

Major Retail Store Chain Improves Wireless Service with TerraWave Solutions®

Executive Summary

Company Focus

- Major retail store chain with over 190 stores in the Midwest

Business Challenge

- Developing a customized enclosure with antennas, APs & lightning protection already installed
- Providing antennas that would work with major access points like Cisco

Solutions

- 802.11n 2.4/5 GHz 6 dBi Outdoor MIMO Omnidirectional Antennas, 6 Pack, Dual Band Leads
- 14x12x6 NEMA 4X Polycarbonate Enclosure with Solid Door, Latch Locks
- 1 GB, 10 KA Single Port LAN/PoE Surge Protector
- 0-6 GHz Lightning Arrestor
- 9-port Enclosure Ground Bus Bar

Benefits

- Successfully developed a comprehensive, integrated solution that included all components, including enclosures that house two access points
- Implemented the solution on time and on budget
- Saved a measurable amount of implementation time since the integrator didn't have to drill, install and wire all of the backplates



Challenge

For 50-plus years, this retail store chain built itself up from a small mom & pop store to a major chain with over 190 stores in the Midwest region of the United States. The company is constantly striving to provide higher levels of service to its customers and has established itself as a leader in finding and using new technology such as being one of the first stores to use checkout scanners.

With advancements in wireless technology, a company-wide initiative was launched to improve the existing Wi-Fi service. This would involve finding durable and reliable wireless equipment to work with their existing wireless infrastructure in order to provide more reliable Wi-Fi service with a broad range for both customers and employees.

As the project continued, the company recognized a growing need to expand their wireless infrastructure to include enclosures to protect their access points from tampering as well as lightning protection for defense against inclement weather conditions. However the company additionally requested that the solution be combined for an all-in-one solution that would include all components with the enclosure - along with the access point.

Solution

TerraWave Solutions worked closely with the company's VAR/ System Integrator to implement the wireless solution. They informed TerraWave that the goal was to save costs by having the lightning arrestors, ground wiring and Ethernet surge arrestor already installed in the enclosure so that when they integrated the AP, they would just need to do a few things to complete the installation.

Major Retail Store Chain Improves Wireless Service with TerraWave Solutions®



802.11n 2.4/5 GHz 6 dBi Outdoor MIMO Omnidirectional Antennas, 6 Pack, Dual Band Leads



14x12x6 NEMA 4X Polycarbonate Enclosure



1 GB, 10 KA Single Port LAN/PoE Surge Protector



0-6 GHz Lightning Arrestor



9-port Enclosure Ground Bus Bar

The TerraWave Solutions team developed an integrated backplate that included the ground wire, lightning arrestors for coaxial and Ethernet cable and coaxial jumpers to extend the RF outside of the box so that the TerraWave antennas could easily mount near the enclosures. These integrated solutions would be installed across multiple locations in challenging environments both indoors and outdoors. The TerraWave enclosures will protect all of the installed wireless equipment from damage caused by tampering as well as exposure to the elements. The outdoor rated antennas are specifically designed to withstand exposure to moisture and dust - making them perfectly suited for use in a warehouse or manufacturing environment.

The retail store company was extremely pleased with the solution since it accomplished their goal of reducing implementation costs, increasing the coverage of their Wi-Fi service and having all of the solution components integrated into one easy-to-install product.