



(603) 717-7117 • WWW.GREENMTNCOMM.COM

CHALLENGE

Electro Wire, specializing in supplying wire and cable solutions to the telecommunications, transit, military, and industrial industries, was faced with finding reliable connectivity between two of their local warehouse locations in Massachusetts. The current leased wired circuits and previous wireless point-to-point connectivity link were proving to be unreliable. Under an expansion program, Electro Wire was also updating their older analog phone systems to VoIP and contemplating implementing a wireless hand-held inventory picking and tracking system in their warehouses.

SITUATION

Green Mountain was asked to assess the situation and present wireless technology solutions to Electro Wire's connectivity challenges. During the discovery period, Green Mountain found that Electro Wire had experimented with several wireless solutions that were not meeting their needs. Some of the identified challenges included a mix of technologies from multiple vendors which only solved parts of a greater need and presented managerial control and parts sparing challenges. In addition to unreliable building-to-building connectivity, their wireless LAN coverage was spotty and bandwidth limited with absolutely no RF coverage overlap.

SOLUTION

The best solution was to implement flexible, next generation Wi-Fi multi-radio arrays. This technology solution provided cellular-like sectorized radios with RF coverage overlap from a circular common chassis. These radios were individually programmable to either 2.4GHz or 5.8GHz, which helped in channel planning and mitigating interference. Additionally, by utilizing one high capacity radio from each warehouse location and an outdoor antenna, reliable wireless backhaul connectivity was implemented between the two warehouse locations. The utilization of a higher gain radio design and an overlapping RF signal pattern ensured that the wireless inventory devices transferred from one array to another with no disconnect.

RESULT

The immediate result was a satisfied customer that now had the ability to utilize one wireless technology throughout its entire building complex, without the threat of dropping its wireless signals. Electro Wire was so impressed with this multi-radio array technology that they have decided to implement similar solutions in their corporate headquarters and warehouse spaces in Illinois, Georgia, and Arizona.

LONG-TERM BENEFITS

The long-term benefits include the ability to develop additional bandwidth as inventory tracking applications demand. More importantly, Electro Wire now has the capacity to manage its national presence with one managerial interface.

"We are very pleased with the addition of the new Wi-Fi arrays into our existing network infrastructure... Our old Wi-Fi access points were not able to provide the coverage or the bandwidth that the new devices are able to, nor were they able to seamlessly transfer the wireless signal between access points without dropping the connection. It is obvious that the equipment recommended by Green Mountain is top-end technology. Additionally, we replaced an aging wireless system that served as a point-to-point Wi-Fi bridge to a secondary building on our campus by simply taking a channel from one of the new arrays in each building and adding an external antenna. This solution is both elegant and more manageable since we are now managing one type of Wi-Fi technology instead of two... Thank you to the Green Mountain team for supporting us in this effort. Your product knowledge and attention to detail have been exceptional, and with your continued support, we expect to have a completely upgraded Wi-Fi environment at all four of our locations."

Andrew Hartley, IT Director of Electro Wire