

## Optimizing Supply Chain Operations and Driving Intelligent Business Decisions While Serving Customers Better

Fuel distributors are on the leading edge of Internet of Things adoption as they are rapidly implementing commercially available tank monitoring solutions using low cost sensors and Low Power Wide Area Network (LPWAN) connectivity to drive business value through increased operational efficiencies, the elimination of emergency deliveries and enhanced customer service.

### Tank Monitoring and Logistics Challenges

With the large number of propane and fuel oil tanks being used to heat residential and commercial properties, a reliable means of monitoring fuel levels is essential. In residential markets, the unpredictability of weather, combined with varying customer uses of propane makes consumption rates difficult to predict. In commercial and industrial markets such as farming, manufacturing and healthcare, fuel delivery companies are a critical partner in supply chain operations where run-outs can have detrimental effects. These and other challenges often result in trucks being dispatched inefficiently, driving up operational costs and complicating customer service delivery.

### Innovation Opportunities

Ubiquitous Low Power, Wide Area Network (LPWAN) coverage is enabling a new set of asset tracking and monitoring applications that can automate services and provide a host of benefits to the fuel delivery market. By placing low-cost, low-power sensors on fuel tanks, fill level and other valuable data can be sent over the network to monitoring solutions used by delivery companies to optimize their processes. Additionally, the automation of data collection, combined with robust reporting and analytics built into management

software and mobile applications allows for a range of new value-add services to be made available to end customers. When information is shared through intuitive and convenient mobile apps, dealers and their customers engage more easily – everybody wins!

### Breakthrough Solutions

US-based propane and oil tank monitoring company WESROC offers a wide array of monitoring components and equipment to provide monitoring solutions for a variety of businesses. Through partnership with Senet, WESROC recently added LoRaWAN™ devices which require far less energy to operate than cellular devices, so they can be deployed in larger numbers at a lower cost. Using this highly secure and reliable technology, WESROC is expanding their business with end-to-end solutions and advancing collaboration between dealers and customers.

### Senet and WESROC

With the addition of LoRaWAN solutions to its portfolio of tank monitoring products, WESROC optimizes delivery efficiency by using affordable monitors to capture customer fuel tank levels throughout the day. The data is transmitted over the Senet LoRaWAN network to their fuel delivery customer's back-office software, including desktop management consoles and mobile applications that provide the tools to make delivery professionals more efficient.

In addition to optimizing operational processes, WESROC's customer can more accurately forecast fuel usage to reduce truck rolls thereby reducing the carbon footprint of their delivery fleet.

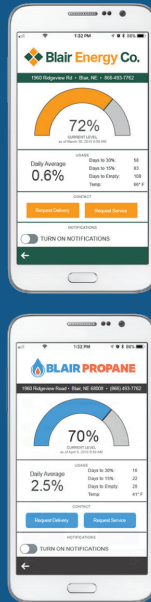


## Tank Monitoring System Features

### WESROC MyTank App

MyTankApp is a mobile app and website service that lets dealers provide customers with access to view their monitoring data enabling them to:

- View current tank level
- View daily usage rate
- View fill history and last fill date
- Schedule emails with tank readings
- Set up push notifications
- Order fuel or request service



### WESROC Sensor

- Measures tank levels to optimize delivery efficiency
- Accommodates a wide range of tank sizes
- Uses LoRa® technology for low cost, low power, long range transmission
- Up to 25-mile range



## Results

### Happier Customers

- Delivers overall better customer engagement and experience
- Improves service quality by eliminating run-outs and building customer trust
- Opens avenues of communication to customers through web and mobile app services
- Enables proactive communications with will-call customers about deliveries
- Positions dealers as technology forward-looking companies

### Why Senet?

Senet is a leading provider in cloud-based software, global connectivity service platforms and network build-out for the Internet of Things. With Senet's network as a service for propane and heating oil tank monitoring, productivity has been enhanced in a simple, scalable and affordable fashion. With a purpose-built architecture designed for Low Power Wide Area Network (LPWAN) service delivery, cloud-based network and fully supported management software, Senet offers a modern approach to network deployment, device connectivity, and customer engagement.

### Lower Operational Costs

- Eliminates Zero Gallon deliveries
- Reduces service failures (OOG)
- Increases gallons delivered per mile
- Increases gallons per stop
- Eliminates wasted stops
- Increases delivery, customer and business profitability
- Enables Field Inventory & Customer Usage Profiling
- Improves safety
- Reduces CAPEX

### For More Information

To learn more about Senet and our solution partners, visit [www.senetco.com](http://www.senetco.com) or call **+1 877-807-5755**.

For developers interested in onboarding and testing LoRaWAN end device sensors and gateways on the Senet network, sign up at: <https://portal.senetco.io>

### LoRaWAN

LoRaWAN™ is the open global standard for carrier-grade LPWAN connectivity, designed to connect low-cost, battery-operated sensors over long distances and offers unique benefits in terms of bi-directionality, security, mobility, and geolocation.