

# SMART RETAIL SOLUTIONS

Leading A-Share Listed Company in Rugged Terminals

Stock Code: 001314

 YOUR ONE-STOP RUGGED COMPUTING SOLUTION PROVIDER



# Smart Retail Solutions - Introduction

Driven by both digital economy and consumption upgrades, the retail industry is undergoing profound transformation from traditional models to smart retail. The smart retail industry is currently experiencing robust growth, primarily fueled by consumers' pursuit of integrated online-offline shopping experiences and enterprises' urgent need to enhance retail efficiency and reduce operational costs.



Emdoor Information's smart retail solutions take the upgrade of digital infrastructure as the starting point, and are mainly built around five business scenarios: preposition warehouses, food and beverage, supermarkets and convenience stores, apparel and footwear, and fresh produce. By integrating rugged handheld terminals and lightweight commercial rugged tablets with modern technologies such as IoT, big data, and cloud computing, the solutions facilitate the transformation and upgrading of retail operations. Simultaneously, they better meet consumers' personalized demands, delivering a seamless shopping experience.



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## SMART RETAIL SOLUTIONS

# Preposition Warehouse



HANDHELD  
TERMINAL



COMMERCIAL  
TABLET



VEHICLE  
PC



# Preposition Warehouse - Inbound/Outbound

## Key Challenges:

“30-minute delivery” and “hourly delivery” have become the new norm. However, due to limitations in space and supporting facilities, some preposition warehouses face challenges such as delays in dynamic inventory management, inefficient storage location planning and scheduling, and insufficient flexibility to handle peak order volumes.

To systematically address these challenges, introducing rugged handheld terminals that integrate data processing and multi-functional scanning capabilities has become a critical solution.



**Low inbound efficiency**



**High pressure during order peaks**



**Disorganized storage location management**



**System data not synchronized**



# Preposition Warehouse - Inbound/Outbound

## Solution:

Emdoor Information's rugged handheld terminal integrates WMS warehousing system, picking and order system. With efficient and accurate code scanning function, it helps preposition warehouse quickly complete inbound/outbound and realize short-time distribution.



## Solution Process



- Staff use the rugged handheld H68T's professional barcode scanning engine for inbound, with data transmitted to the WMS system;
- 4G/dual-band Wi-Fi functionality enables the system to generate picking lists and sync them to the H68T after user orders are placed;
- The H68T connects to printers via Bluetooth to print picking slips;
- Pickers scan slips to confirm items and utilize the H68T's built-in GPS navigation for precise location tracking.
- The H68T features a rear hand strap and 5800mAh long endurance, making it portable and durable.

## Solution Value

- Professional scanning engine for efficient and accurate barcode reading
- Long-lasting battery to support prolonged high-intensity workloads
- IP68-rated protection, rugged and durable
- Lightweight, non-slip design for all-day comfort

## Recommended Product



H68T

Hand Strap

- 6.56-inch HD high-brightness display, supports touch with wet hands/gloves
- Top-mounted professional code scanning engine, optional long-range scanning module
- Multiple connectivity options with 4G/dual-band Wi-Fi/Bluetooth
- Rear 48MP + front 32MP cameras for clear warehouse records
- 5800mAh large battery, 33W fast charging, supports reverse charging
- IP68-rated protection with 1.5m drop resistance



# Preposition Warehouse - Smart Shelving and Replenishment

## Key Challenges:

For enterprises with extensive product categories and large-scale preposition warehouses, traditional methods—such as relying on manual experience to locate storage positions, verifying replenishment orders with paper documents, and handling goods manually—can no longer meet business needs.

By equipping forklifts with industrial-grade vehicle PCs, these machines evolve from simple transport tools into “mobile decision centers”, enabling intelligent upgrades for preposition warehouses.



**Delays in paper  
document  
circulation**



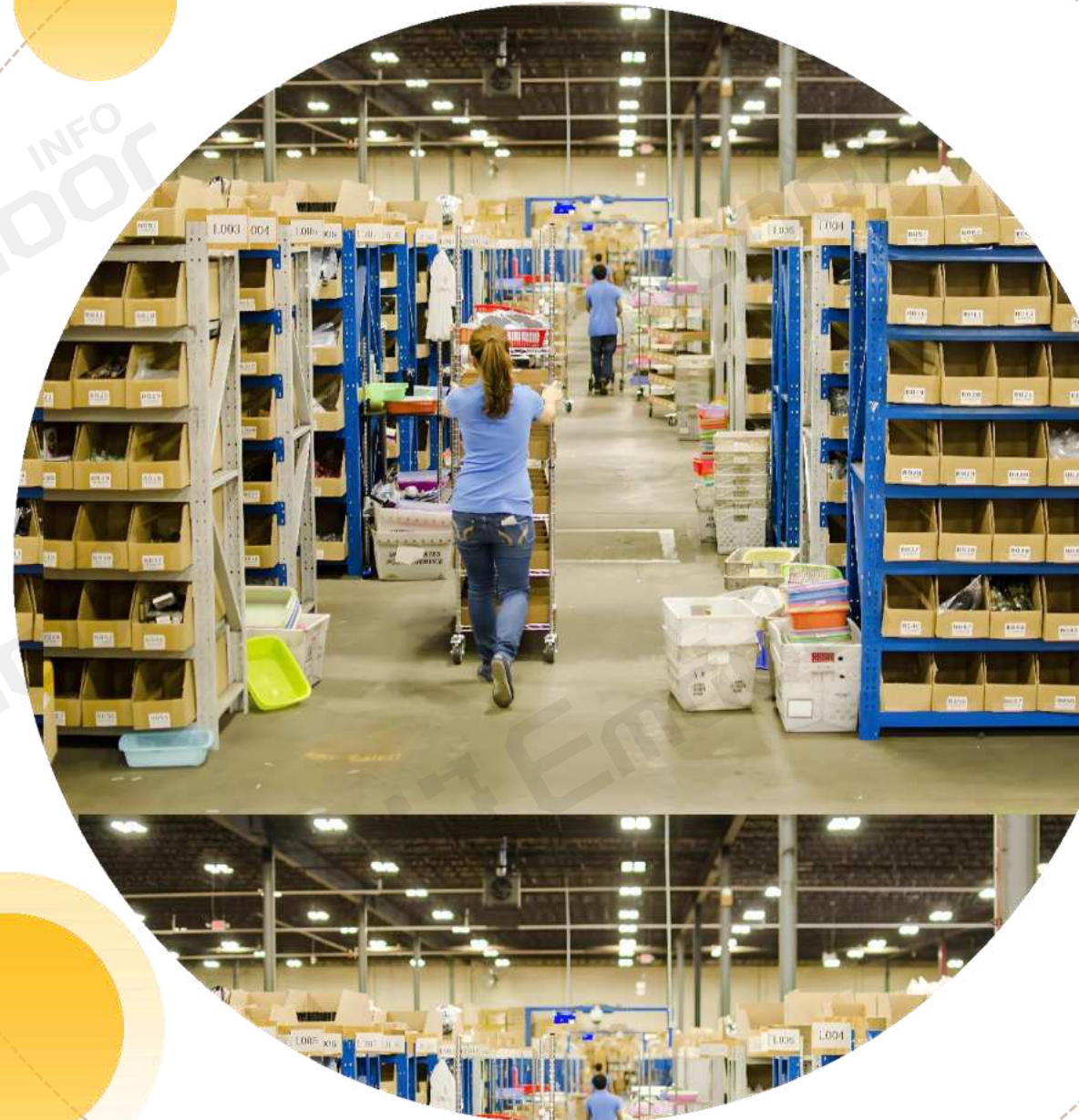
**High reliance on  
manual labor**



**Disconnected  
inventory data**



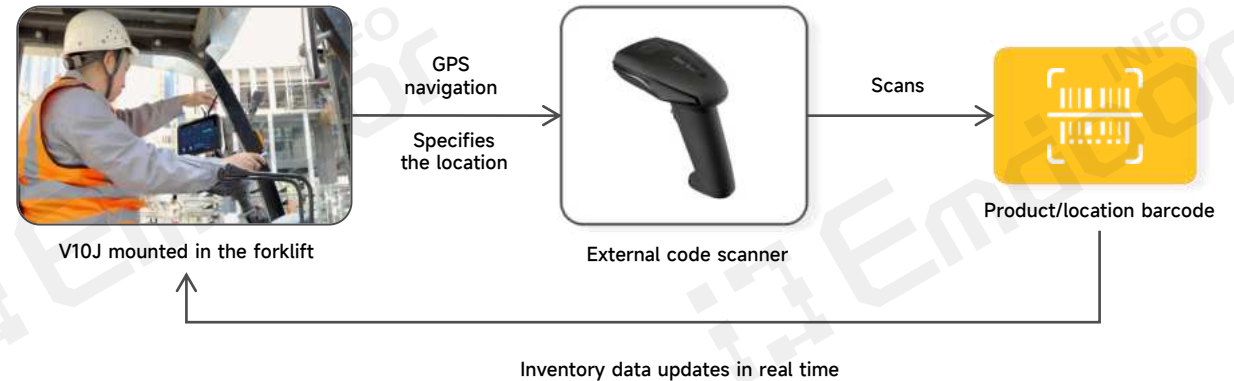
**Cumbersome  
replenishment  
and transfer  
processes**



# Preposition Warehouse - Smart Shelving and Replenishment

## Solution:

Emdoor Information's vehicle PC is mounted in the forklift operator's cab, and installed with the client's warehouse management system. It synchronizes with the cloud to precisely plan routes, enabling fast goods shelving and restocking.



