

ARTIFICIAL INTELLIGENCE

eRay Company Profile



3F., No. 56, Lane 258, Ruiguang Road, Neihu
District, Taipei City 11491, Taiwan (R.O.C.)

18F., No.1-114, Zhonghua Rd., Yongkang Dist., Tainan
City 71084, Taiwan (R.O.C.)



About eRay

***WITH TRAINING
NOTHING IS INDISTINGUISHABLE***



Clients Achievements

Clients & Achievements

Semiconductor Sector



Manufacturing Industry



Engineering Industry



Education and Healthcare



Food Industry



Other



Precision AI Application Solutions



Construction Site Safety

Safety Helmet Detection

- Real-time detection of whether personnel are wearing safety helmets
- Automatic notification to the control center and on-site alerts if not worn
- Can be integrated with identity recognition to record violations

High-Visibility Vest Detection

- Detects whether personnel are wearing high-visibility vests
- Enhances recognition accuracy in nighttime or low-light environments
- Suitable for scenarios such as road construction and factory operations



Construction Site Safety

Fall Protection Hook Detection

- Uses image analysis to verify whether workers at height are properly secured with safety hooks
- Can be integrated with hazardous area detection systems to issue alerts for unsecured personnel
- Reduces the risk of fall-related accidents

Pedestrian Violation Detection

- Identifies pedestrians who fail to follow designated walkways or enter heavy machinery operation zones
- Prevents potential collision accidents through electronic fencing and image analysis
- Allows for customizable alert zones and automatic reporting to management



Safety Gear Donning Training



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eRaySecure



Firefighting Suit

- Heat-resistant and flame-retardant, designed for frontline personnel in fire and disaster scenarios
- Training focus: rapid donning, proper fastening, correct helmet and face shield wearing
- Can be integrated with image recognition to evaluate training procedures

Level A Protective Suit

- Fully encapsulated, gas-tight design providing the highest level of chemical protection
- Suitable for unknown or highly toxic chemical environments (e.g., toxic gas leak response)
- Training includes donning/doffing procedures, positive-pressure system operation, and performance testing

Level C Protective Suit

- Lightweight with chemical-resistant capability, suitable for known low-concentration chemical environments
- Used in combination with respirator and filter cartridges
- Training focus: rapid donning, correct use with respiratory equipment, and motion simulation



Facial Recognition System



奕瑞科技有限公司
eRaySecure

Access Control

- Replaces traditional access cards or fingerprint scanners with facial recognition
- Automatically records entry/exit times, personnel identity, and photo logs
- Suitable for factories, office buildings, and temporary construction site entrances
- Integrated with attendance systems to enable contactless time tracking

Workstation Verification

- Employees must pass facial recognition to operate specific equipment or access restricted areas
- Ensures only qualified personnel can operate designated workstations or machinery
- Can be integrated with certification systems to strengthen compliance
- Provides risk management and accountability tracking

Smart Lock Control

- Combines facial recognition with smart locks to enhance security
- Replaces physical keys, passwords, or cards, reducing risks of loss or misuse
- Allows flexible applications such as time-based access and temporary lock/unlock permissions



CIC Camera Image Integrity Detection

Surveillance System Management

- Integrates various on-site CCTV cameras, AI recognition modules, and personnel tracking systems
- Supports centralized management across multiple sites and projects, with remote cloud access
- Connects with IoT devices to establish a smart construction site infrastructure

Construction Monitoring

- Allows automatic image capture at key construction milestones as proof of progress
- Automatically generates construction logs, progress comparison charts, and workflow transition records
- Provides real-time tracking and inspection tools for project owners

Safety Management

- Issues real-time alerts for pedestrian violations, unauthorized entry into high-risk areas, or missing protective gear
- Records violations for post-incident review and accountability
- Helps contractors manage on-site safety independently while enabling project owners to remotely monitor risks



