



DAHUA Cargo & Logistics Security and Management Solution

WEU Version 1.0

WEU Product and Solution Department

Zoetermeer, The Netherlands



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Logistic Industry in EU



Country	LPI Rank	LPI Score	Customs	Infrastructure	International shipments	Logistics competence	Tracking & tracing	Timeliness
Germany	1	4.19	4.09	4.38	3.83	4.26	4.22	4.40
Netherlands	2	4.07	3.97	4.23	3.76	4.12	4.08	4.30
Sweden	3	4.07	3.95	4.22	3.88	4.04	4.02	4.32
Belgium	4	4.05	3.74	4.03	3.97	4.10	4.11	4.40
Singapore	5	4.05	4.00	4.14	3.72	4.08	4.05	4.34
United Kingdom	6	4.01	3.85	4.09	3.69	4.04	4.10	4.32
Japan	7	3.99	3.91	4.19	3.61	4.03	4.03	4.24
Austria	8	3.99	3.71	4.07	3.78	4.04	4.13	4.22
Hong Kong, China	9	3.96	3.85	4.02	3.85	3.94	3.95	4.18
United States	10	3.92	3.76	4.10	3.54	3.93	4.13	4.14
Denmark	11	3.92	3.88	3.89	3.59	3.98	3.94	4.26
Finland	12	3.92	3.89	3.95	3.56	3.88	4.10	4.17
Switzerland	13	3.91	3.75	4.07	3.57	3.92	4.02	4.20
United Arab Emirates	14	3.89	3.66	3.98	3.76	3.83	3.89	4.23
France	15	3.86	3.63	4.00	3.60	3.82	3.99	4.17

*Data from World Bank

World Bank has recently come out with the **Logistics Performance Index 2018** (released every two years). **Germany** again leads the table as **#1** with an **LPI score of 4.20**. Followed by **Netherlands**, Sweden, **Belgium**, and Singapore. The LPI scores of high-income countries are 48% higher than in lower-income countries. Logistics is a \$4.3 trillion industry globally. It is the backbone of trade, and good logistics can reduce trade cost and make countries compete globally. Getting logistics right means improving infrastructure, skills, customs and regulations, policies and governance at the right proportion.

The functioning of the logistics sector is the key to the functioning of the European economy. According to the 2018 Global Logistics Index published by the World Bank, **eight out of the ten best-performing countries in the logistics sector worldwide are EU countries.**