## Solution Process



- The V10J vehicle PC is installed in the forklift cab via a vehicle mount, allowing the driver to freely adjust the angle;
- The WMS (Warehouse Management System) assigns storage locations to SKUs or goods and synchronizes them to the V10J;
- The V10J features built-in GPS navigation to plan the optimal driving route for the driver;
- The V10J connects to an external barcode scanner, allowing the driver to scan product barcodes/batch codes and storage location barcodes to bind locations within the WMS;
- The system inventory status formally changes from "Received/On Hold" to "In Transit" and then to "Available Inventory." The vehicle PC's inventory data updates in real time, completing intelligent shelving and replenishment.

## Solution Value

- Improved cargo transportation efficiency
- Reduced labor costs
- Automatic system data synchronization
- Standardized replenishment processes

## Recommended Product



Vehicle PC V10J

- 10.1" high-brightness display with a maximum brightness of 1000 nits
- Wi-Fi 5/BT5.1/4G, always connected GPS/Glonass navigation, optional installation with vehicle mushroom antenna
- Intel N5100 processor, Windows 11 OS
- Multiple circular connectors available, supporting expansion with USB/DB9/LAN/CAN and other interfaces
- IP65 dustproof and waterproof, vibration-resistant, wide temperature tolerance



# Preposition Warehouse - Inventory Management

## Key Challenges:

In high-turnover, multi-category preposition warehouse scenario, manual inventory counting and paper-based ledger management often lead to high inaccuracy rates of inventory, delayed responses, and chaotic inventory management—all detrimental to long-term business operations.



**Inventory  
data delay**



**Expiry date  
management lag**



**Inefficient  
warehouse-  
store synergy**



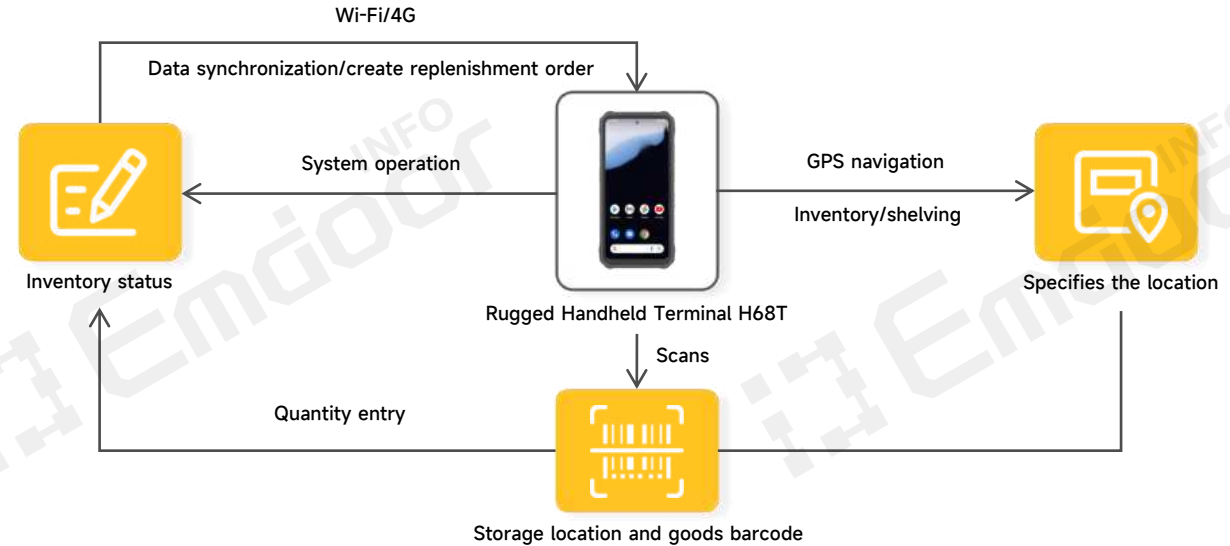
**High deviation  
rate of manual  
inventory**



# Preposition Warehouse - Inventory Management

## Solution:

Emdoor Information's rugged handheld device serves as a core execution tool in inventory management of preposition warehouse. Via barcode scanning, wireless network transmission, and system integration, it enables real-time, paperless, and precise operations throughout the entire process, significantly enhancing inventory counting efficiency.



## Solution Process

- Staff pre-freeze relevant storage location operations in the system or switch them to inventory status;
- The rugged handheld H68T can position inventory locations with built-in GPS navigation;
- Staff scan storage location codes and product barcodes using the H68T, then input actual quantities;
- The H68T transmits replenishment alerts in real-time via Wi-Fi/4G networks to the restocking system, where staff create replenishment orders;
- Upon product arrival, staff must scan each item's barcode or conduct box-by-box verification before completing inbound and shelving.

## Solution Value

- Improved inventory accuracy
- Precise control of warehouse shrinkage
- Enhanced warehousing flexibility
- Visualized resource coordination across stores

## Recommended Product



- Top-mounted professional 2D code scanning module, optional long-range scanning
- GPS navigation for precise positioning and automatic route planning
- Multiple connectivity options with dual-band Wi-Fi/4G/BT 5.1
- 5800mAh high-capacity battery for extended endurance
- Ultra-slim 14mm body with a matte anti-slip back design, includes a hand strap for portability
- IP68-rated protection with drop resistance





02

# SMART RETAIL SOLUTIONS

## Food and Beverage



HANDHELD  
TERMINAL



COMMERCIAL  
TABLET



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PC



# Food and Beverage - Mobile Ordering

## Key Challenges:

In the highly competitive food and beverage industry, factors such as labor costs, customer ordering and waiting times, and dish inventory management directly affect both restaurant performance and customer satisfaction. For chain enterprises, cross-regional management poses an additional challenge.

The emergence of rugged smart mobile terminals not only reduces operational costs for enterprises but also enhances their sustainable competitiveness.



**Peak-hour ordering  
congestion**



**Verbal orders  
prone to  
mishearing**



**Multi-platform  
coordination chaos**



**Delayed inventory  
updates for dishes**





# Food and Beverage - Mobile Ordering

## Solution:

The core value of mobile ordering lies in reducing wait times, enhancing operational efficiency, and accumulating user data. Emdoor Information's rugged tablets enable rapid data collaboration in electronic operations, boosting user convenience and merchant control.



## Solution Process

- IS19N features a **rotating hand strap** for portability;
- Waitstaff **scan** the table QR code or manually select the table number to **pinpoint** the customer's location;
- The rugged tablet IS19N has a **HD high-brightness display** that updates menus in real time, recommends signature dishes and special deals, and supports **language switching**;
- After an order is placed, **inventory checks** are automatically triggered with real-time alerts on remaining stock levels;
- After order submission via IS19N, data is instantly pushed to **kitchen screens** via **Wi-Fi/4G** networks, with preparation progress synchronized back to the tablet.

## Solution Value

- Optimized customer dining experience
- Enhanced lobby operational efficiency
- Optimized kitchen collaboration and dish delivery process
- Real-time inventory data synchronization

## Recommended Product



EM-IS19N

Hand Strap

- Ultra-slim 12.7mm body, weighing just 930g
- 10.1-inch high-brightness display with active stylus support
- Next-gen Intel N150 processor, Windows 11 OS
- Dual-band Wi-Fi 6 with optional 4G/5G
- Professional 2D code scanning engine supporting multiple code types
- IP67-rated protection with 1.8m drop resistance

# Food and Beverage - Mobile Payment

## Key Challenges:

Traditional payment methods face significant operational challenges, including labor-intensive processes, uncontrollable risks, and lack of data retention. As restaurants undergo digital and intelligent transformation, mobile payments have replaced cash transactions.

The integration of industrial-grade rugged tablets will reshape the restaurant value chain, driving transformative changes across cost structures, user experiences, and business models within the industry.



**Limited payment methods**



**Low efficiency**



**Decision-making based on experience**



**Financial compliance risk**





# Food and Beverage - Mobile Payment

## Solution:

Utilizing Emdoor Information's rugged tablets for mobile payments ensures secure transactions, service coordination, and financial oversight. Compared to traditional cash registers, this solution not only boosts efficiency but also enables payment data to directly inform operational decisions.



