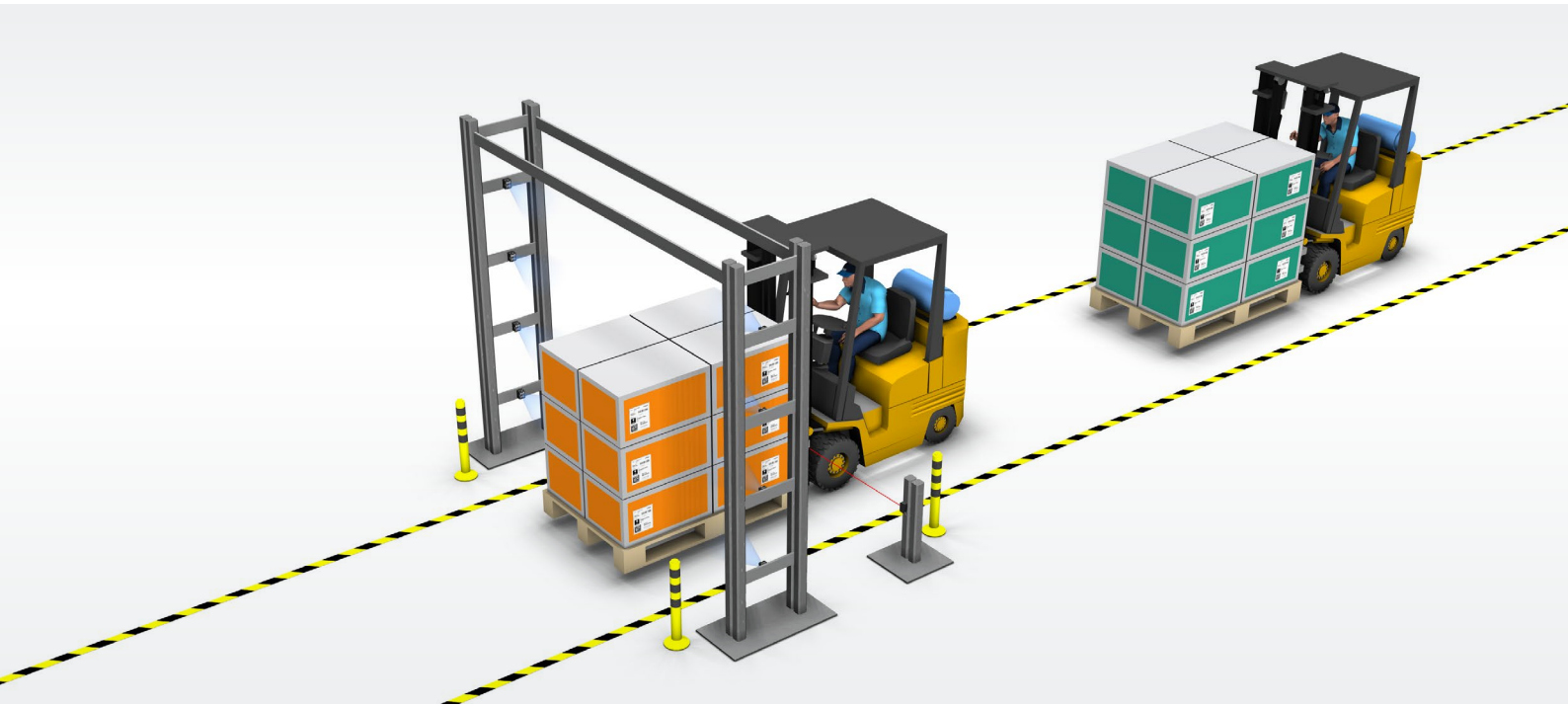


Automated scanning of pallets in motion for improved supply chain efficiency



Current Challenges in pallet scanning

Modern supply chain operations face increasing complexity when processing pallets in and out of dispatch and reception areas:

- Manual Scanning Bottlenecks: Forklift drivers must stop and manually scan pallet manifest codes, slowing down operations.
- Inconsistent Barcode Positioning: Barcodes vary in location, complicating detection.
- Motion Blur & Small Codes: Scanning while moving leads to unstable images and missed reads.
- Large Inspection Area vs. Small Code Size: Requires high-precision, dynamic tracking technology.



The Solution: High-Performance Code Reading Gate with OMRON advanced decoding algorithms

A smart, high-speed gate system that scans 1D/2D barcodes on the fly: **no need to stop or dismount.**

Key features

- **High resolution readers:** 5.0 MP cameras with bright light LED illumination.
- **Dynamic Autofocus & Tracking:** Ensures accurate reads even in motion
- **Time-of-flight sensor:** Adjusts settings based on object position
- **Web browser configuration:** easy set up and monitoring.
- **Industrial connectivity:** EtherNET, ProfiNET, and I/O link integration.
- **ERP Integration:** Seamless data flow with enterprise systems.
- **Visual feedback:** light tower indicators for scan confirmation.



Operational Benefits

- **No manual scanning:** Drivers stay in the forklift. Just drive through.
- **Higher accuracy:** Reliable reads even with variable barcode positions.
- **Small footprint:** Compact design fits into existing workflows.
- **Affordable investment:** Cost-effective automation upgrade.
- **Workflow optimization:** Faster loading bay operations.
- **Operator comfort:** No disruptive flashing lights.

Technology behind the Solution

VHV5 engine

- Multicore processor with X-Mode 6.0 decoding algorithm.
- High-speed, high-accuracy barcode reading with autofocus.

NX1 Controller

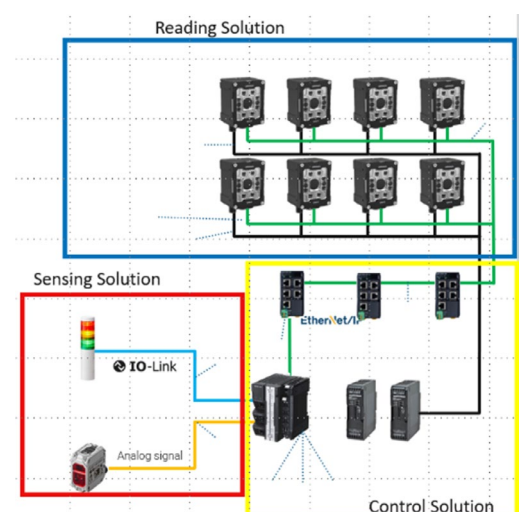
- Integrates logic, motion and data.
- Eliminates middleware for seamless IT connectivity.

E3AS-HF Sensor

- Compact-sized body reflective photoelectric sensor can be mounted anywhere.
- Wide-angle detection up to +/- 85°, range up to 6m.

IO-Link Signal Tower LR6-IL

- Seamlessly integrates into IO-Link masters with a built-in 5-pin M12 connector for quick and easy installation.



For more information visit industrial.omron.eu