Germany
Rank #1



Netherlands
Rank #2



Belgium
Rank #4

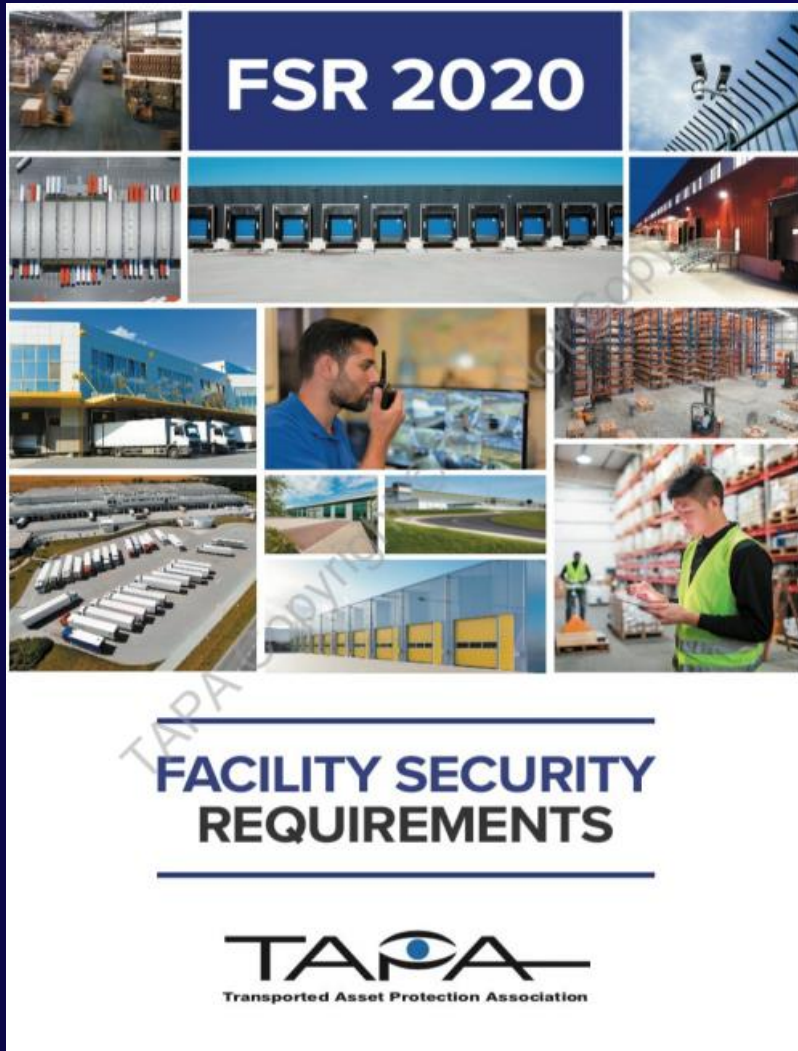


Austria
Rank #8



France
Rank #15

TAPA FSR _ LEVEL A Standards



Transported Asset Protection Association (TAPA) is an association of security professionals and related business partners from high technology and high value companies. Their objective is to address the emerging security threats common to the high value industry supply chain. It unites global manufacturers, logistics providers, freight carriers, law enforcement agencies, and other stakeholders with the common aim of reducing and preventing losses from international supply chains.

Dahua Logistic park and warehouse solution are designed with full reference to TAPA Level A standards, which will help our customer to get the TAPA certification more easily. Also strengthen the security of logistic park and warehouse.



Perimeter Protection



Access Control



Alarm System



HVC Monitoring
(High Value Cage)



Dock area surveillance



Central Management

SOLUTION OVERVIEW



01
LOGISTIC PARK

ANPR

#PERIMETER PROTECTION

#PARCEL TRACKING



02
Perimeter Protection



03
Panoramic Monitoring



05
Dock Management

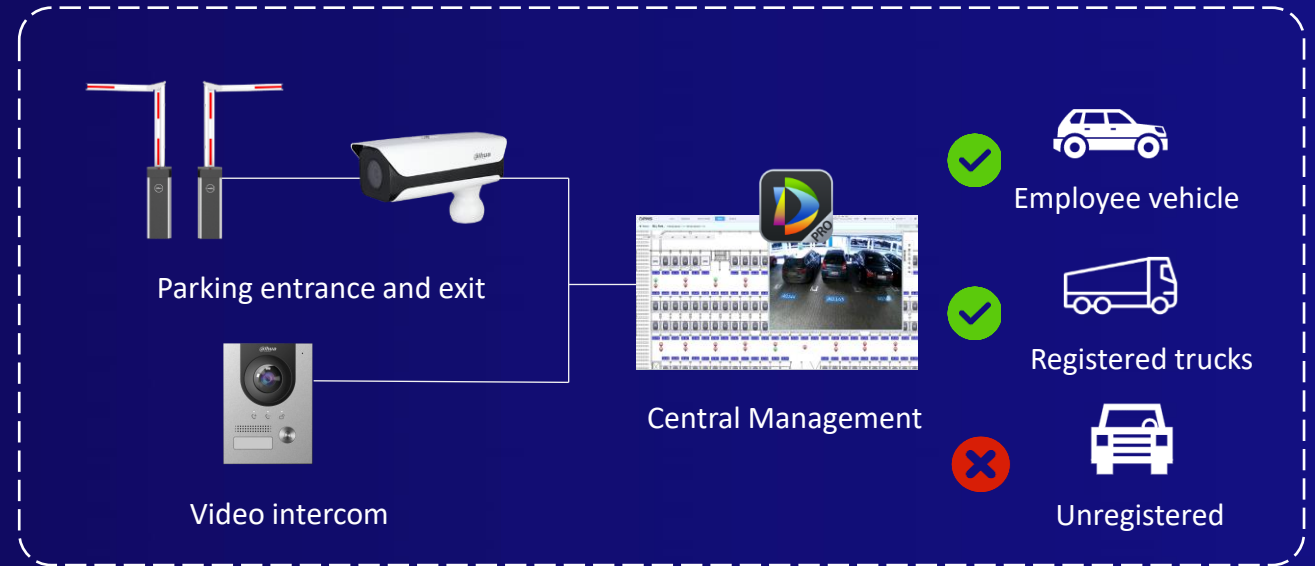


01
Entrance & Exit



04
Parking Space Management

Entrance and Exit ANPR System



Innovations to Assure High Efficiency of Entrance/Exit Management

With global urbanization and rapid growth of vehicle population, how to manage the security by tight control of Entrance/Exit and at the same time improve running efficiency is one of the topic which concerns every potential Entrance/Exit manager.