## Solution Process

- The rugged tablet IS19N supports multiple payment methods. After the server triggers the payment interface on the tablet, several options are available:
- Scan-to-Pay: The server scans the customer's payment code using the IS19N's rear camera or code scanning engine;
- Card Payment: The IS19N's front NFC module, with an optional all-in-one card reader, supports contactless payments via mobile wallets or bank cards;
- Manual Card Number Entry: After the customer provides the card number, the server manually inputs it and obtains customer confirmation for payment;
- Upon payment completion, the customer signs for confirmation using the IS19N's stylus.

## Solution Value

- Optimized payment experience
- Enhanced transaction efficiency
- Achieve precise financial management
- Empowering merchants to adjust operational strategies

## Recommended Product



EM-IS19N



Stylus

- 10.1" HD display with optional active stylus
- Front NFC module with optional all-in-one card reader
- Front 5MP + rear 13MP camera for clear shooting
- Built-in 4800mAh battery with optional docking charger
- IP67-rated protection, built to withstand bumps



03

## SMART RETAIL SOLUTIONS

# Supermarkets and Convenience Stores



HANDHELD  
TERMINAL



COMMERCIAL  
TABLET



VEHICLE  
PC



# Supermarkets and Convenience Stores - Stock Inventory

## Key Challenges:

In supermarkets and convenience stores, the wide variety of products makes manual inventory counting both highly labor-intensive and prone to errors. The heavy reliance on manual operations cannot keep pace with the growing demands of goods circulation and inventory control. This challenge is even greater for large supermarkets, where products are updated daily, turning inventory counting into a massive undertaking.

Therefore, retailers need to introduce smart devices in their stores to intelligently and efficiently complete inventory counts and manage stock, thereby enhancing overall operational efficiency.



**Extensive product categories**



**Inefficient manual inventory**



**Product information outdated or out of sync**



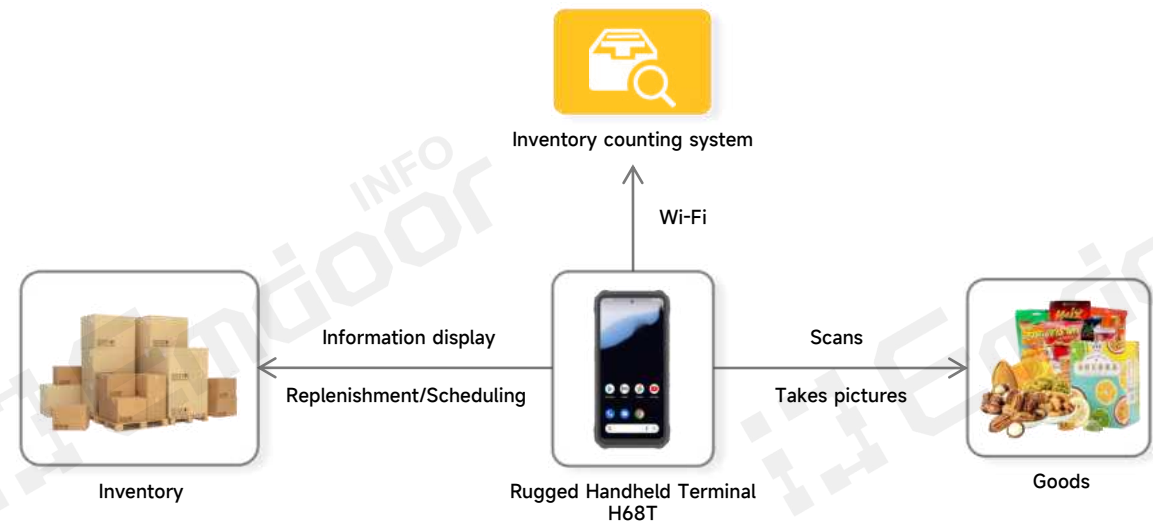
**Excess inventory and stockout**



# Supermarkets and Convenience Stores - Stock Inventory

## Solution:

Emdoor Information's rugged handheld terminal combines high performance with exceptional reliability. Utilizing barcode recognition technology, it intelligently, instantly, and efficiently completes tasks such as inventory counting, shelf organization, and restocking. This effectively empowers supermarkets and convenience stores to achieve transparent stock management, thereby enhancing overall supply chain efficiency and standards.



## Solution Process

- The rugged handheld terminal supports 2D code scanner for product barcode scanning and connects to the backend system via Wi-Fi, enabling real-time inventory updates to facilitate precise and rapid goods inventory;
- Equipped with an ultra-clear camera, it supports photographing and recording product conditions, batch numbers, expiration dates, and other information, enabling real-time marking of defective items to enhance supply chain quality control efficiency;
- The rugged handheld terminal seamlessly integrates with platforms for real-time inventory queries, enabling timely replenishment and accurate scheduling;
- Through real-time analytical feedback, it provides data-driven market insights to support enterprise procurement decisions.

## Solution Value

- Real-time data synchronization eliminates information delays
- Proactive quality control enables rapid response to anomalies
- Seamless integration across multiple systems ensures timely category supply
- Deep data mining enhances corporate market competitiveness

## Recommended Product



Rugged Handheld Terminal  
H68T



Hand Strap

- 6.56" incell large display
- Optional long-range scanning engine with reading range up to 10m
- 48MP main + 32MP front + 8MP ultra-wide cameras
- 5800mAh large battery, all-day endurance
- Helio G99 high-performance platform
- IP68-rated protection with 1.5m drop resistance



# Supermarkets and Convenience Stores - Electronic Price Tag Management

## Key Challenges:

Retailers face the following challenges with traditional price tag management: price adjustment processes are cumbersome, slow, and consume significant labor and resources; achieving real-time price consistency across online and offline channels is difficult, leading to slow responses and frequent errors during promotions and other events.

Electronic price tag systems eliminate these issues, offering far superior information display, accuracy, and flexibility compared to paper price tags.



**Cumbersome update process**



**Error-prone labels**



**Inconsistency in prices**



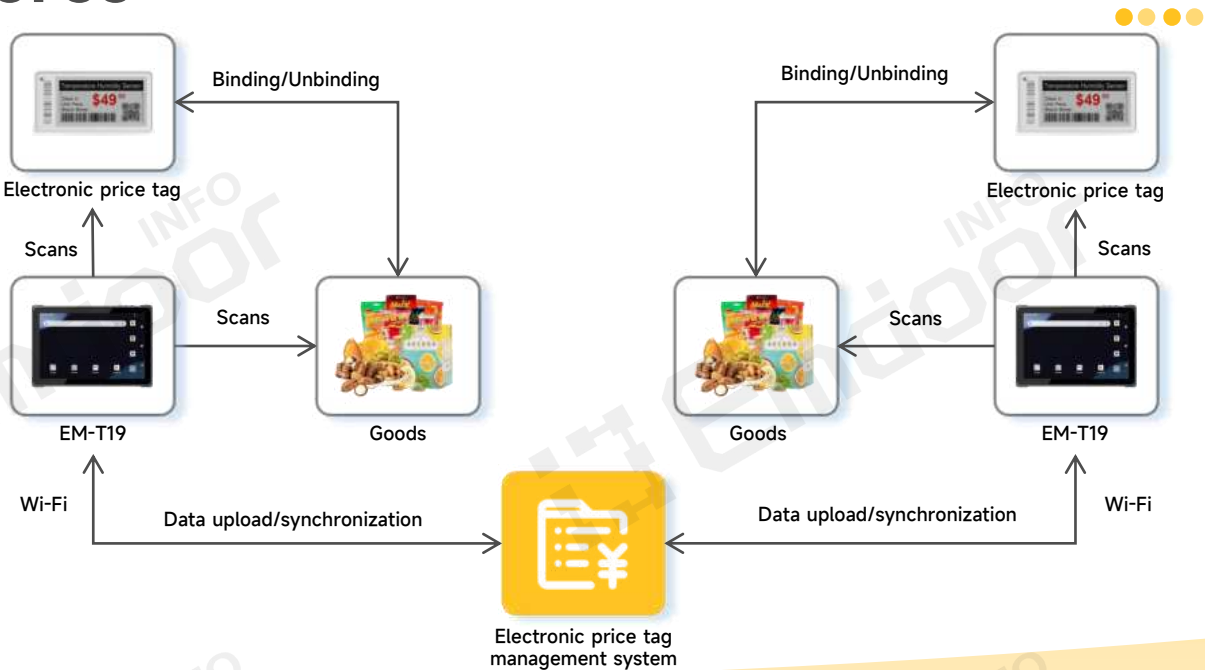
**Poor flexibility**



# Supermarkets and Convenience Stores - Electronic Price Tag Management

## Solution:

Emdoor Information's light commercial rugged tablet, when paired with electronic price tags, enables the construction of a comprehensive electronic price tag management system. This solution assists retail clients in swiftly accomplishing functions such as price display, price updates, and price management, thereby achieving digitalized merchandise management.