Competitive Advantages of E-Ray Technology

1. AI Products Fully Developed In-house, Not Resold
2. Core Technologies Owned, Enabling Broad Development Potential
3. Flexible and Adaptive Strategies
4. Strong Relationships with Upstream and Downstream Partners, High Customer Loyalty
5. Specialized Professional Teams Enabling Diverse Project Development
6. Commitment to Customized Projects, Delivering High-quality Outcomes
7. Ability to Localize and Tailor Complete Systems for Clients
8. Real-time Algorithm Updates, Lowering Barriers to Project Development
9. Forming Strategic Alliances and Signing Partnership Agreements



Application Examples

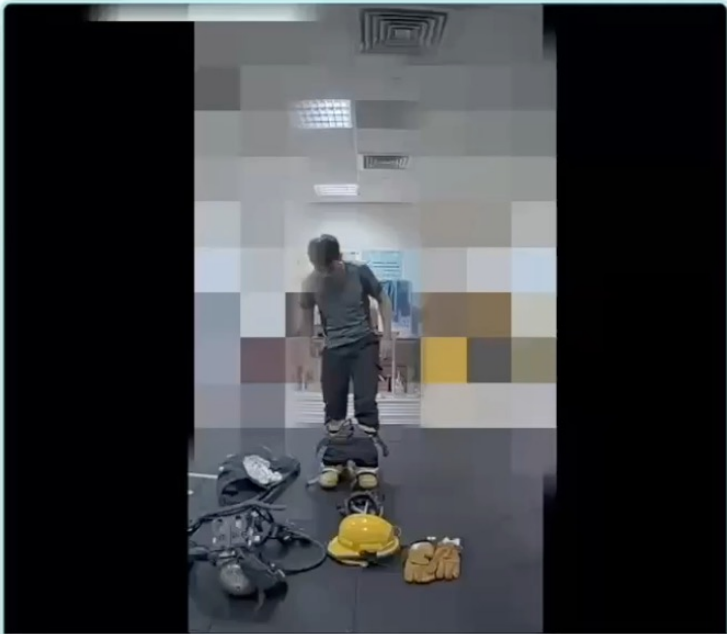


»»» Safety Gear Donning Training

部門: Material
類別: A
姓名: 余怡伶
編號: 10

穿戴流程

- 1. 防燄頭套掛於頸部
- 2. 消防靴穿上
- 3. 消防褲穿上
- 4. 消防褲鬆緊帶拉好
- 5. 消防上衣拉鍊拉好
- 6. 肩帶調整
- 7. 腰帶調整
- 8. 面罩戴上
- 9. 面罩氣密度測試(直視鏡頭)
- 10. 裝上肺力閥
- 11. 將防燄頭套覆蓋至面罩邊緣
- 12. 戴上安全帽
- 13. 戴消防手套



消防衣: (未通過)
A級防護衣: (未通過)
C級防護衣: (已通過)

手動開始 手動結束

錄像回放

練習模式

消防衣

合格時間 02:30

穿戴時間 00:00

請站在方框內指定位置



開始姿勢: 未穿戴單手舉高。點擊圖片可以手動開始。

結束姿勢: 穿戴後單手舉高。點擊圖片可以手動結束。

切換模式 重新練習

示範影片 登出系統

Application Scenarios:

1. Personnel Training
2. Gear Donning Tests
3. Workflow Inspection



CIC Camera Image Integrity Detection

Golden Image設定

Image Time 00:00 [Click to preview] Image Time 01:00 [Click to preview] Image Time 02:00 [Click to preview]

Image Time 03:00 [Click to preview] Image Time 04:00 [Click to preview]