Dahua innovative Entrance/Exit solution with embedded ANPR, seamless integration of various technologies like video , VTO and management platform offers you what matters most for Entrance/Exit management



Accurate ANPR algorithm and AI metadata (**Vehicle type /Color / Country recognition.**)

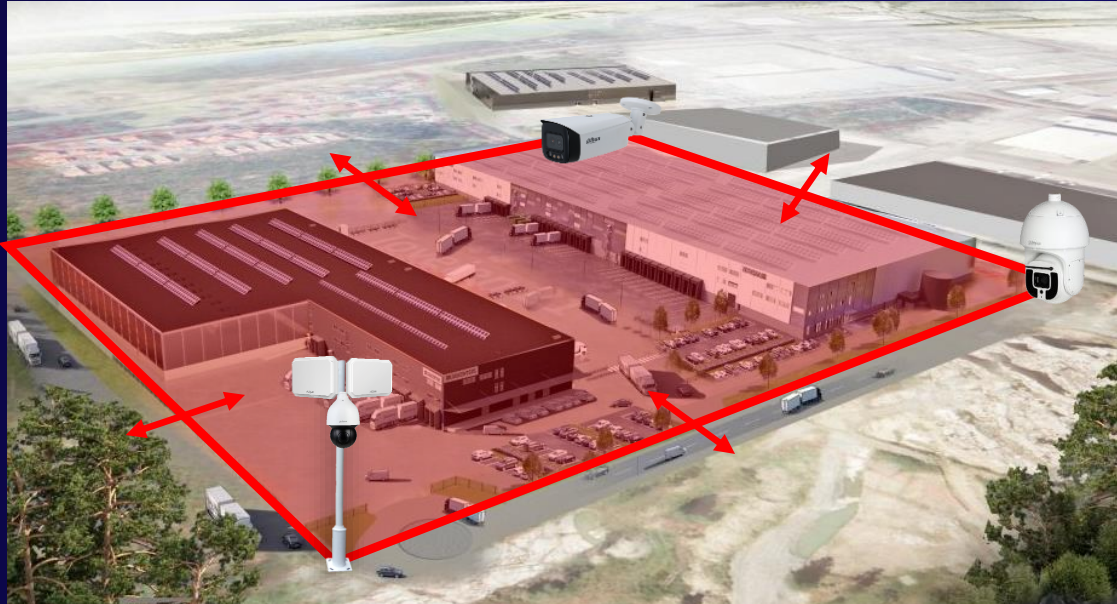


Vehicle access control: white list and block list



Temporary access permit: Visitor and logistic truck

Perimeter Protection



TiOC 2.0



Video Perimeter



Radar Perimeter projection



Central Management



24/7 Day and Night / All-weather Monitoring



Wide Range / High Accuracy / Low false alarm



False alarm filtering : banners/ leaves/ Balloons

Loading Dock Panoramic Monitoring



Safety at the loading dock is an indispensable aspect of loading dock management. That said, loading dock management doesn't end at safety, because without proper security at the loading dock, you're leaving a vulnerability that can potentially disrupt the operations of the entire warehouse.