## Solution Process

- Price Display: Emdoor's light commercial rugged tablet scans electronic price tags and product barcodes, uploading data to the server via Wi-Fi. Backend software sends corresponding prices and display content to designated tags based on product information, enabling real-time inventory updates.
- Price Updates: The tablet and electronic price tags are connected to backend software, synchronizing data in real time from the server to ensure up-to-date pricing.
- Price Management: The tablet's large screen and touch functionality enable centralized pricing management across multiple stores. It supports QR codes or NFC for locating specific products in individual stores, facilitating instant price adjustments for promotions.
- Inventory Management: After scanning product information, the tablet automatically updates inventory information on electronic price tags. Customizable out-of-stock alerts are also available.

## Solution Value

- Quickly link price tags to products to advance digital management
- Effortlessly handle frequent price changes with error-free adjustments
- Customize price tags for easier promotional campaigns
- Reduce labeling costs while saving labor and resources

## Recommended Product



Light Rugged Tablet  
EM-T19



Hand Strap

- Integrated ultra-thin body with 10.1" full HD large display
- ARM octa-core processor
- Installed with the latest Android 14 OS
- Built-in 9500mAh large battery, supports 18W fast charging
- Supports barcode scanning + NFC
- Dual-band Wi-Fi + BT 5.1 + 4G



# Supermarkets and Convenience Stores - Membership Services

## Key Challenges:

With the consumption upgrade of the middle class and intensifying competition in the retail market, membership management has gradually shifted from being a behind-the-scenes function to a central driver of retail operations, becoming a key tool for many retailers to gain a competitive edge. In particular, membership-based supermarkets are placing higher demands on the convenience and flexibility of membership management.

As a result, many retail enterprises are in urgent need of a smart commercial terminal solution that integrates multiple functions and applications, in order to enhance the overall membership service experience.



**Complex membership application process**



**Numerous membership types**



**Large demand for mobile applications**



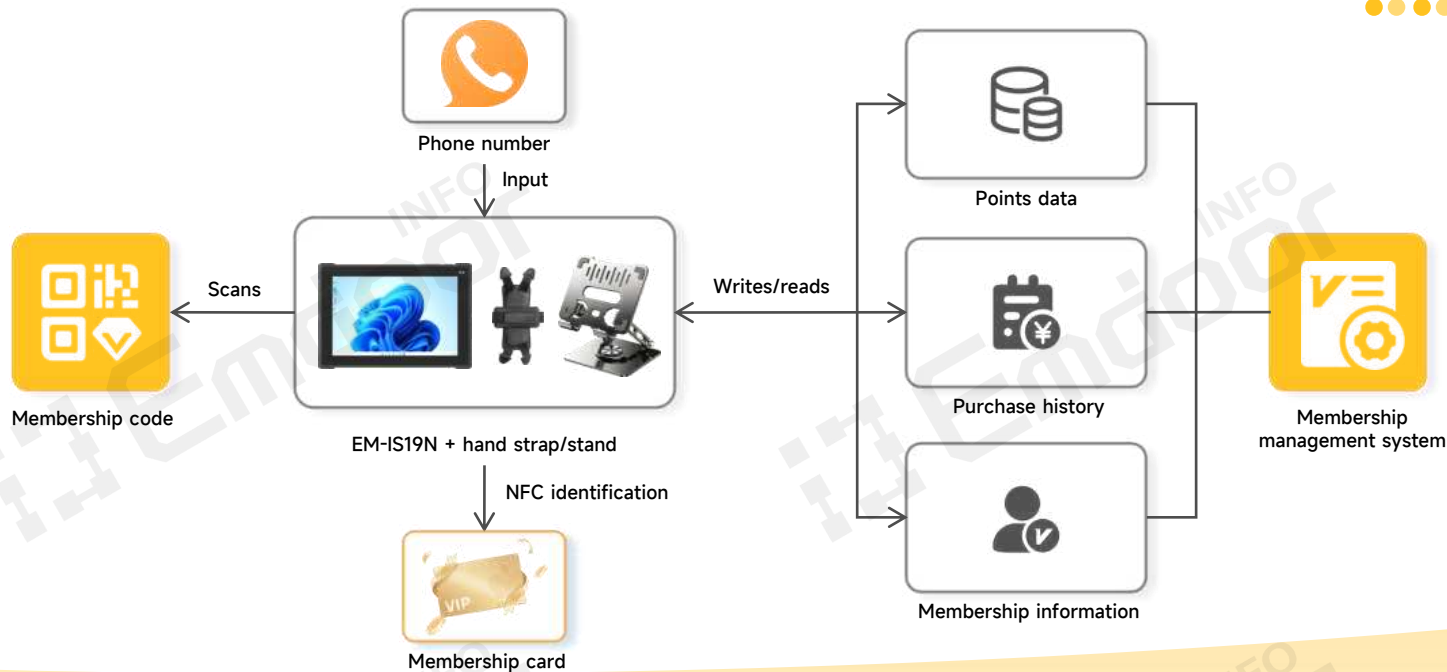
**Higher requirements for other functions**



# Supermarkets and Convenience Stores - Membership Services

## Solution:

Emdoor Information's light commercial rugged tablet supports mobile and desktop deployment. It enables effortless store member checkout and precise redemption through rapid scanning and contactless reading, streamlining operations, enhancing customer experience, and boosting market competitiveness.



## Solution Process

- Integrated NFC and 2D code scanning functions support membership card and QR code recognition, enabling membership management and services;
- 10.1-inch full HD high-brightness display clearly shows member details—including profile information, purchase history, and points data—after scanning membership codes or entering phone numbers;
- Rotating hand strap design allows handheld use with adjustable viewing angles, facilitating card issuance, top-ups, and redemption anytime, anywhere;
- When paired with a simple desktop stand for hands-free operation, the tablet enables connection to more peripherals while simultaneously handling multiple tasks such as membership management and checkout transactions.

## Solution Value

- Multiple recognition modes, all handled by one device
- Extensive accessories to fully meet personalized needs
- Optimized membership management processes for enhanced operational efficiency
- Flexible membership service handling for improved customer experience

## Recommended Product



- Professional code scanning engine with front NFC module
- Slim and integrated body, as thin as 12.7 mm
- Intel N150 processor + Windows 11
- Wi-Fi 6, BT 5.2, optional 4G/5G
- IP67-rated protection with 1.8m drop resistance
- Rotating hand strap, simple stand and other accessories



# Supermarkets and Convenience Stores - Picking and Delivery

## Key Challenges:

In recent years, retail innovation has emerged in rapid succession. From new internet-driven models such as live-streaming commerce and community-based e-commerce to consumption innovations that integrate online and offline channels like community group buying and instant delivery, all have effectively tapped into and satisfied consumer demand. Among these, picking and delivery are two critical steps, with their efficiency directly determining order processing speed.

As a result, some traditional supermarkets have to abandon conventional practices, seeking faster and more precise digital solutions to win consumer favor.



**Low sorting efficiency**



**High error rate**



**Large order volume**



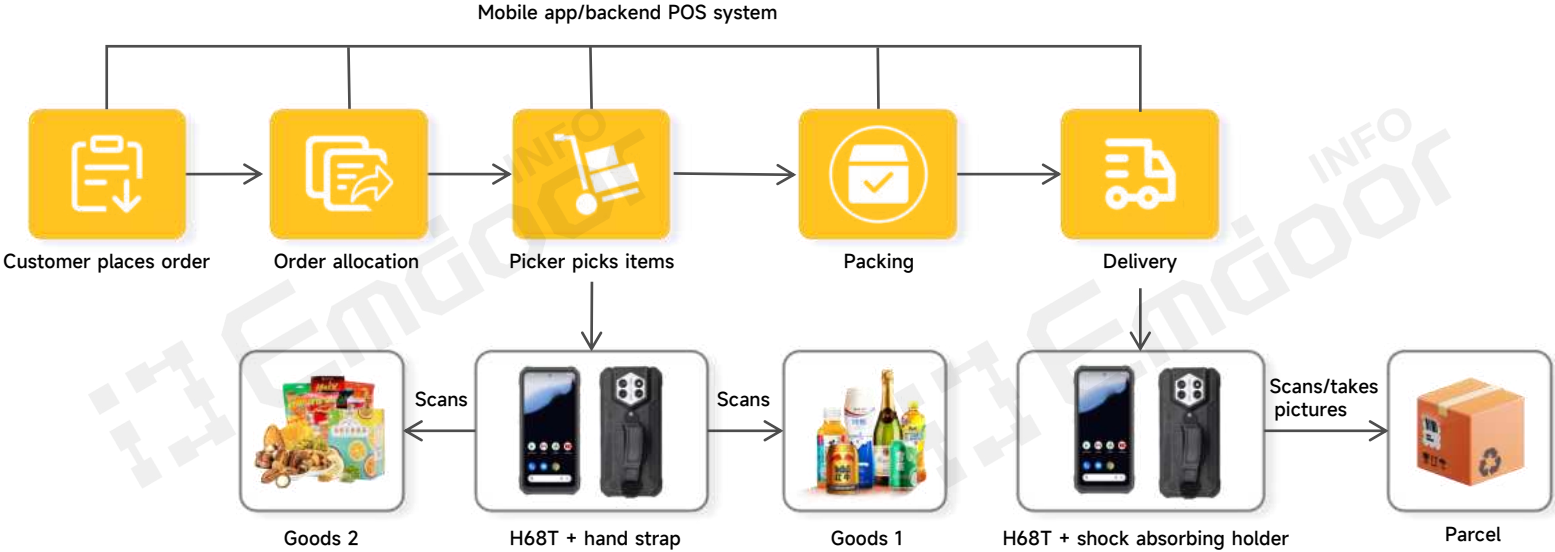
**Untimely delivery**



# Supermarkets and Convenience Stores - Picking and Delivery

## Solution:

Emdoor Information's rugged handheld terminal covers the entire workflow from order taking and picking to delivery, forming a complete data flow system. This enables new retail clients—including supermarkets, fresh produce retailers, and community group buying platforms—to deliver goods to customers at minimal cost and maximum speed.



