Belden

High-performing warehouses need High-performance wireless networks



Infographic

Modern warehouses must operate at peak efficiency — in dynamic, ever-changing environments — to meet more and more challenging service-level agreement metrics.

But what if the network can't keep up? Risks could arise anywhere across the warehouse floor, impacting fulfillment, worker safety and, ultimately, business performance.

Let's explore two scenarios:



First, a digitized warehouse with numerous robots in its storage, picking and other areas but operating with an unoptimized data network.



Next, the same warehouse with a reliable, flexible network that unlocks unparalleled efficiency and greater value from enterprise IT investments.

A network unable to meet rising demand

High latency, unplanned disconnections and downtime, wireless network instability and coverage gaps wreak havoc on operations.

High network latency throttles cutting-edge robotics performance Slow network speed reduces packaging rates, increases shipment times

> Network blind spots hinder data flow and deliver inaccurate analytics





An optimized wireless network to power today's intelligent warehouse

A resilient, fast and future-ready wireless network delivers minimal latency and disruptions. Now, robots can operate safely and efficiently, and the facility can maximize its performance, uptime and warehouse throughput.

Deploy 400+ robots to optimize operational space and increase

Achieve the same throughput with fewer robots or add robots to the same network to increase productivity





* For RLX2 products

Better wireless data networks

Better business performance

Wirelessly connecting data, devices, systems and people while enhancing accuracy and security produces better operational outcomes.

Belden clients have reported:





Rise of the robots

Year-over-year e-commerce growth is driving demand for autonomous guided vehicles (AGVs), autonomous mobile robots (AMRs), dense storage and micro-fulfillment centers. As all these systems come online, warehouses need to have networks that can handle the increasing loads.



Projected mobile robots shipped by 2028*



Projected installed mobile robot base by the end of 2028*



Projected total AGV and AMR market in 2028*

* AGV and AMR Industry Landscape 2023 - 2028 Featuring Analysis of 650+ Players - Shipments of Around 670,000 Mobile Robots are Projected Worldwide, with an Installed Base Reaching 2.7 Million," GlobeNewswire, August 2023



We drive digital transformation for intelligent warehouses

Belden's fast, stable and resilient wireless networks set the standard in scalable and secure warehouse automation. Our industry expertise has made us a trusted partner to some of the leading large-scale wireless-enabled mobile solutions providers in the market.

Ready to elevate warehouse operations with unified network control, future-proof connectivity and fail-safe performance?

It's time to build the automated, next-gen warehouse.



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About Belden

Belden Inc. delivers complete connection solutions that unlock untold possibilities for our customers, their customers and the world. We advance ideas and technologies that enable a safer, smarter and more prosperous future. Throughout our 120+ year history we have evolved as a company, but our purpose remains - making connections. By connecting people, information and ideas, we make it possible. We are headquartered in St. Louis and have manufacturing capabilities in North America, Europe, Asia and Africa. For more information, visit us at www.belden.com; follow us on LinkedIn, Instagram, Twitter/X and Facebook.