

# Private Networks for Warehousing

The **first Enterprise Mobility API platform** that provides warehouses with the reach and IT/OT mobility needed to manage the complexities of the next-generation connected warehouse.

## THE PROBLEM

### LOGISTICS MOVE FAST. YOU HAVE TO BE FASTER.

The supply chain has never been so complex, or under as much pressure to perform as it is today. Traditional IT and OT networks are being put to the test as more guided vehicles and other remotely controlled automations are being implemented.

This infrastructure needs a lot of bandwidth at extremely low latency to avoid safety issues and downtime, but it also needs to be flexible enough to deal with the constantly changing warehouse environment. Wi-Fi, with its interference problems, can't be counted on to be reliable, and you need to be able to count on your network because **your customers are counting on you.**

**WE MAKE CREATING PRIVATE LTE NETWORKS EASY SO YOU CAN FOCUS ON GETTING THINGS WHERE THEY NEED TO GO**

## THE ALEF SOLUTION



### BETTER COVERAGE

Establish ubiquitous wireless coverage without the RF wrapping headaches inherent in traditional Wi-Fi solutions



### MORE CONTROL

Device level access control and support robots and forklifts with low latency



### CARRIER CLASS SECURITY

Provide reliable managed spectrum / support seamless carrier-class mobility



### COST, SPACE & TIME SAVINGS

Remove the need for expensive on prem solutions and the massive footprint they require

# Use Case: Building the Connected Warehouse

## High Bandwidth Video Cameras

Enable security, biometric analysis and process monitoring

## Drones

Stock counting enables real time inventory tracking and analysis

## Autonomous Mobile Robots (AMR)

Transport goods around the warehouse, scan barcodes or RFID tags for continuous inventory updates

## Push to Talk/Video

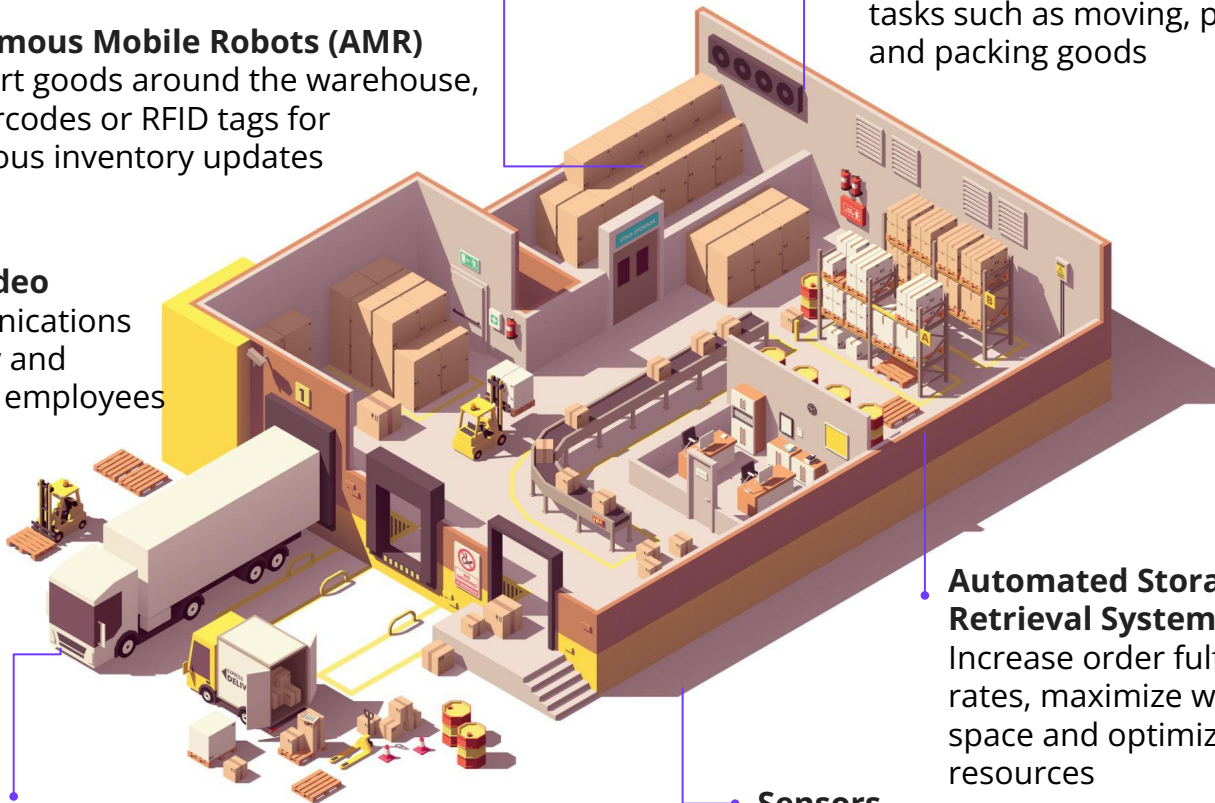
Communications for crew and security employees

## Smart Glasses

Provide real time directions, information, training, automated bar code scanning, and inventory updates to increase employee efficiency while reducing errors

## Collaborative Robots (Cobots)

Perform dangerous and tedious tasks such as moving, palletizing, and packing goods



## Automated Storage & Retrieval Systems

Increase order fulfillment rates, maximize warehouse space and optimize labor resources

## Employee Connectivity

Connectivity to Warehouse Management System (WMS) for job allocation and handling

## Asset Tracking

Sensors for Real Time Location Services (RTLS) to track mobile and portable equipment to optimize utilization

## Sensors

For condition-based monitoring of equipment for predictive maintenance & quality control

## Inventory Pallet Tracking

RTLS for item and pallet tracking to increase pick and pack operations

## Scanners

Handheld scanners capture 1D and 2D barcodes in every application and environment

**Private Mobile Networks implement carrier-class dependability and rock-solid mobility—the kind general contractor and construction managers can depend on.**