



Premium WiFi Deployment for Seamless Network in Clothing Warehouse

Overview

The warehouse is an open-structured building where employees use handheld PDAs to manage inventory and coordinate stock flow. The operation depends heavily on wireless connectivity, and a stable, high-capacity network became essential. After adopting Zyxel Networks solutions and LGU+ Premium WiFi service, the customer ensured seamless wireless connectivity throughout the warehouse without any dead zone and created a safe work environment by preventing cyber threats.

Challenges

The Yeosu clothing logistics warehouse faced several challenges in achieving reliable WiFi coverage across its three floors. The open-ceiling structure posed challenges in maintaining consistent connectivity, creating potential dead zones, especially on the second and third floors, which are primarily used for clothing storage with a full hanger layout, requiring a design that minimizes shaded areas even as hangers fill up with additional clothes. Additionally, employees frequently moved between floors while using PDAs for inventory management, necessitating a stable, uninterrupted WiFi connection during these transitions. Compounding the issue, the warehouse had to maintain reliable connectivity even as multiple devices, including PDAs and automated robots, accessed the network simultaneously, increasing the demand for a robust and high-capacity wireless solution.

Solutions

The company aimed to create a seamless WiFi environment that eliminated connectivity issues and optimized network performance in the logistics warehouse. Zyxel Networks and LGU+ worked to implement a comprehensive wireless network solution at the clothing logistics warehouse in Yeosu. During the site inspection, the floor height was measured at 3.5 meters. Five wireless access points were installed across workspaces on the first floor of the logistics warehouse to ensure seamless network connectivity and support efficient operations, including product receipt, shipment, packaging, and logistics lanes that generate the highest traffic.

Customer

Clothing Logistics Warehouse
in Yeosu

Industry

Logistics

Location

Yeosu, Korea

Customer Background

The clothing logistics warehouse is located in Yeosu and consists of three open floors. The warehouse stores clothing and manages stock using PDAs and automated logistics robots. To optimize operations, the warehouse required a reliable and seamless wireless network across all floors.



Solutions

Seven access points were installed on the second and third floors, where densely packed clothing storage required strong and reliable connectivity. By using a unified WiFi name (SSID) across all floor access points, employees can use PDAs throughout the warehouse without interruption, ensuring a smooth and consistent connection.

The GS1920-8HPv2 PoE switches were installed in the terminal box on each floor to efficiently supply power to the access points, ensuring smooth operation and providing advanced management features to prevent network errors and maintain stability. Additionally, their status can be monitored via a cloud-based platform, offering real-time insights into port connections, connected devices, and PoE power consumption for easy management.

In the logistics warehouse, multiple PDAs handle receiving, shipping, and logistics, making network security a top priority. The USG FLEX 200 firewall was installed at the top of the network where all traffic converges. The firewall features a robust, intelligent network security capability that applies the principles of zero trust access. It blocks external threats such as viruses, phishing, spyware, and spam while restricting inappropriate applications and website access within the company. This solution provides comprehensive multi-layer protection against various types of threats.

Product List



- WAX610D WiFi 6 Access Point



- GS1920-8HPv2 Smart Managed PoE Switch



- USG FLEX 200 Firewall

Results

The new network was designed with seamless roaming between access points, enabling employees to move freely within and between floors without disconnections. This improvement enhances the warehouse's efficiency. Employees can now move between floors without manually reconnecting their PDAs to WiFi, ensuring faster and more reliable stock management.

- Seamless WiFi across all floors, even when moving through the storage area
- Stable connectivity supports simultaneous device connections, including PDAs and robots
- Enhanced network security with advanced traffic management, malware prevention