Compare with footage from the same time period

VISION CIC

備註板 通知管理 產品授權 硬體使用率 攝影機管理 系統參數

操作手冊 登出 Version 1.5.1

規則清單 時間篩選 位置 掃描結果 進階篩選 搜尋 儲存規則

日期與時間	位置	掃描結果	查看細節
☐ 2025/3/28 下午5:41:28	Fake-800W-60FPS	正常	查看細節
☐ 2025/3/28 下午5:22:10	Fake-800W-60FPS	正常	查看細節
☐ 2025/3/28 下午5:02:52	Fake-800W-60FPS	正常	查看細節
☐ 2025/3/28 下午4:43:33	Fake-800W-60FPS	正常	查看細節
☐ 2025/3/28 下午4:24:21	Fake-800W-60FPS	正常	查看細節
☐ 2025/3/28 下午4:05:20	Fake-800W-60FPS	正常	查看細節
☐ 2025/3/28 下午3:46:03	Fake-800W-60FPS	正常	查看細節
☐ 2025/3/28 下午3:26:49	Fake-800W-60FPS	正常	查看細節

最新結果

- 正常 : 1
- 刪除 : 0
- 忽略 : 1
- 黑畫面 : 0
- 模糊 : 0
- 偏移 : 0

CSV PDF 下載紀錄

Centralized Reporting for Quick Identification of Camera Issues



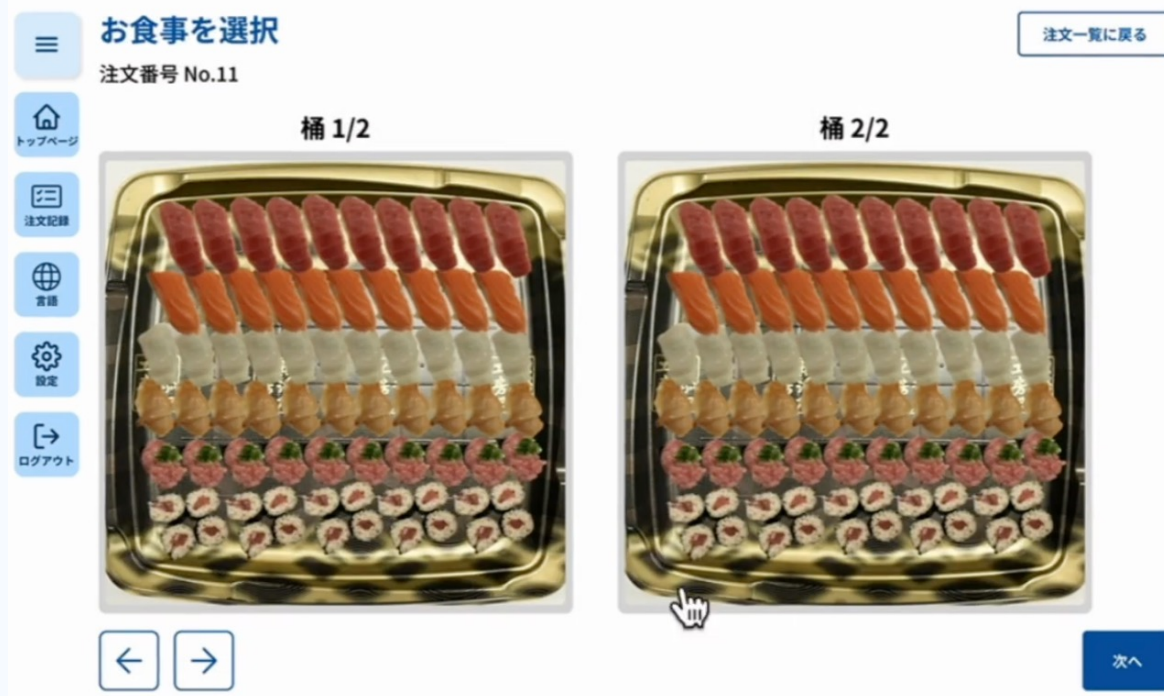
Smart Enforcement in Factories



Application Scenarios:

- 1.Factory Overspeeding Detection
- 2.Violation Detection for Not Wearing Safety Helmets
- 3.License Plate Recognition
- 4.Road Condition Monitoring

》》》 Sushi Pre-serving Inspection System



Application Scenarios:

1. Order Detail Image Generation
2. Out-of-stock Check for Restaurant Dishes
3. Placement Rule Comparison



Instrument Recognition



Left Side: Camera View / Right Side: Recognition Output



Users capture instrument readings via mobile phone and upload them to the cloud server. The recognition engine processes the image and returns the results, while allowing users to adjust the values if necessary.