Highlights



Wider field of view compared to standard cameras



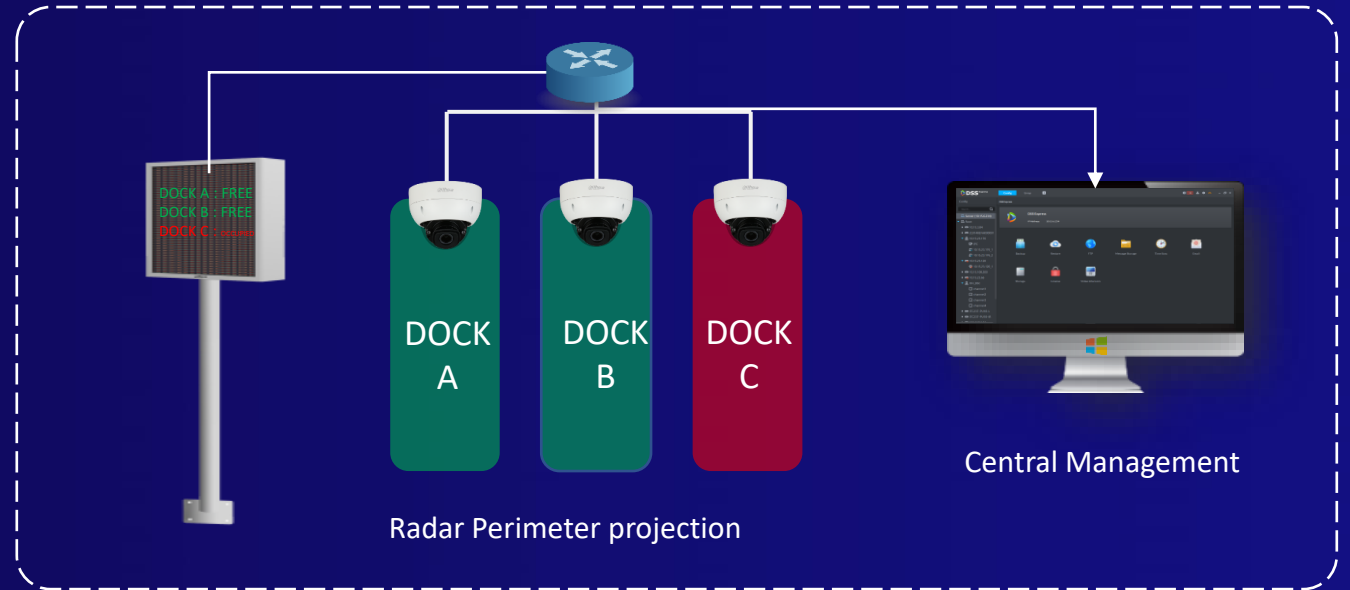
Eliminate blind spots



AI applications : Auto tracking, Tripwire, crowd detection, etc.



Loading Dock Management



Dock Status Detection : Available / Occupied



Logistic Truck Recognition : License Plate / Parking time



Dock Location Guidance : Show available docks to drivers

*Notice: Part of the function is under developing

Outdoor Parking Space Management



Large Coverage



Single camera up to **50** parking spaces

Low Bandwidth



AI embedded inside camera, no back-end server required

Availability Auto-counting



Use for data analysis

Precise Guidance (Optional)