## Solution Process

- The rugged handheld terminal receives orders in real time via the mobile app or backend POS system, and broadcasts them through Bluetooth-connected speakers to prevent omissions;
- The handheld terminal displays each item's name, location, required quantity, and remaining quantity in the order;
- Pickers locate items based on backend order data and picking strategies, scan corresponding barcodes, and swiftly complete picking;
- Delivery staff clearly view delivery orders and real-time navigation routes on the handheld terminal, then complete deliveries using scanning and photo-taking functions.

## Solution Value

- Addressing challenges in supermarket digitalization
- Reducing labor costs while boosting picking and delivery efficiency
- Ensuring stable operations during peak hours with uninterrupted order flow
- Enhancing consumer trust

## Recommended Product



Rugged Handheld Terminal H68T



Hand Strap



Shock Absorbing Holder

- 6.56" incell large display
- Optional long-range scanning engine with reading range up to 10m
- 48MP main + 32MP front + 8MP ultra-wide cameras
- 5800mAh large battery, all-day endurance
- Helio G99 high-performance platform
- IP68-rated protection with 1.5m drop resistance





04

## SMART RETAIL SOLUTIONS

# Apparel and Footwear



HANDHELD  
TERMINAL



COMMERCIAL  
TABLET



VEHICLE  
PC



# Apparel and Footwear - Mobile Shopping Guide, Inventory Inquiry, Stock Transfer

## Key Challenges:

At present, the apparel and footwear industry faces fierce competition and shrinking profit margins. At the same time, consumer purchasing behavior is changing—shoppers now place greater emphasis on the overall experience and personalized services. These shifts are creating significant pressure for apparel and footwear retailers.

Under conditions of increasingly diverse product assortments, how to respond promptly to customer needs, deliver attentive services, and enhance the shopping experience has become a pressing challenge that apparel and footwear enterprises must address.



**Difficulties in  
managing  
numerous SKUs**



**Inaccurate inventory  
information**



**High service  
frequency**



**Poor customer  
experience**

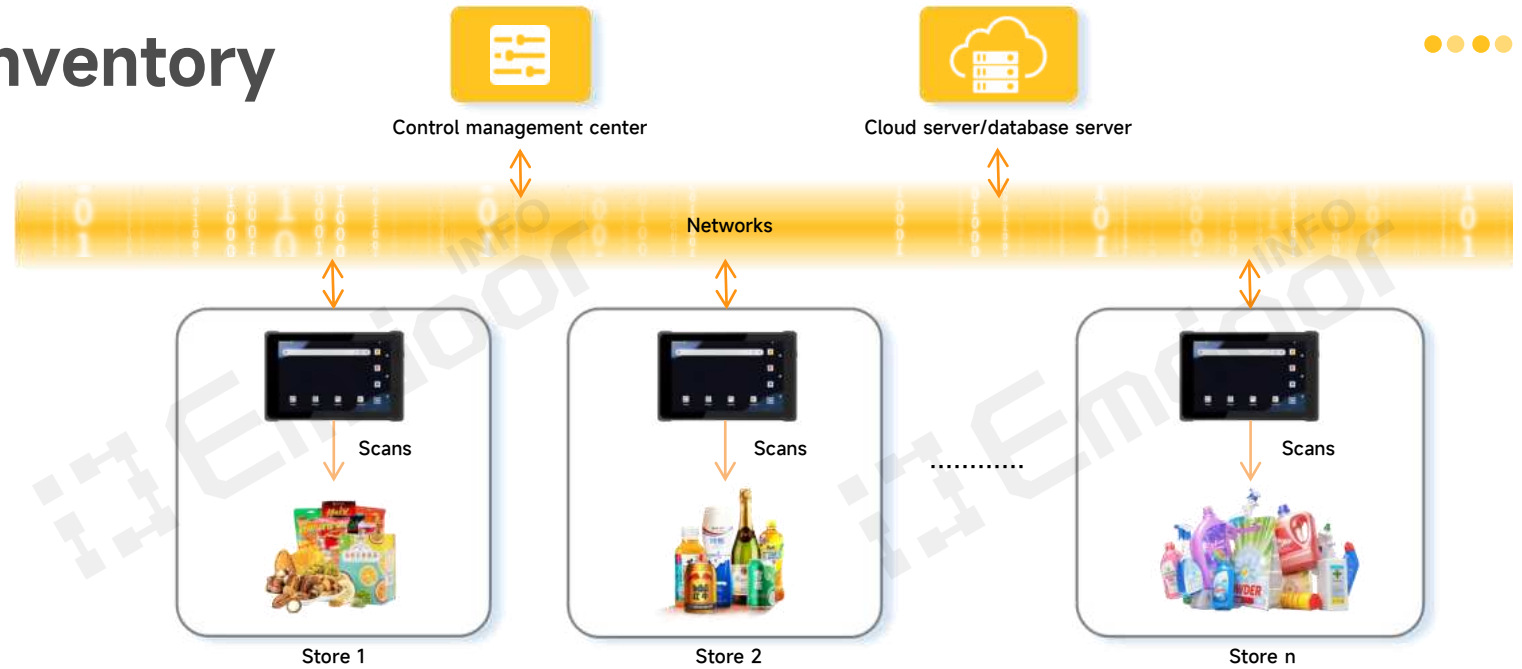




# Apparel and Footwear - Mobile Shopping Guide, Inventory Inquiry, Stock Transfer

## Solution:

Emdoor Information's commercial rugged tablet delivers efficient mobile shopping solutions tailored for the apparel and footwear retail industry. It provides fast, effective mobile shopping assistance while ensuring real-time inventory visibility across channels, creating an exceptional shopping experience for your customers.



## Solution Process

- With a built-in high-precision 2D code scanner, sales associates can simply scan a product barcode to quickly access detailed information such as price, specifications, and promotions—helping to complete the sale.
- While serving customers, associates can respond to requests anytime, anywhere by checking real-time inventory levels on the tablet, providing accurate availability information.
- Once a purchase is completed, inventory levels are instantly updated, enabling real-time data synchronization across multiple stores and platforms.
- In the event of an out-of-stock item, the system supports initiating inventory transfer requests from nearby stores, ensuring efficient resource allocation.

## Solution Value

- Quickly access product information to boost sales efficiency
- Precisely respond to customer needs to enhance service accessibility
- Ensure consistency and accuracy of inventory data
- Improve customer experience to strengthen store competitiveness

## Recommended Product



Commercial Rugged Tablet  
EM-T89



Hand Strap

- Ultra-slim and integrated body, as thin as 12.5 mm
- 8" flagship display with full HD resolution
- ARM octa-core processor + Android 14
- Built-in 7200mAh large battery, supports fast charging
- Supports barcode scanning + NFC
- Wi-Fi 5, BT 5.1, 4G
- IP65-rated protection with 1.22m drop resistance

# Apparel and Footwear - Store Inventory

## Key Challenges:

1. To ensure timely supply and replenishment in retail stores, daily inventory counts of all goods must be conducted, with specifications and quantities recorded for each item.
2. With stores offering diverse product categories in varying colors, sizes, and specifications, traditional manual verification methods for inventory counts result in significant waste of labor and time, while also increasing the risk of human error.
3. Stores utilize different systems or coding conventions, resulting in fragmented accounting systems and information silos that hinder centralized monitoring of network-wide data by headquarters;
4. Completed inventory data requires manual secondary verification and accounting entry, which is a time-consuming process.