Application Scenarios:

1. Analog-to-digital data conversion
2. Error-proof and tamper-proof data entry
3. High-frequency data acquisition
4. Integration with internal enterprise backend systems



Fall Detection



- Application Scenarios:
1. Medical Facilities
 2. Care Institutions
 3. Elderly Living Alone

Workplace Safety Equipment System



Application Scenarios:

1. Tank Truck Filling
2. Equipment Inspection
3. Workflow Inspection



Hazardous Area Alarm System



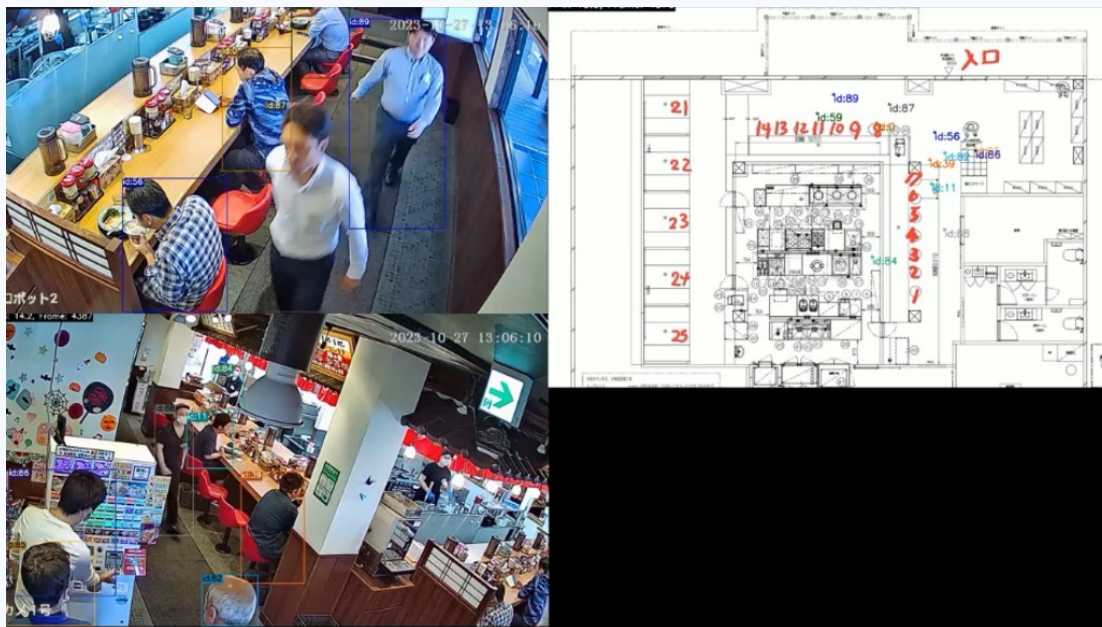
- Application Scenarios:**
1. Clearance During Material Feeding
 2. Equipment Inspection
 3. Hazard Warning



Cross-camera Tracking

Application Scenarios:

1. Personnel Tracking
2. Personnel (Object) Positioning





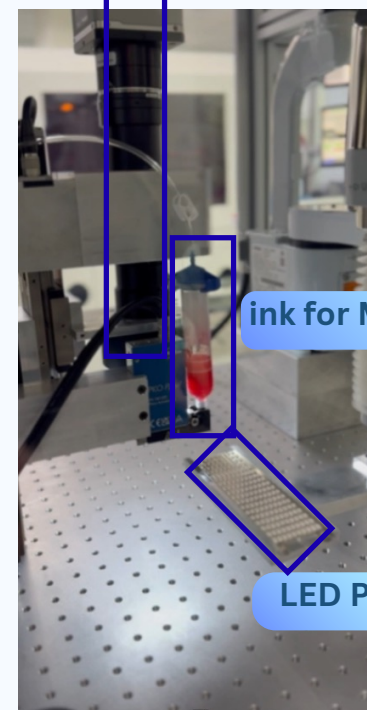
LED Defect Detection



Application Scenarios:

1. LED Die Inspection
2. Customized Mechanical Structures
3. Secondary Inspection for Traditional AOI Systems

Specialized Imaging System



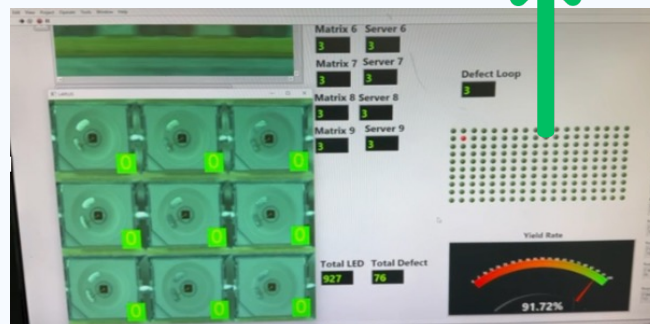
Ink for Marking Machines

LED Platform

Marking Defect Locations

Captured Footage

Recognition Screen

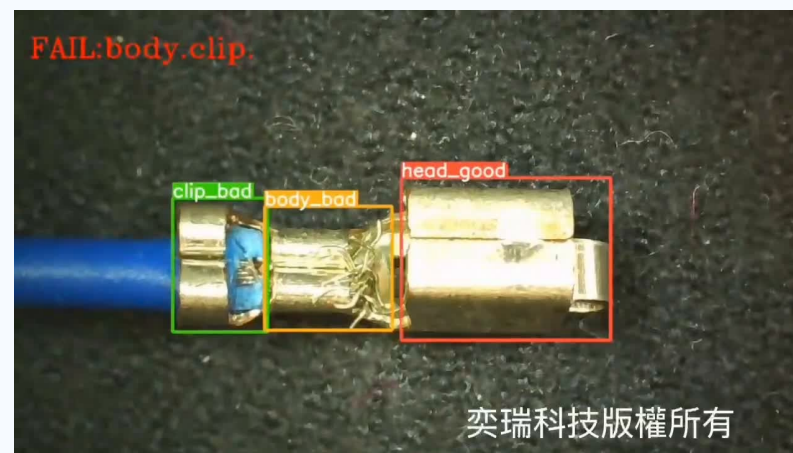




Wire Defect Detection



Wire Printing
Inspection



Terminal Connector
Inspection



Production Line Defect Inspection



Application Scenarios:

- 1.Surface Defect Inspection for Various Products
- 2.Customized Mechanical Structures
- 3.Secondary Inspection for Traditional AOI Systems



Packaging Defect Detection



Application Scenarios:

1. Adding Inspection Functions to Existing Equipment
2. Secondary Inspection for Traditional AOI



Client Self-labeling Platform

The interface displays a defect detection workflow for electronic components. It includes a sidebar with 'AI 畫面辨識' and '後台資料' options. The main area shows a 'LOGO' placeholder, a '奕瑞科技版權所有' watermark, and two images of components with defects highlighted. Below the images are input fields for '商品料號' (Product Part Number), '產品序號' (Product Serial Number), '檢驗範圍' (Inspection Scope), '檢驗數量' (Quantity of checks), '檢測接頭' (Inspection Fittings), '缺陷數量' (Quantity of defects), '檢驗人員' (Inspector Name), and '焊接人員' (Welding Staff). A table on the right shows 'AI檢測數量' (AI Detection Quantity) with columns for '顯示' (Display) and '項目' (Item), listing '錫多_開口' (Too much solder - opening) and '錫多_上方' (Too much solder - top).

