

EMPOWERING WAREHOUSE MODERNIZATION WITH T-MOBILE 5G

Traditional WI-FI Is Not Keeping Pass With Digitalization

Traditional WI-FI networks, once considered adequate for basic connectivity, are now struggling to meet the demands of modern manufacturing and logistics operations. These networks were not originally designed with mobility in mind, leading to frequent disconnections and poor handoffs as devices and personnel move throughout expansive warehouse spaces. Security vulnerabilities inherent in WI-FI technology pose risks to sensitive data and operations, while the cost and complexity of scaling WI-FI to cover large areas can be prohibitive. In device-dense locations typical of today's smart warehouses, WI-FI networks often buckle under the strain, resulting in interference and bandwidth allocation issues that degrade overall performance. Moreover, the physical obstacles common in warehouse environments, such as metal shelving and machinery, create signal dead zones and inconsistent coverage, further compromising reliability.

5G Is An Innovation Platform

To address these challenges and propel their digital transformation efforts forward, forward-thinking manufacturers are increasingly turning to advanced solutions like T-Mobile's 5G network. This next-generation cellular technology offers a robust alternative that is well-suited to the dynamic needs of modern warehouses and production facilities. T-Mobile's 5G infrastructure enables real-time, high-precision asset tracking throughout the supply chain, facilitates continuous monitoring of equipment for predictive maintenance, and provides the connectivity backbone for a wide array of Industrial Internet of Things (IIoT) devices and sensors. Additionally, the high-speed, low-latency connections support advanced camera systems with AI-powered computer vision, enhancing employee safety monitoring and workflow optimization.

T-Mobile The 5G Leader

One of the key advantages of T-Mobile's 5G network is its multi-spectrum approach, utilizing low-band, mid-band, and high-band frequencies to cater to various use cases and environments. This versatility ensures excellent coverage both indoors and outdoors, supporting diverse applications in logistics, tracking, security, and AI-driven computer vision. By investing in 5G infrastructure, manufacturers are not only solving current connectivity challenges but also future proofing their operations for emerging technologies and evolving business needs.

Perhaps most importantly, T-Mobile's 5G enables true worker mobility, supporting seamless connectivity for personnel throughout the facility. This opens new possibilities for leveraging augmented reality (AR) and virtual reality (VR) applications for remote assistance and smart hands operations. The low latency of 5G also allows for real-time remote control of machinery and robotics, enhancing operational flexibility and enabling new paradigms in manufacturing processes.

By adopting T-Mobile's 5G solution, manufacturers can overcome the limitations of traditional WI-FI networks, significantly improve operational efficiency, and position themselves at the forefront of the industry's technological evolution. Our team is ready to help.

To learn more about D&H and T-Mobile's 5G Connected laptop program contact D&H rep.