Logistics

Innovative AI Surveillance Solutions: Empowering Logistics Companies to Meet Increasing Customer Demands

In the next five years, the global logistics industry is expected to face even greater demands.

For instance, a recent McKinsey report predicts that by 2025, the cross-border e-commerce market will reach approximately $500 billion, marking a nearly 67% increase from 2020 figures.

Furthermore, the report indicates that by 2030, cross-border e-commerce will surge by another 100% compared to 2025 projections, exceeding $1 trillion.
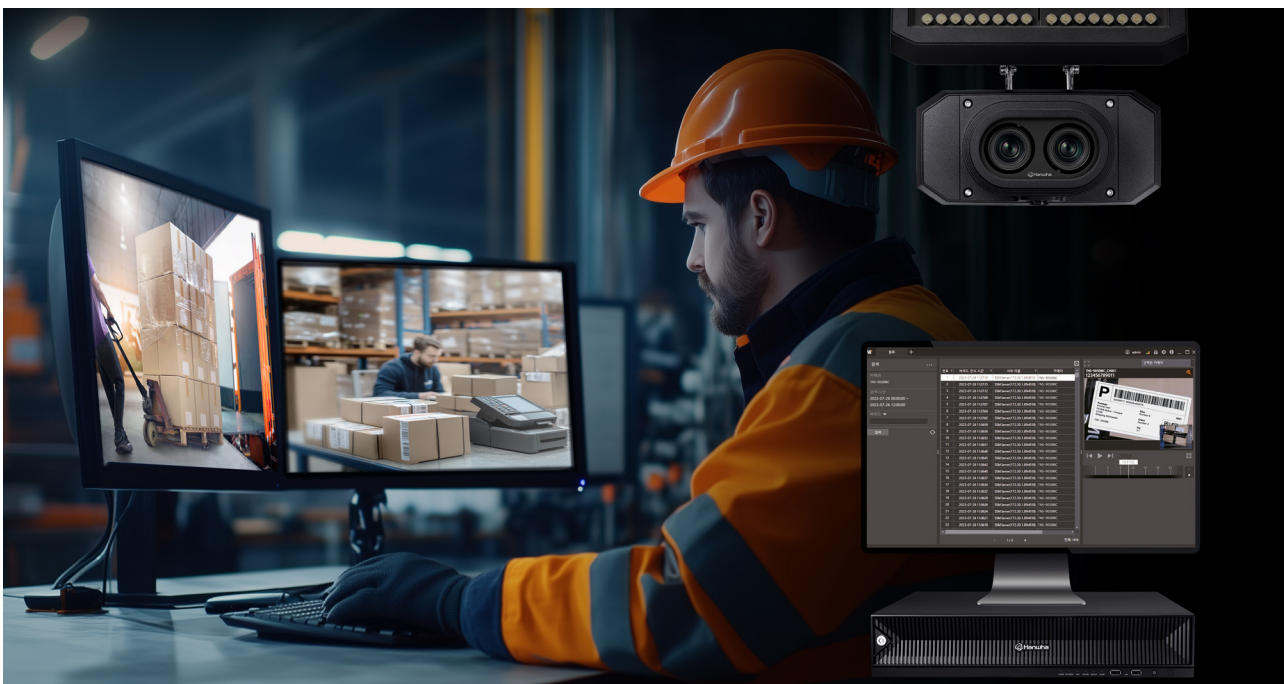
In response to these challenges, companies across the logistics sector are rapidly developing or integrating advanced AI tools. This is aimed at reducing costs and enhancing daily operations, including inventory management and route optimization for quicker last-mile deliveries.

As a global vision solution provider, Hanwha Vision technologies are trusted by many of the world's top logistics and package delivery firms.

Its latest offering, the Hanwha Vision Logistics Solution set, is designed to help these organizations improve their logistics management, delivery, and tracking processes.

The Potential of a Fully-Integrated Logistics Solution Set

By utilizing its extensive range of edge-based AI solutions and Vision Logistics Tracking software (VLTS), Hanwha Vision's fully-integrated Logistics Solution set encompasses all aspects of inbound and outbound package delivery, including receiving, handling, shipping, and tracking.

The set includes Hanwha Vision's breakthrough Barcode Reader (BCR) camera, which combines barcode recognition and video capture all in a single device.

The AI-enabled BCR camera, introduced in 2024, accurately tracks and recognizes parcel barcodes on high-speed conveyors at a speed of 2m/s. The image sensors for barcode recognition and video monitoring offer 4K resolution and a wide Field of View (FoV) with a 25mm lens.

As a single device, the unit lowers installation and maintenance costs compared to conventional systems that require barcode readers and surveillance cameras to be installed independently.

Integrating the BCR camera with Hanwha Vision's VLTS, can help companies boost productivity, improve efficiency, and reduce theft or damage.

With an integrated logistics system (WMS) and CCTV system (NVR), the Hanwha Vision VLTS enables operators to easily track a package and access video playback by simply scanning the invoice barcode.

By comparison, with logistics and CCTV systems typically operating separately, employees are forced to check the last location and time through a barcode search every time an event occurs. Then, they must revert to the surveillance system to view a recorded video to see what happened at that precise time and location.

Along with more time required to find packages, this process increases the risk of errors and adds costs. Furthermore, slower response times can negatively impact customer experiences.

"Besides the BCR camera, the Hanwha Vision Logistics Solution set includes other effective management systems that simplify operations, enhance safety, and reduce costs," said Hanwha Vision representative.

For example, Hanwha Vision's Packaging Video Management system quickly matches videos with work history and helps operators respond effectively to customer claims for errors, omissions, or damage throughout the packing process.

For Dock Safety, Hanwha Vision's edge-based AI cameras oversee the safety of dock loading and unloading, helping operators to minimize hazards and easily document and report on compliance with all safety and industry regulations.

Click here to connect with Hanwha Vision experts to learn more about how the Hanwha Vision Logistics Solution set can help your business.

Hanwha Vision