24*7 Working Design



Température -30°C – 65°C

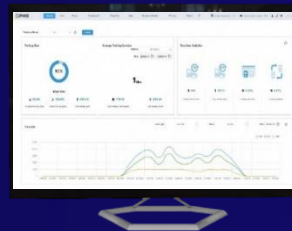
* Min Environnement light 10lux



Outdoor parking space detector



Parking space guidance



Parking space management platform

02
WAREHOUSE

THERMAL

ACCESS CONTROL

PANORAMIC



Indoor Panoramic



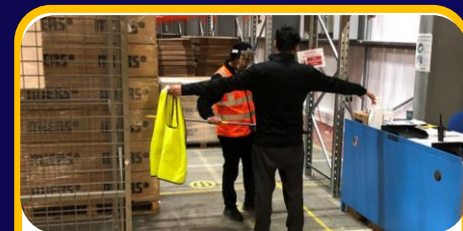
Thermal Fire Prevention



Access Control System



High Value Cage Control

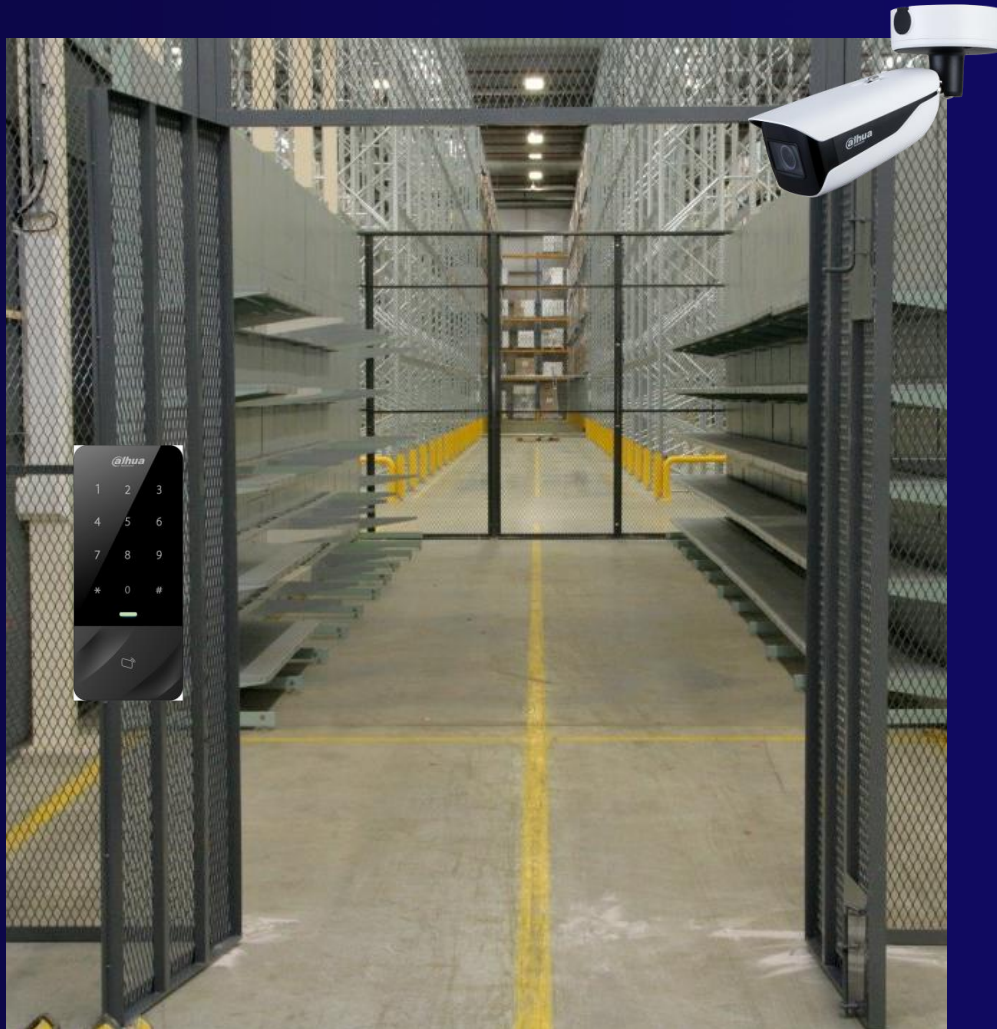


Loss Prevention



Loading Area Monitoring

Entrance and Exit Control



Dual Protection : Access control & Video monitoring



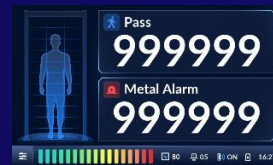
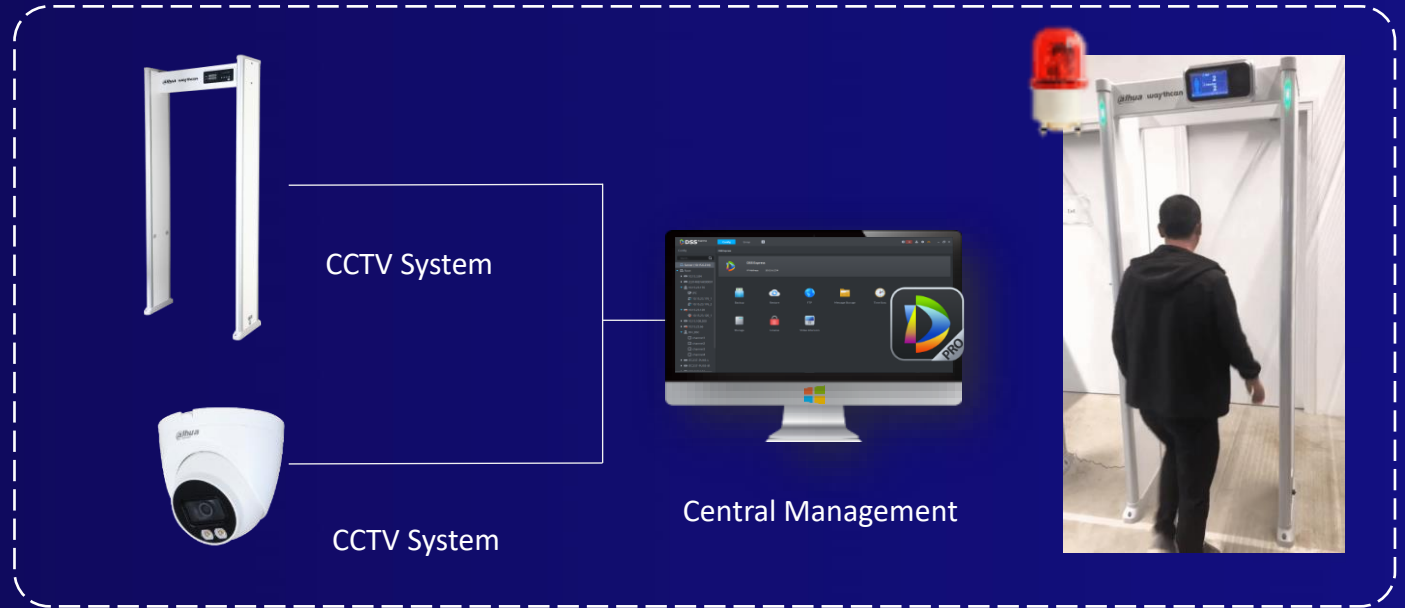
Multiple unlock methods : card/ Remote/ password/ fingerprint*/ Face* or combination , 90 days access records



