

USMC SMART WAREHOUSE CASE STUDY

PRIVATE NETWORK PIONEER FEDERATED WIRELESS NEEDED A PARTNER TO HELP DESIGN AND DELIVER SMART WAREHOUSE APPLICATIONS AS A PART OF FEDERATED'S 5G INSTALLATION AT THE MARINE CORPS LOGISTICS COMMAND WAREHOUSE OPERATIONS IN ALBANY, GA



Cloud connected, wireless sensors feeding web-based application dashboards will provide the USMC with instantaneous updates on warehouse facilities and operations.

A big part of warehouse's efficiency revolves around the proper management of the loading dock and coordinating arrival, departure and unloading of trucks. Private network pioneer Federated Wireless needed a partner to help design and deliver Smart Warehouse applications as part of Federated's 5G installation at the Marine Corps Logistics Command warehouse operations in Albany, GA. The project includes the upgrade of wireless network infrastructure and applications which can be employed to profoundly improve the efficiency, timeliness, accuracy, security, and safety of warehouse operations.

Software as a Service (SaaS) application platform

The SemperCon team reviewed the USMC warehouse requirements aimed at improving the warehouse's efficiency and designed a comprehensive solution which helps streamline operations using motion sensors to track incoming and departing trucks, as well as separate door sensors monitoring the current status of all bay doors. SemperCon's Software-as-a-Service (SaaS) cloud-based application platform will utilize Federated's 5G communications infrastructure for backhaul connectivity and employ LoRaWAN-based wireless sensors for capturing environmental conditions including temperature, humidity, logistics status and CO2 levels throughout the warehouse.

Part of the Capstone Partner/Federated Wireless team

SemperCon was introduced to Federated by Capstone Partners, a strategic advisory firm that is Federated's primary partner for 5G and Internet of Things applications and solutions.

According to Capstone president Allen Proithis, SemperCon has a strong background in designing and building Internet of Things systems that leverage connected devices to monitor environmental conditions and help improve operational efficiencies.



"SemperCon has demonstrated its ability to develop and deploy mission critical applications like those used in hospitals for monitoring temperatures of refrigerators and freezers for storing sensitive vaccines and medicines" explained Proithis. "SemperCon is very experienced at using the latest wireless technologies to connect environmental and motion sensors to help enhance safety conditions and manage operations within a facility."

—Allen Proithis, Capstone President

The Results

SemperCon delivered the Smart Warehouse solution on time and on budget for a well-received pilot program. SemperCon is now working with all stakeholders to expedite the production rollout of the application at the Marine Corps Logistics Command warehouse operations in Albany, GA.

The Challenge

Update an existing warehouse to improve efficiencies by properly managing the of loading dock and coordinating arrival, departure and unloading of trucks.

The Opportunity

Improving efficiency of systems by leveraging SemperCon's long experience in designing wireless Internet of Things solutions for industrial operations.

Solution

Use various wireless sensors connected to 5G wireless communications infrastructure and cloud-based SaaS application to quickly update existing warehouse to be a new 'smart' connected system.

Why Sempercon?

10+ years of cloud, IoT, web and mobile experience developing turn-key solutions for customers and managing those solutions allowing the client to focus on their business.



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