3. AI辨識完，抓出瑕疵範圍

Application Scenarios:

1. Customers can add data independently
2. Customers can define their own defect standards
3. Customizable user interface

Camera Integrity Check (C I C)





CIC Inspection Abnormalities

1. Loss of Camera Connection
2. Blackout on Camera Feed
3. Image Flickering or Noise Interference
4. Visual Obstruction (such as leaves, nests, etc.)
5. Intentional Camera Movement
6. Video Recording/Storage Malfunction
7. Abnormality in Designated Area (e.g., obstructed IR detector)



CIC Key Benefits

1. Compatible with all camera brands
2. Low implementation cost
3. Customizable alert frequency and mechanisms based on requirements
4. Integrated AI algorithms to minimize false alarms
5. Labor cost savings
6. Report-based records for easier post-event investigation
7. Data available for big data analysis

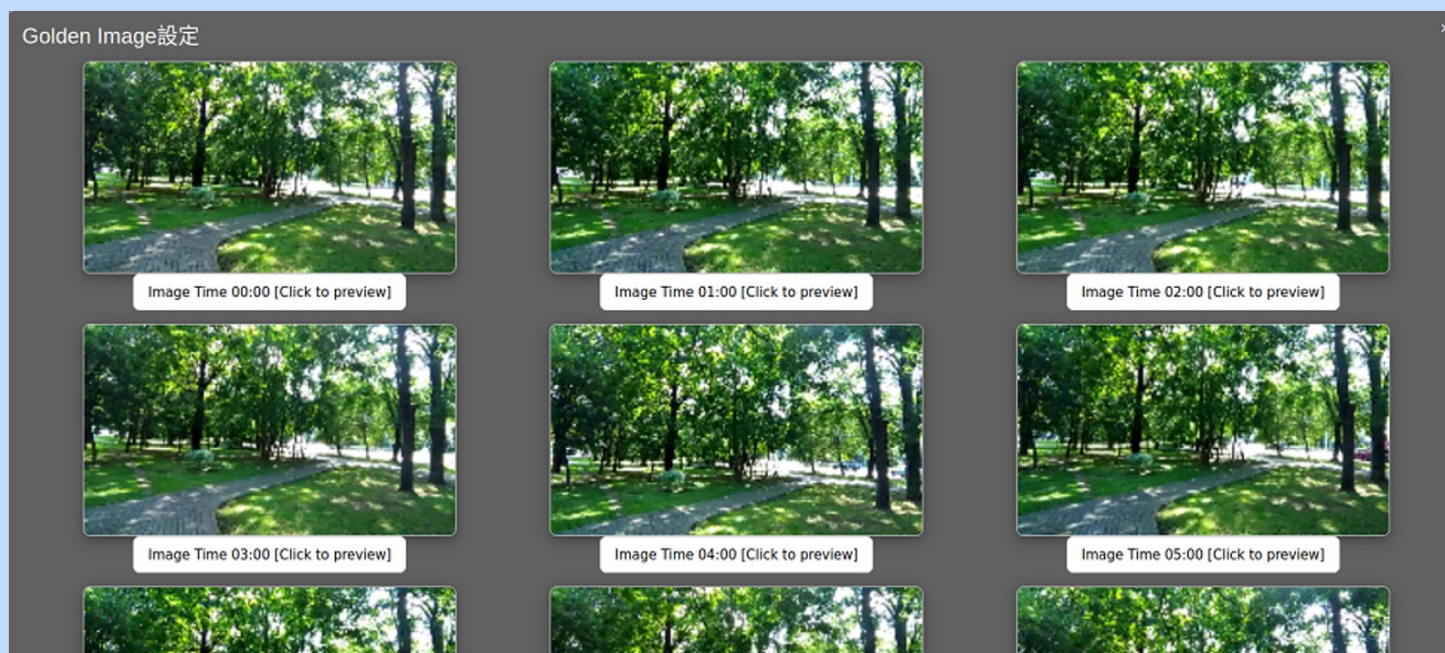


EASIER MANAGEMENT OF ALL SITE VIDEO IN ONE PLACE!



