exceptional ease of use.

Temperature Control

Maintaining strict temperature control is vital to ensuring food safety and complying with health department regulations. Areas of particular concern include: refrigeration levels in storage areas, cooking temperatures during food preparation and holding temperatures in hot and cold food stations. Zebra handheld computers and tablets make it easier to accurately collect, analyse and act on this important data, not at the end of the day or the next morning, but in real time.

Remote Temperature Probes

Zebra handheld computers and tablets work with sanitised digital or Bluetooth thermometers that are inserted into food as it is prepared or when it is holding in a food line. These remote probes work almost instantly to verify temperatures when cooking and in line spot checks, showing green when the temperatures are correct and red when they are not. The devices have corrective actions built in, showing employees exactly what procedures to follow if temperatures are not correct. They also alert users when scheduled tasks have not been initiated or completed. Real-time reports can be pulled immediately from the system, so action can be taken as quickly as possible, ensuring that customer safety is never compromised.

Accessible Data Repository

Zebra touch screen mobile computers and tablets also address another major issue with paper-based food safety processes: accurate, accessible record keeping. It's not unusual for paper records to fill up fifty or more large binders with manually recorded data. Not only are these records susceptible to human error, but they are anything but quickly and easily accessible.

With a robust food safety application and Zebra handheld mobile computers, all food safety data is automatically recorded on the device, and then sent to a data repository that makes accurate information immediately accessible. Transferring data to a database is easy and immediate. Enterprise-grade mobile computers make complete records readily available for regulatory and traceability purposes, and the historical records make it easier to recognise and implement potential new efficiencies.

Remote Temperature Probes

- Work with sanitised digital or Bluetooth thermometers
- Verify temperatures throughout cooking and food lines
- Alert users for scheduled tasks



Employee Productivity

Electronic data capture and automated functionalities are important factors in enhancing employee productivity. The TC51 and TC70 mobile computers and the ET50 tablet all prompt and document employee conformance with health department sanitation guidelines, such as consistent hand washing procedures and equipment washing.

Additionally, by combining real-time data and behavioral observation and documentation, the devices also provide opportunities for employee training and coaching, offering the ability to correct problem areas on the spot, while helping to reinforce positive behaviours.

Building a Food Service Culture

Zebra touch screen mobile computers and tablets are transformative solutions that can help grocery stores ensure food safety, sanitation, product quality and service excellence from the moment the food is received at the loading dock to just before customers savour their first bites. They are fundamental components for creating a true food safety culture, helping organisations continually build the knowledge of their staff and increase their ability to work at their highest levels of productivity. Employees are continually reminded of the importance of food safety and are provided with the technology and processes to maximise food safety in every aspect of food transport, storage, preparation and service.

Protecting Your Customers and Your Brand

In the food and beverage business, the key to sustainable success is creating a brand promise based on providing consistent, enjoyable, delicious customer experiences. Ensuring food safety by scrupulous attention to detail in the monitoring and management of critical control points is fundamental to your ongoing success. Zebra mobile computers and tablets are essential technology tools for helping you assure food safety and deliver on your brand promise... for every customer every time.

For more information on how Zebra handheld mobile computers can help you ensure food safety, reduce liability and deliver on your brand promise, visit **www.zebra.com/retail**



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