**Extensive product categories**



**Time-consuming manual inventory**



**Irregular barcodes**



**Data cannot be synchronized in real time**

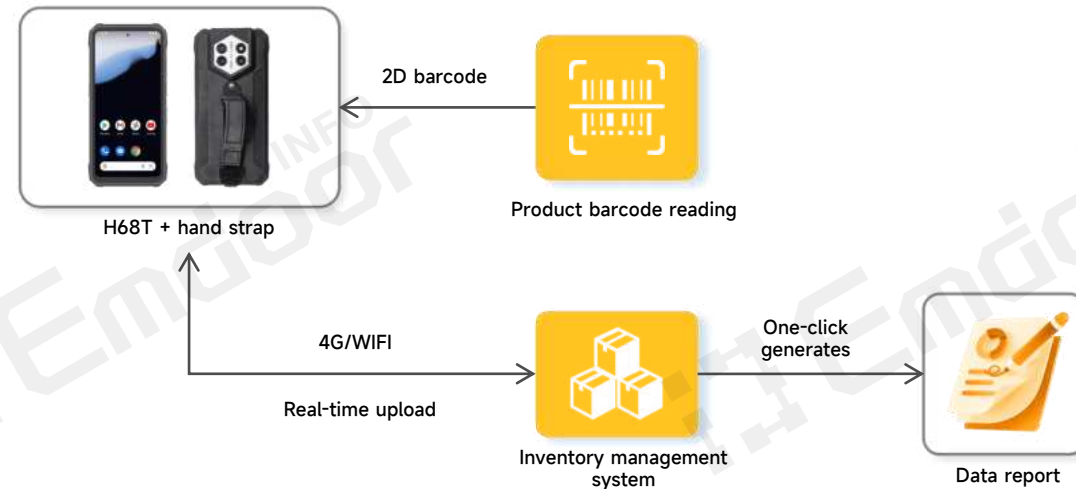




# Apparel and Footwear - Store Inventory

## Solution:

The data intelligence terminal features robust data analytics capabilities, empowering store staff to manage operations on the go. Store staff can conveniently perform tasks such as inventory counting during spare moments using mobile devices, significantly boosting operational efficiency.



## Solution Process

- The H68T integrates with inventory management software to perform real-time reading and uploading of product data, and generate reports.
- Equipped with an advanced 2D code scanner, the H68T can read barcodes of various formats from up to 10 meters away.
- Scanned data can be transmitted in real time via Wi-Fi or Bluetooth, ensuring inventory records remain synchronized with the system.
- Managers can view real-time inventory levels online to monitor sales performance, facilitating informed decisions on merchandise marketing strategies.

## Solution Value

- Mobilized efficient inventory
- Long-range accurate code scanning
- Real-time data synchronization
- Intelligent decision support

## Recommended Product



Rugged Handheld Terminal H68T



Hand Strap

- 6.56" incell large display
- Optional long-range scanning engine with reading range up to 10m
- 48MP main + 32MP front + 8MP ultra-wide cameras
- 5800mAh large battery, all-day endurance
- Helio G99 high-performance platform
- IP68-rated protection with 1.5m drop resistance

# Apparel and Footwear - Checkout Signing, Receipt Printing

## Key Challenges:

1. The system cannot support multiple operational software such as ordering and POS simultaneously.
2. Manual processes are inefficient—handling return/exchange slips manually and reprinting lost receipts is time-consuming and error-prone.
3. Receipt accumulation makes traceability difficult, and retrieving past orders requires searching through paper archives.
4. Devices are often damaged by strong sunlight, accidental water spills, or drops.



**Poor system compatibility**



**Inefficient manual processes**



**Difficulty in tracing information**



**Poor protection level**

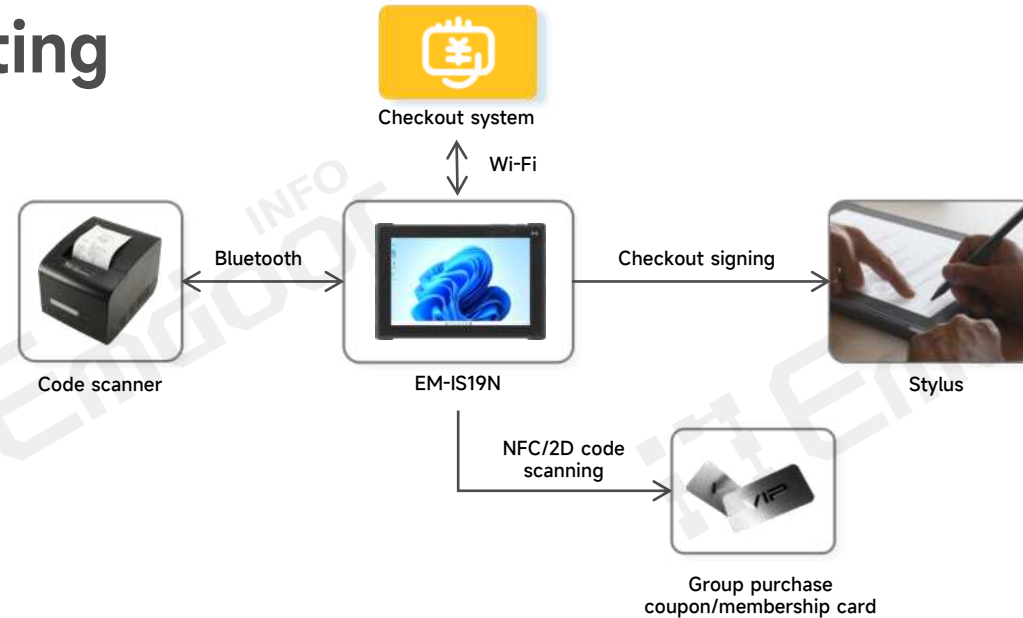




# Apparel and Footwear - Checkout Signing, Receipt Printing

## Solution:

Implementing electronic and automated checkout and receipt printing at retail locations has become a core strategy for enhancing operational efficiency and competitiveness.



## Solution Process

- Bluetooth 5.2 connectivity allows the EM-IS19N to wirelessly connect with receipt printers for efficient printing;
- Equipped with a HD display and stylus, EM-IS19N enables customers to provide electronic signatures for confirmation and archiving;
- Front NFC and 2D code scanning support the recognition of group-purchase coupons and membership cards;
- Wi-Fi connectivity ensures real-time upload of order and payment records for archiving, making report generation and traceability convenient;
- The EM-IS19N features IP67-rated protection with 1.8m drop resistance—no need to worry about accidental falls.

## Solution Value

- Wireless, efficient printing to enhance the customer experience
- Electronic signature archiving for real-time traceability
- Multi-modal payment support to boost store competitiveness
- Rugged and durable, no need to worry about accidents

## Recommended Product



- Professional code scanning engine with front NFC module
- Slim and integrated body, as thin as 12.7 mm
- Intel N150 processor + Windows 11
- Wi-Fi 6, BT 5.2, optional 4G/5G
- IP67-rated protection with 1.8m drop resistance
- Rotating hand strap, simple stand and other accessories



05

## SMART RETAIL SOLUTIONS

# Fresh Produce



HANDHELD  
TERMINAL



COMMERCIAL  
TABLET



VEHICLE  
PC



# Fresh Produce - Weight-Based Pricing

## Key Challenges:

1. Manual entry of product codes and repeated weight verification slow down the process, resulting in long customer wait times.
2. Employee reading errors, incorrect unit price entries, or failure to update price tags promptly can lead to pricing disputes.
3. Customers cannot easily confirm weight calculations or pricing basis, raising concerns about “short weight” or inaccurate charges.
4. Short-term discount promotions not updated in the pricing system in time can cause discrepancies between checkout prices and advertised promotions.



**Long wait time**



**High error rate**



**Inaccurate charges**



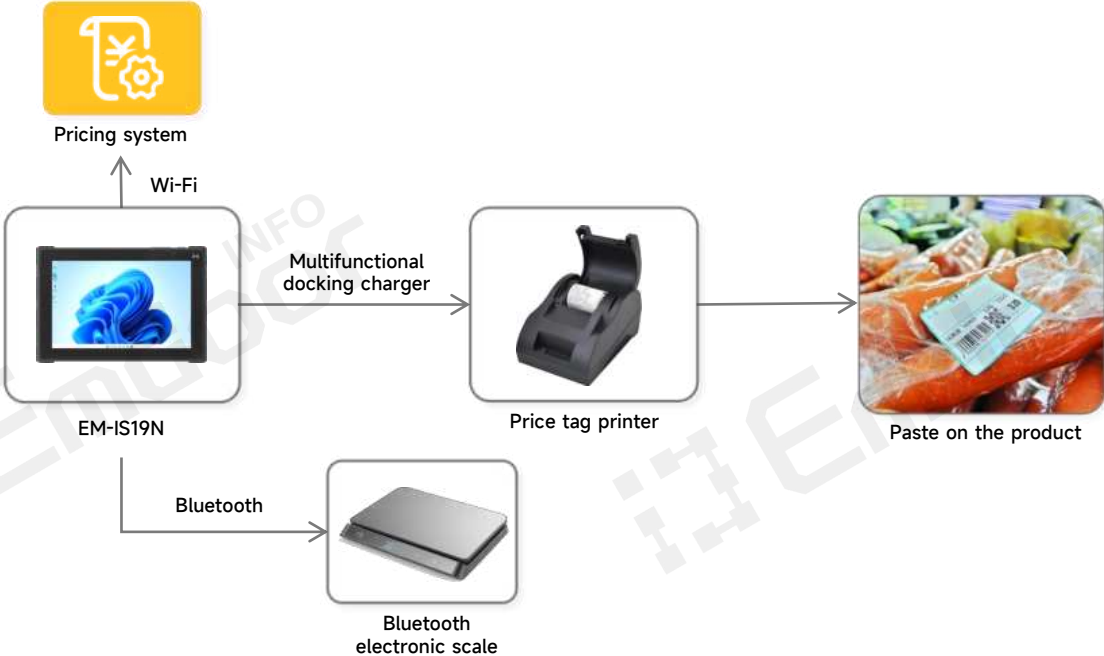
**Incur labor costs**



# Fresh Produce - Weight-Based Pricing

## Solution:

The digital, integrated solution for in-store “weight-based pricing” combines rugged tablets, Bluetooth electronic scales, and label printers to deliver efficient and accurate checkout processes, enhancing operational efficiency and the customer experience.



