



**WELL
OVER 20m**



**Increase Warehouse Efficiency
with an Extra-Long Range Scanner**

See the Forest and the Trees

Several factors are disrupting supply chain, setting the stage for a shift toward modern, more efficient technology. One notable factor is global e-commerce growth with revenues on pace to reach [\\$4.15 trillion in 2022](#). Revenues are predicted to continue to rise at an 11.35% CAGR from 2022 to 2025, increasing to \$5.73 trillion. Furthermore, Statista is predicting that e-commerce will capture [21% of total retail sales](#) in 2022 and keep growing to reach 24.5% in 2025.

This e-commerce boom is contributing to greater demand for labor in warehouses and distribution centers. In 2021, 58% of businesses reported an [increase in fulfillment volumes](#). This might be considered a good problem to have – if it wasn't occurring at the same time as a labor shortage. Research for the Instawork 2022 State of Warehouse Labor report found that [73% of warehouse operators can't find enough labor](#).

Increased demand and scarce labor make it more important than ever for warehouse operations to run smoothly and efficiently. Mobile devices have been an essential tool for automating data collection, increasing accuracy, and operating more profitably. However, the choice of barcode scanners is now more pivotal than in the past. In a quest to find more space to address growing demand and to build a cushion against supply chain variability, warehouses are expanding vertically as well as horizontally. This growth both up and out requires scanners that not only enhance employee productivity and efficiency but also read barcodes at close-, mid-, and long-range, from any position or angle.



How to Make Fast-Paced Scanning Faster and More Accurate

Extra-long-range (XLR) scanners are a practical solution to current warehouse data collection challenges. XLR functionality allows employees to scan items on a high shelf or in a bin across the warehouse, eliminating having to expend labor hours walking to items or bringing them to the ground for a scan. Furthermore, if the item isn't correct, it wastes even more time and labor and delays fulfillment. A barcode scanner that saves time by accurately scanning at extra-long distances – even just seconds per scan – can add up to hundreds of labor hours and thousands of dollars of savings each year.

XLR scanner features that meet today's warehouse operational challenges, increase efficiency, and save costs include:

Scanning Through Plastic and Other Common Barriers

People can see through a plexiglass windscreen on a forklift and shrink wrap, but not all barcode scanners can. For maximum efficiency, warehouses need to deploy XLR scanners that can get a good read regardless of plastics or other materials that might be between the scanner and the barcode. Look for scanners tested for excellent depth of field and sweep performance through a variety of transparent materials with no reduction in their capability to produce good reads.

Ergonomics and Safety

Decision makers can sometimes overlook worker safety when choosing a barcode scanner for their operations. However, the right scanner can make a positive impact on accident and injury rates. First, an XLR scanner that can read to different ranges up to 20 m will eliminate the need for forklift drivers to exit their vehicles to scan an item on a top shelf or at a distance. This minimizes the chance that workers on their feet in a busy warehouse or distribution center will step into the path of another vehicle.

Additionally, a long-range scanning distance eliminates the need to climb to a high shelf. With an industry-leading XLR scanner, all the employee has to do is point, aim, and scan from the floor and leave the heavy lifting to warehouse equipment.



Worker Satisfaction and Retention

During a labor shortage, employees may feel overworked and overwhelmed as they try to cover for unfilled positions and keep performance metrics at peak levels. Pew Research found this scenario may set the stage for resignations. A study in 2021 found that 39% of employees cited [working too many hours](#) as a reason they resigned, and 56% cited feeling disrespected at work. Equipping employees with the right tools, such as barcode scanners that work reliably and effectively in today's warehouse settings, can contribute to better employee job satisfaction and retention rates than forcing employees to work with tools that leave them feeling like they always need to work harder to catch up.

You may find that eliminating unnecessary steps in data collection processes will not only balance workloads and maximize productivity but also decrease the chances warehouse operators will spend time and budget recruiting, hiring, and onboarding new employees.

Snappy Scanning from Any Perspective

Another XLR barcode scanner feature to investigate is how well the scanner changes perspective. Imagine seeing a barcode at arm's length and then one 20 m away. The human eye needs to adapt focus when looking at something up close then far away. XLR barcode scanners need that flexibility as well – but some cannot handle perspective differential. Industry-leading devices like the Datalogic's XLR scanners will adapt quickly and provide good reads and snappy responses when scanning at any distance. Additionally, they are capable of seamlessly reading close to far in rapid sequence.

It's also important to choose a scanner that can read a barcode at any angle. Taking time to orient items or cartons to accommodate a barcode reader takes extra time and slows down production. The best scanners for today's operations can deliver a good read regardless of the barcode's position.



Visual Guidance

When you can't tell where the scanner is pointing, it's difficult to know which data you are collecting. Furthermore, without feedback, employees can waste time canceling scans and rescanning items to ensure they captured the right information.

Choose an XLR scanner that projects a brightly colored light cue confirming what the employee is scanning to reduce errors and the amount of time it takes to aim. The best XLR scanner for the warehouse will provide feedback so that employees know they've successfully read the barcode, so look for a scanner that gives quick and easy good-read confirmation.

Is It Time for a Barcode Scanner Upgrade?

Before the e-commerce boom, more-than-typical supply chain variability, and a persistent labor shortage, the IT hardware that warehouses had deployed may have been adequate to keep up with demand. But in an era where that demand has grown and many operations have fewer workers than they need, a tech upgrade can help fewer workers accomplish more.

Furthermore, scanners need new functionality to work effectively in warehouses where stock or products are stored on high shelves, behind plexiglass or plastic, and at different distances from the warehouse worker that needs a good read. Legacy barcode scanners will not provide all of the functionality required to streamline scanning, reduce wasted movement, and keep operations safe at the new speed of business.

Evaluate your operation, how much value your current barcode scanner is providing to your distribution operations, and the impact a scanner with XLR capabilities can make on overall productivity, efficiency, and profitability.

Ready to learn more about how XLR scanners can help you solve today's warehouse challenges? [Contact Datalogic](#)



About Datalogic

For over 50 years, Datalogic has been a leading manufacturer of automatic data capture and factory automation solutions, including bar code readers, mobile computers, and RFID solutions.