



Wireless Networking in the Warehouse



It seems straight forward. You have a corporate wide strategy for wireless networking and the products from the vendor that you have selected seem to be working well in your office environments. So why would you choose a different vendor for the wireless in you warehouse? Fun trivia question, how fast does a fork lift travel? No fair looking that up on the internet. Think about it for a minute. Ok, the answer is 8 MPH. How fast does your laptop travel on your desk? How about your printer? Are you starting to realize why you might need a different wireless network in your warehouse?

1 BUILT FOR THE WAREHOUSE

8 MPH is 704 feet every minute with a mobile computer and possibly a mobile printer both running on your wireless network. If you have a 500,000-square foot warehouse, that is from one end of the warehouse to the other. Your fork lift probably went through ½ dozen access points or more in that 1 minute. Will your office grade wireless network seamlessly hand off those connections that fast? A wireless network that is specifically designed for this environment will hand those multiple AP connections off without an issue. An office grade network will have the access points try to hang on to a connection for as long as it can. That will spell catastrophe in a warehouse environment.



2 OVERSATURATION

In an office environment, you may want to over saturate your wireless access points. After all, you have some heavy data usage with many users in a relatively small area. But if you do that in a warehouse environment, you will cause many issues. If a hand-held device can see too many access points and if it is moving rapidly through a warehouse, it makes it very difficult for the mobile device to pick an AP to latch onto. In a warehouse wireless network, you want to have overlap with the AP placement to be sure, but you do not want to over saturate your access points.

3 WHERE IS THE ACCESS POINT?

Have you ever been in a warehouse trying to spot where the access points are located? 30 or 40 feet up in the air, they are usually white and the ceiling is often also white. There is a blinking light up there somewhere...or maybe there is a problem and the light is out. Which access point are you standing under? When trying to troubleshoot issues, this can be very important information. The answer was a simple one. Get a large piece of plywood, paint it yellow, put large numbers on the board that identify the access point and mount the AP to the board. Finally, put beam clamps and safety straps on the board to mount and safely secure it. Now you can stand at a distance and see where every AP is and which one is which. These are the kinds of things that you get when you hire the EMP Tech Group to install the wireless network in your shop or warehouse. Years of experience telling us that these simple add-ons make a huge difference.

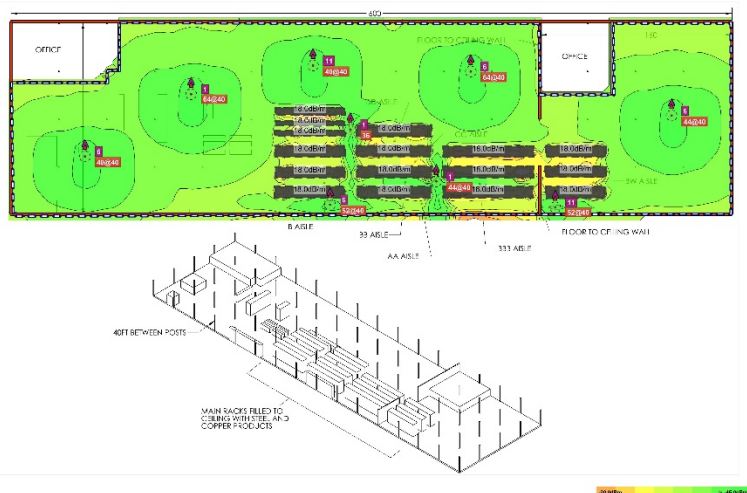


4 CHANGING ENVIRONMENT

No place like a warehouse has such frequent change in the environment that affects the wireless network. One month you have racks that are mostly empty after a big sale or the holidays have plucked your warehouse clean. The next month, production has caught up and the warehouse is full of product all the way to the rafters. When you first moved into the facility you were mainly storing in floor locations, now you are half full of racking. You need a wireless network specifically designed for the warehouse to meet these kinds of challenges.

5 WIRELESS SITE SURVEY

If your office is small enough it could be argued that you don't even need a professional wireless site survey. Heck, if your warehouse is small enough the same argument could be made. But if you are approaching 100,000 square feet or more and if you have high racking that is more than half of the way to the ceiling, a professional site survey done by a company that specializes in warehousing and factory floor is the way to go and will more than pay for the upfront investment.





6 THE COST OF A BAD WIRELESS NETWORK

The productivity losses from spotty connections and dropped sessions can be immense and they happen every day across every worker. If your average burdened labor rate is \$30,000 per year and you have 50 warehouse workers per shift using mobile computers on 2 shifts, that is \$3 million. A 10% loss or gain in efficiency is a swing of \$300,000. You can now start to see why those dropped sessions or spotty coverage can be costing you big!

7 HIRE AN EXPERT

The EMP Tech Group specializes in wireless networking. Not for schools or government buildings or stadiums, but for warehouses and manufacturing floors. We bring years of expertise to your application and will install a rock solid wireless network that will excel in giving you 100% coverage for your wireless data collection and label printing devices.

