

Intelligent Food Logistics

Food quality management solution using Internet of Things



The global Food industry consistently faces two major financial margin exposures. The first is spoilage and the second theft. According to statistics 40-50% of food is lost to wastage. In developed nations, this waste accounts [1.3 billion tons](#) of food annually. As far as Theft is concerned Food is the largest commodity exposed to theft, and accounts for over \$47.5 billion of losses annually. Companies can now leverage technology to drive their FSMA compliance requirements while simultaneously improving margins and lowering prices of food items.

Food manufacturers, Distributors, Transporters, Wholesale and retail markets as well as restaurants are under pressure to comply with new regulations known as FSMA (Food Safety Modernization Act), being enforced in 2017. There are deadlines for compliance with these regulations starting in 2017. For example, raw meat, poultry and seafood must be stored at very specific temperatures and temperature fences must not be violated during the transportation and delivery of these items. The FDA

and USDA require detailed reporting of temperature, which is mostly done manually and hence prone to error and tampering as well as involves high cost.

The advancement in technologies such as sensors, RFID, cloud, and internet as well as drastic reduction in their costs is making it affordable to monitor environment variables in real time. The technology makes it possible to create cooperation between food producers, transportation, distributors, and retail companies to work together as never before to ensure efficient delivery and safety of food is a reality through value chain visualization.

With IoT-based business solutions, companies across the supply chain not only simplify the data logging and compliance requirements but also gain the real-time visibility that enables the automated, intelligent actions needed to ensure food is of the highest quality, delivered on time.

Our Solution

PrideVel provides a complete wireless IoT solution for real time monitoring of the temperature, humidity, and the location of goods in transit as well as while at rest in a warehouse.

Our solution provides comprehensive monitoring and tracking of refrigerated cargo involved in cold chain whether sea, land, rail or in a static warehouse. The solution enables real time alerts/notifications on threshold violations. It also monitors the position of the vehicle in real time.

We use small proprietary wireless sensors that can be placed in trucks, rooms, or coolers. The sensors continuously monitor the environment variables and send the readings to the local gateways. The gateways filter and send the collected readings to

the cloud for storage and further analytical processing.

The intuitive dashboards display real time information of your entire supply chain for easy monitoring and analysis. Our software dashboard analyzes the data continuously and provides insights that can save on operating expenses and avoid disasters. We are deeply integrated with SAP Leonardo™ and Cisco hardware to ensure data security and robust analysis.

Business Benefits

- Ensure food quality and increase shelf-life
- Preventive approach to food safety
- Reduce operational cost by removing inefficiencies in supply chain
- Reduce downtime of assets such as freezers
- Comply with FSMA regulations
- Improve inventory management and control



Key Features



Wireless Sensors



Wireless Gateways



Real Time Alerts



Dashboard



Compliance Reports



Edge Processing



Fleet Tracking



ERP Integration