## Solution Process

- The electronic scale wirelessly transmits real-time weight data to the EM-IS19N via Bluetooth, reducing manual entry errors.
- The EM-IS19N connects to a printer through a multifunctional dock, enabling real-time printing of product price tags.
- The EM-IS19N features a 10-inch HD high-brightness display, making product, price, and weight information clearly visible at a glance.
- The EM-IS19N features IP67-rated protection with 1.8m drop resistance—no need to worry about accidental falls.

## Solution Value

- Wireless weight-based instant printing reduces queue times
- Electronic signatures prevent disputes and allow traceable transaction records
- Smart one-code payment automatically redeems coupons/cards
- Stable performance for a smooth user experience

## Recommended Product



- Professional code scanning engine with front NFC module
- Slim and integrated body, as thin as 12.7 mm
- Intel N150 processor + Windows 11
- Wi-Fi 6, BT 5.2, optional 4G/5G
- IP67-rated protection with 1.8m drop resistance
- Rotating hand strap, simple stand and other accessories



# Fresh Produce - Cold Storage Operation



## Key Challenges:

1. Reliance on manual entry and paper documents leads to delayed inventory updates and high error rates.
2. In low-temperature environments, frequent handling and inefficient route planning cause workflow congestion.
3. Poor device compatibility creates isolated systems.
4. Short endurance cannot support a full work shift.
5. Common devices are not resilient to low temperatures or impact damage.



**Time-consuming  
paper records**



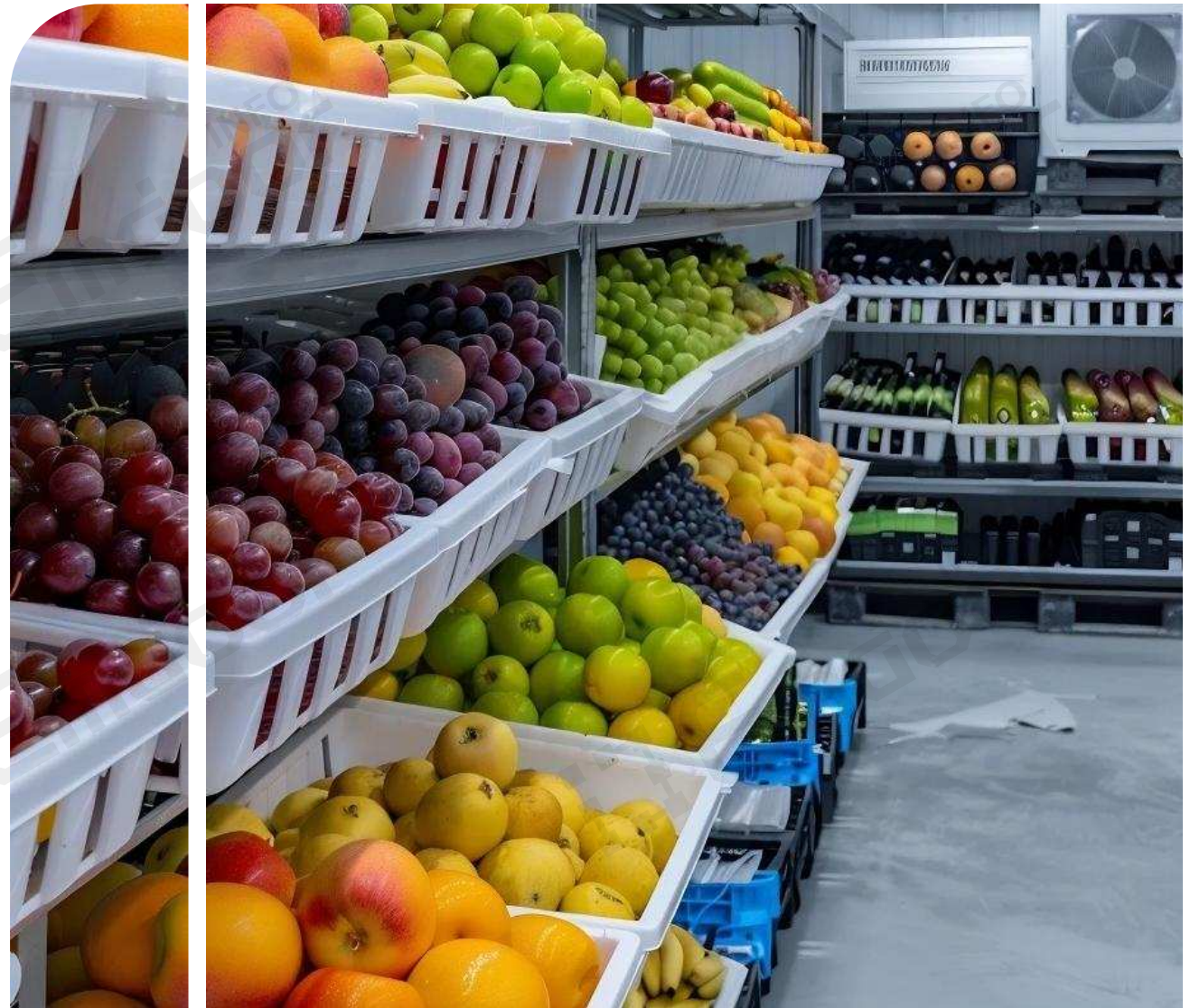
**Unclear path  
planning**



**Short endurance**



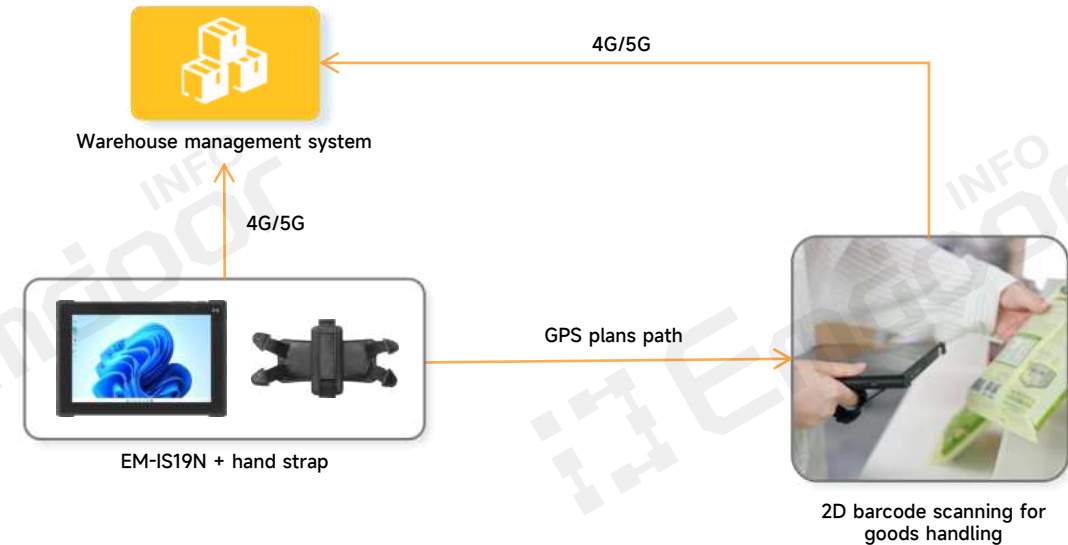
**Poor ruggedness**



# Fresh Produce - Cold Storage Operation

## Solution:

In the harsh environment of cold-chain warehouses, extreme temperature of -30°C and high humidity are harmful factors that constantly threaten the normal operation of electronic devices. Emdoor Information's rugged tablet terminals confront these challenges head-on with military-grade protection standards.