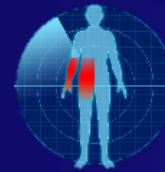
Video record: Realtime video record and AI add-ons like unauthorized person alarm, tripwire etc.

* Please follow GDPR restrictions.

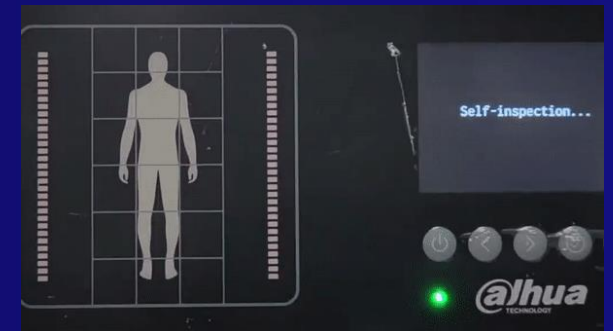
Internal Loss Prevention



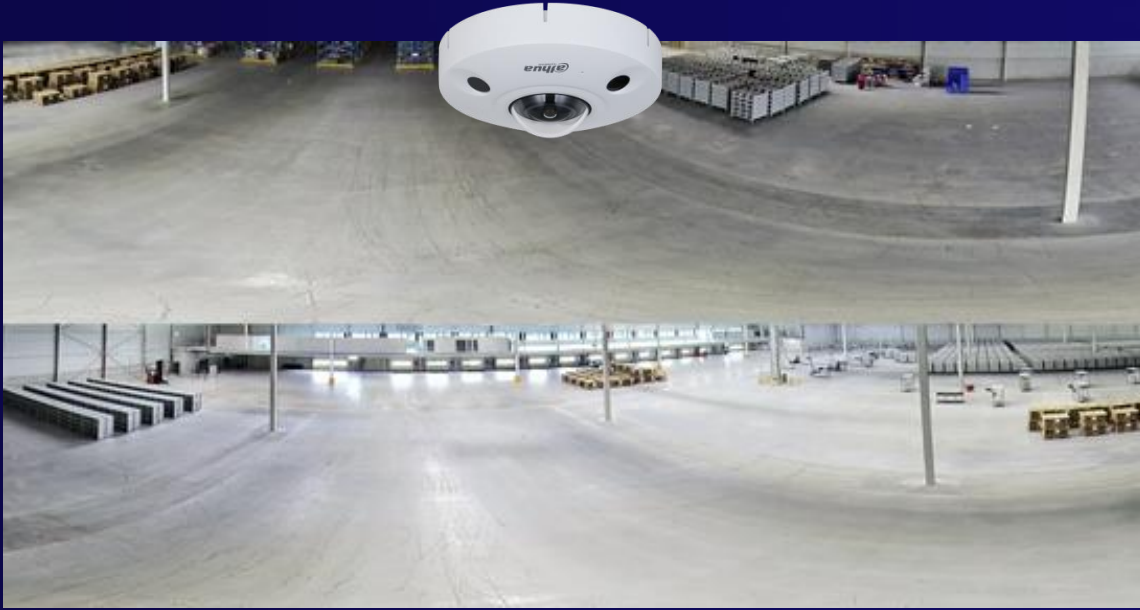
People Counting



Max 18 Zones Alarm



Warehouse Indoor Panoramic



Securing large areas with adequate camera coverage can be challenging, and the use of pan-tilt-zoom (PTZ) cameras often does not suffice in these applications. Panoramic view cameras don't miss anything; a single 180° or 360° panoramic view camera can cover a large area that would require many conventional cameras or multiple PTZ cameras.



