

# Smart Warehouse Recognition Workstation Datasheet



AI Vision Recognition | Barcode Scanning | Image Capture | Operator Verification

## Product Overview

Smart Warehouse Recognition Workstation is an AI-enabled warehouse operation terminal designed for receiving, outbound checks, inventory review, issue/return tracking, and digital archive capture.

The workstation combines AI visual recognition, barcode/QR scanning, high-definition image capture, and operator identity verification to help digitize warehouse workflows and reduce manual entry errors.

## Key Features

- AI-based item recognition for inbound and outbound warehouse operations
- Barcode and QR code scanning for SKU, batch, order, package, tool, or part records
- High-definition overhead image capture for visual evidence and traceability
- Operator verification using dual-camera face recognition options
- Industrial Android 12 platform with high-performance RK3588 computing
- Wired and wireless network connectivity for system integration
- Supports custom WMS, ERP, dashboard, and API-based workflow integration

# Technical Specifications

## System & Computing

Item	Specification	Description
System Platform	Android 12	Industrial Android operating environment
Processor	RK3588, 8-core CPU	High-performance edge computing platform
Memory & Storage	8GB RAM + 128GB storage	Supports local applications and operation data
Power Adapter	5A power supply	Standard workstation power configuration

## Display, Recognition & Capture

Item	Specification	Description
Touch Display	15.6 inch capacitive screen, 16:9, 1920 x 1080	Full-lamination display for workstation operation
Dual Camera Module	2MP IR + 2MP visible camera	Supports operator face recognition and identity check
Overhead Camera	5MP fixed-focus camera	Supports object image capture at approx. 75mm shooting height
Barcode Scanner	1D / 2D barcode scanner	Supports USB or RS232 connection options
IC Card Reader	Single IC card reader	Supports access control and operator record options

## Interfaces & Network

Item	Specification	Description
Serial Interfaces	2 x RS232 + 2 x RS485 + 2 x TTL	For external devices, scanners, and industrial integration
USB Interfaces	8 x USB	Supports scanner, camera, reader, and peripheral expansion
Network Communication	WiFi + RJ-45 Ethernet	Supports wireless and wired network access
Main Material	Cold-rolled steel with powder coating	Durable structure for warehouse operation environments

# Workflow Capabilities

## Warehouse Operation Functions

Function	Typical Workflow	Value
AI Visual Recognition	Place items in the recognition area for AI-assisted identification	Improves recognition speed and reduces manual selection
Barcode / QR Workflows	Scan SKU, batch, order, package, tool, or material codes	Enables fast inbound, outbound, and inventory records
Image Records	Capture item, document, sample, or package images during operation	Creates visual evidence for exception review and traceability
Operator Verification	Verify user identity using face recognition or card reader options	Reduces unauthorized operation risks
Data Upload	Upload recognition, scan, image, and user records to software systems	Supports digital warehouse records and dashboard visibility

## Software & Integration

Item	Support Scope	Description
WMS Workflow	Receiving, outbound, inventory, issue/return, task records	Can be used with ZedIoT-developed or customized WMS workflows
Existing System Integration	WMS, ERP, dashboard, or custom warehouse software	Connect recognition and scanning data to existing business systems
API Support	Available on project basis	Supports secondary development and system extension
Custom Expansion	RFID counting and other peripheral expansion options	Hardware and software can be customized for project needs

# Typical Applications

Scenario	Use Case
Manufacturing Warehouses	Parts inbound/outbound management, tool issue tracking, consumable records, and real-time stock review.
Retail & Supermarket Operations	Goods receiving, barcode verification, package image capture, and warehouse item review.
Medical & Consumable Storage	Medicine, consumable, and material record management with operator verification options.
Logistics & Parcel Handling	Package scanning, image capture, receiving/dispatch records, and integrated operation review.
Document & Archive Management	High-definition document capture, file registration, sample image storage, and digital traceability.

## Service & Support

- Standard one-year warranty support
- Deployment assistance and technical training for project teams
- Online technical support on working days, 10:00-19:00
- Hardware and software customization based on warehouse workflow requirements
- Secondary development interface and API documentation available on request

## Recommended Project Fit

This workstation is suitable for companies that need a practical AI vision, barcode, and image-capture terminal to connect warehouse operations with digital records, dashboards, or existing business systems.

## Company Info

ZedIoT is an AIoT-driven company specializing in smart hardware, edge device integration, AI vision workflows, and cloud-integrated solutions for practical equipment and warehouse operation scenarios.

We provide end-to-end support from device sensing and embedded hardware integration to AI-based recognition, workflow software, cloud dashboards, and system integration.

## Contact Information

Email: [support@zediot.com](mailto:support@zediot.com)

HQ: Room 215, St. No.28 Xin Jiekou, Xicheng, Beijing Tel: +(86)-10-62386352

Sydney: 11-31 York Street, Sydney, NSW

New York: One Rockefeller Plaza 11th Floor, New York Tel: +1 (669) 202-0166

Shanghai: 209, Building 5, No.199 Fenghong, Minhang, Shanghai

Website: [zediot.com](http://zediot.com) | AIoT Solutions for Smart Equipment