## Solution Process

- The tablet features IP67-rated dustproof and waterproof with silicone sealing to prevent condensation ingress;
- 4800mAh large battery, supporting continuous operation for 7.4 hours at -20°C;
- Dual-mode GPS and Glonass positioning to plan optimal routes for moving goods;
- Integrated NFC and 2D barcode scanning modules enable instant product barcode reading and data upload;
- Installed with Windows OS, seamlessly connecting with management platforms such as WMS, ERP to ensure cross-platform synchronization of temperature control and inventory data.

## Solution Value

- Continuous low-temperature operation ensures cold-chain efficiency
- Waterproof and dustproof design reduces maintenance costs
- Smart barcode tracing makes product information transparent and easily trackable
- Dual-mode positioning optimizes routes and enables fast response

## Recommended Product



- Professional code scanning engine with front NFC module
- Slim and integrated body, as thin as 12.7 mm
- Intel N150 processor + Windows 11
- Wi-Fi 6, BT 5.2, optional 4G/5G
- IP67-rated protection with 1.8m drop resistance
- Rotating hand strap, simple stand and other accessories



# Fresh Produce - Quality Monitoring

## Key Challenges:

1. Reliance on wholesale market procurement makes it difficult to perform quality spot checks on suppliers, making it hard to prevent risks such as pesticide residues and excessive preservatives.
2. Existing rapid testing technologies are easily affected by sample matrix interference, resulting in high rates of false positives/negatives.
3. Many store testing personnel lack formal system training, and inconsistent operation leads to inaccurate results.
4. Sending samples to professional laboratories takes a long time and costs over a thousand RMB per test, making it unsuitable for the high-frequency testing required for fresh produce.



**Inaccurate  
rapid tests**



**Unclear  
standards**



**Excessively  
high cost**



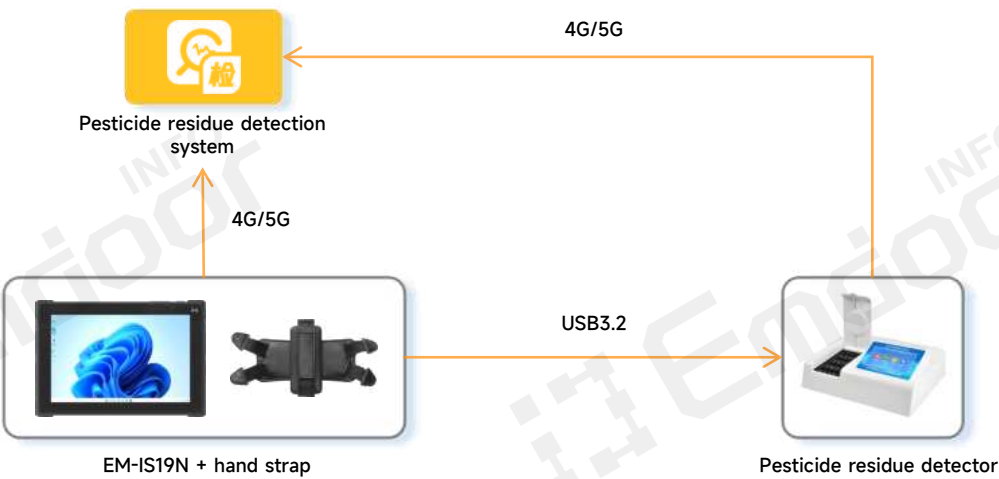
**Lack of  
capability**



# Fresh Produce - Quality Monitoring

## Solution:

Leveraging EM-IS19N rugged handheld terminal, which integrates barcode technology and wireless communication, fixed asset information can be quickly collected using mature barcode solutions. This improves asset management efficiency and enables more rational resource allocation.



## Solution Process

- The EM-IS19N, paired with a pesticide residue detector, enables fast, real-time testing.
- Test results are transmitted and archived in real time via 4G/5G networks.
- 10-inch HD high-brightness display provides comprehensive information at a glance.
- The EM-IS19N features IP67 protection and 1.8m drop resistance, easily handling accidents.

## Solution Value

- Traceable rapid pesticide testing with real-time monitoring ensures food safety
- Real-time data upload enables remote management and efficient decision-making
- High-definition display makes information clear, reducing errors
- Drop-resistant and durable design minimizes equipment loss

## Recommended Product



- Professional code scanning engine with front NFC module
- Slim and integrated body, as thin as 12.7 mm
- Intel N150 processor + Windows 11
- Wi-Fi 6, BT 5.2, optional 4G/5G
- IP67-rated protection with 1.8m drop resistance
- Rotating hand strap, simple stand and other accessories



# Typical Cases



01



Emdoor Information's rugged handheld terminals streamline order picking and warehouse operations, boosting productivity for a sporting goods enterprise

Client: A comprehensive sporting goods enterprise  
Product: EM-I62H rugged handheld terminal  
Application: Preposition warehouse - inbound/outbound



02



A well-known beverage company in Qingdao achieves convenient and efficient forklift operations in warehouses using Emdoor EM-I16J

Client: A well-known beverage company in Qingdao  
Product: EM-I16J rugged tablet  
Application: Preposition warehouse - smart shelving and replenishment



03



Emdoor's rugged handheld terminals help a retail chain manage in-store inventory and improve sales efficiency

Client: A well-known retail chain  
Product: H60T rugged handheld terminal  
Application: Supermarkets and convenience stores - stock inventory



# Typical Cases

04



A community coffee brand leverages Emdoor Information's commercial tablets for tableside ordering, improving order efficiency and enhancing the customer experience

Client: A community coffee brand  
Product: EM-IS19N light commercial rugged tablet  
Application: Food and beverage - mobile ordering

05



Emdoor Information's commercial tablets serve as intelligent shopping guides, with full-scenario management applications accelerating digital transformation in retail stores

Client: A leading sportswear company  
Product: EM-T89 light commercial rugged tablet  
Application: Apparel and footwear - mobile shopping guide, inventory inquiry, stock transfer

06



Emdoor's rugged handheld terminals help a retail chain manage in-store inventory and improve sales efficiency

Client: A budget chain hotel apartment in South China  
Product: EM-IS19N light commercial rugged tablet  
Application: Supermarkets and convenience stores - membership services



# Why Choose Emdoor Information Solutions?



- We are a leading A-share listed company in rugged terminals (stock code: 001314), with 17 years of deep industry expertise.
- We have **extensive industry experience**, with **successful deployment** among multiple globally recognized clients, which allows us to understand the challenges in your business and the difficulties in selecting the right solutions.
- Our one-stop rugged computing product line offers over 200 products with diverse performance options, enabling us to tailor the **most suitable solutions** and recommend **the best-fit products** for you.
- With fully self-developed products, our **multi-million-level testing base** and **18,000 m<sup>2</sup> digital smart factory** ensure high-quality products, services, and solutions.
- Our **professional custom R&D team** can provide customized solutions when standard products cannot meet specific requirements.

# YOUR ONE-STOP RUGGED COMPUTING SOLUTION PROVIDER





# SMART RETAIL SOLUTIONS

## Product Selection Table

Model	H68T Rugged Handheld Terminal	EM-IS19N Light Commercial Rugged Tablet	EM-T89 Light Commercial Rugged Tablet	EM-T19 Light Commercial Rugged Tablet	V10J Vehicle PC
Host	H68T (8G/128G) H68T (8G/256G)	EM-IS19N (8G/128G) EM-IS19N (8G/256G) EM-IS19N (8G/512G)	EM-T89 (8G/128GB)	EM-T19 (8G/128GB)	V10J (8G/128G)
Optional Modules	2D 2D (10m long-range code scanning)	5G Light sensor	2D	/	4G NFC
Standard Accessories	33W adapter Type-C cable Hand strap	33W adapter Type-C cable Rotating hand strap	18W adapter Type-C cable Type-C OTG cable Hand strap	18W adapter Type-C cable Type-C OTG cable Hand strap	Wi-Fi rod antenna GPS vehicle mushroom antenna Power adapter cable (to $\phi 5.5$ power port)
Power Adapter	33W adapter	33W adapter	18W adapter	18W adapter	19V/3.42A cigarette lighter adapter 12V/4A adapter
Optional Accessories	Docking charger Tempered glass screen protector Semi-enclosed vehicle mount Fully enclosed vehicle mount	One-handed hand strap Docking charger Active stylus Simple Stand Multifunctional Dock All-in-one card reader & fingerprint module	Docking charger	Docking charger Leather cover Rotating leather cover	4G rod antenna GPS rod antenna 19V/3.42A cigarette lighter adapter 12V/4A adapter Power adapter cable (to 4 loose cables) Wide voltage module RAM mount VESA mount Function adapter cable (to USB 2.0 $\times 2$ + USB 2.0/CAN, to RS232+RS485, to RS232 $\times 2$ , to 12 loose cables)



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**YOUR ONE-STOP RUGGED  
COMPUTING SOLUTION PROVIDER**

Leading A-Share Listed Company in  
Rugged Terminals



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