Golden Image Comparison

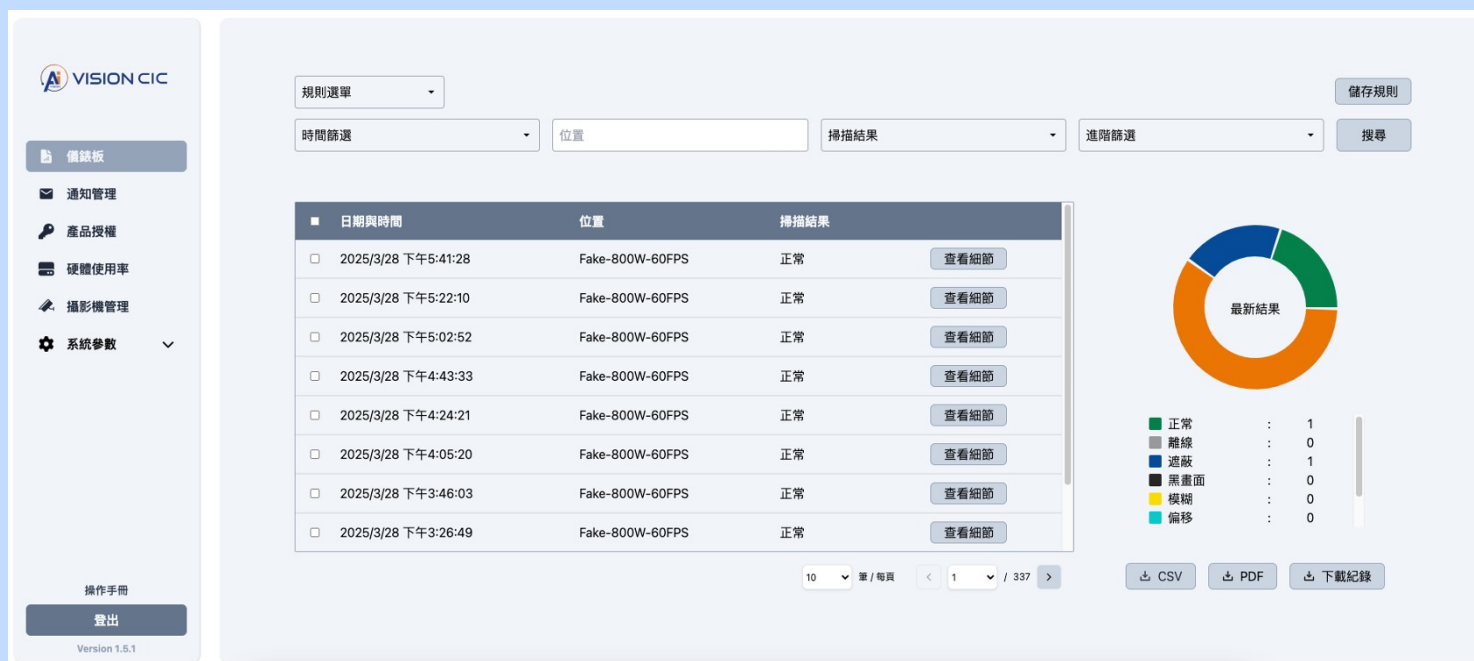
Captures one image every hour, totaling 24 images per day





Report

Allows users to view the current status of cameras in the system and check for abnormalities.





奕瑞科技有限公司



THANK YOU

3F., No. 56, Lane 258, Ruiguang Road, Neihu
District, Taipei City 11491, Taiwan
TEL : (02) 2657-8027 FAX : (02) 2658-7027

18F., No.1-114, Zhonghua Rd., Yongkang Dist.,
Tainan City 71084, Taiwan
TEL : (06) 702-1321 FAX : (06) 702-1325