

The Wireless Warehouse



Inventory management costs add up quickly, siphoning profitability directly from the company's bottom line. Being able to quickly locate and move raw materials and finished goods not only reduces inventory management costs, it improves customer satisfaction. To quickly and accurately move tens of thousands of items per day to customers around the world, modern warehouses rely on wireless technology. Hand-held bar code scanners capture real-time data, sending it over wireless networks to back-end operations, finance, and manufacturing systems where it forms the foundation for the company's reporting, forecasting, and customer service operations.



Wireless networking equipment such as access points and wireless switches rely on Ethernet connectivity for their backhaul infrastructure. Warehouses can cover many acres, making it expensive to pull fiber or cable for these devices.

Because storage

configurations can change frequently and extending the wired backhaul to every desired location can be difficult, this can result in coverage holes, erratic connectivity, and data loss. With Firetide™ Instant Mesh Networks™, warehouses can significantly improve connectivity, and

with it, data accuracy, fulfillment speed, and employee productivity. Using mesh network technology, Firetide HotPoint™ wireless mesh routers improve and extend coverage while eliminating the need for traditional wired Ethernet backhaul. Firetide's wireless mesh networks provide the most cost-effective way to deploy Ethernet and increase the return on investment of wireless warehouse management systems.

Firetide Instant Mesh Networks

A Firetide Instant Network is a TCP/IP, broadband mesh network that supports multi-hop, point-to-point, and multi-cast routing. Firetide HotPoint mesh routers automatically connect to each other to create an extensive mesh backhaul for transporting traffic such as bar-code data and real-time surveillance video. Deploying a HotPoint mesh router is as easy as plugging the unit into an AC power source. Now, virtually any Ethernet networking service can be deployed anywhere — even outdoors.

Assure Vital Data Integrity

At the heart of modern warehouse management is the bar code. It identifies items as they arrive, are picked to fill orders, shipped, and accounted for. In addition to shipping finished products, warehouse facilities also receive raw materials, hold inventories, manage logistics, and provide real-time cost and resource data to enterprise applications.



Application Note: The Wireless Warehouse



Bar code systems are heavily transaction-oriented and any connectivity interruption can result in data loss and error. With metal shelving, metal support beams, and constantly changing numbers of items on racks, network coverage can change as well. Sometimes it's good. Other times, it's not.

Hotpoint mesh routers can be installed virtually anywhere, making it easy to put them in as many locations as needed to assure good coverage. And because a Firetide instant network self-configures when powered-up, a HotPoint mesh router can be turned off, moved, and turned back on without having to change anything.

Improve Efficiency and Accuracy

Quickly fulfilling materials requests requires having up-to-the-minute information about SKUs, inventory levels, and product locations within the warehouse. As a high-performance, broadband network, a Firetide Instant Network enables the delivery of real-time information from barcode scanners to key inventory management and logistics systems. Now, drivers can be sure that the requested SKUs are indeed on the shelves when they go to pick them. Drivers don't have to try two or three locations to find the order components, saving dozens of wasted trips—and valuable hours—per day.



Simplify Security and Surveillance

Deploying a wired security or surveillance monitoring system can be expensive. However a Firetide Instant Network enables IP cameras to deliver real-time, round-the-clock video over a wireless backhaul. This allows very cost-effective installation of cameras in any

location, indoors or outdoors—throughout the warehouse, in parking lots, equipment bays, loading docks, and offices.

Ethernet Anywhere

HotPoint mesh routers function as a distributed Ethernet switch providing Ethernet connections for peripheral devices. For the first time, a warehouse can deploy printers or other Ethernet devices almost anywhere.



Mobilizing for a Return on Investment

Wireless warehouse management accelerates materials handling and improves order accuracy, which not only makes customers happy, but also improves a company's profitability. Fast and easy to deploy, a Firetide Instant Networks can help accelerate a good return on a wireless warehouse investment.

For more information about Firetide, Firetide Instant Mesh Networks, and HotPoint Wireless Mesh Routers visit www.firetide.com.

Firetide, Inc.

16795 Lark Avenue, Suite 200
Los Gatos, CA 95032
www.firetide.com