HD Fisheye panoramic monitoring wider area



Multiple Display mode : overview or details, your choice



Intelligent add-ons : People counting , Heatmap, etc.



Thermal Fire and Smoke detection



Fire Early Warning

The primary benefit of thermal cameras for fire protection lies in their ability to detect the temperature anomalies that occur just before a fire starts, or if the fire has already started before the smoke can be detected by a conventional smoke detector.

7X24 Detection

Unlike regular video cameras, thermal cameras do not require light to capture an image, making them ideal for use in low-light settings and at night.

Dual Lens (Thermal/Visual)

they can be used for fire detection and prevention, security, and equipment monitoring all at the same time, offering a broader spectrum of protection than standard video cameras can provide.

High Value Cage (HVC) Security



Handling specialty and high value inventory is both complex and high risk. With each unit value at over \$100 per pound your supply chain could be storing and protecting millions of dollars in customer assets. The most common types of high value cargo handled by supply chain operations are precious metals, semi-precious stones, electronics, documents and life science/ pharmaceutical inventory.

Access Control



Authorized employee only



Unlock through Card/ Remote/
Password/ Fingerprint*/ Face *
OR COMBINATIONS

Video Parameter



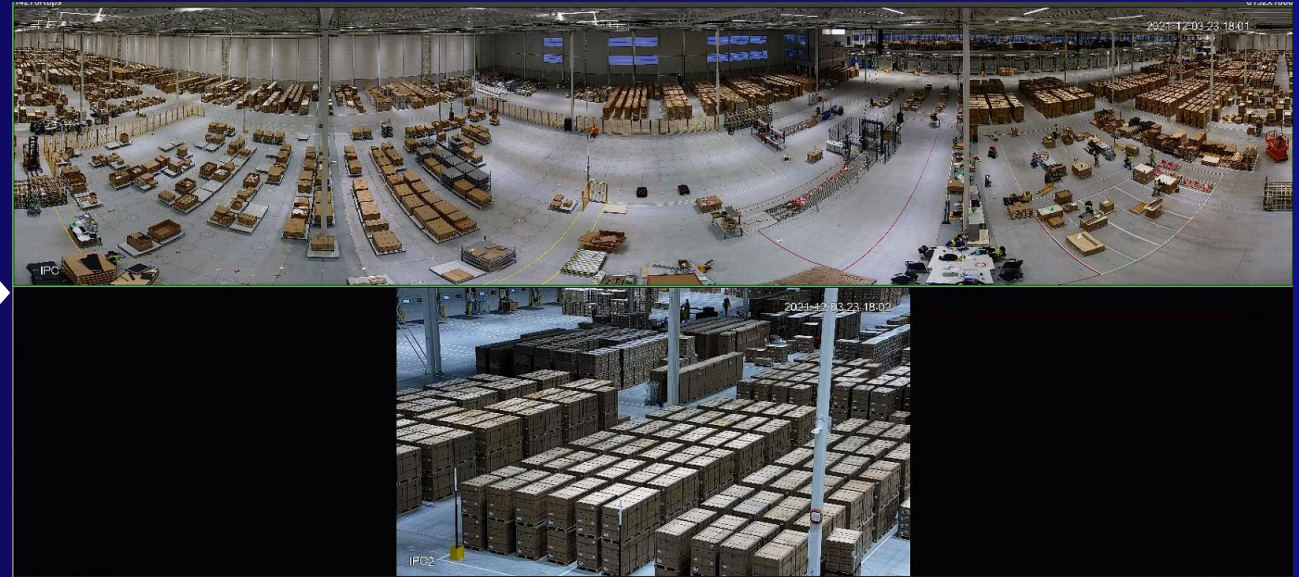
Video Parameter Detection



Loitering detection

* Please follow GDPR restrictions.

Inventory Area Monitoring



360° Panoramic & PTZ



360° Panoramic view of the warehouse



Intelligent video analysis : tripwire, parameter, etc.



45x optical zoom and auto tracking.

Internal Dock Doors Monitoring



According to TAPA standard, internal dock doors should be covered with CCTV system, views of freight being loaded/unloaded at all internal dock doors and dock areas should always clear.



One HD camera could cover 1~2 dock doors without any blind area.

WDR

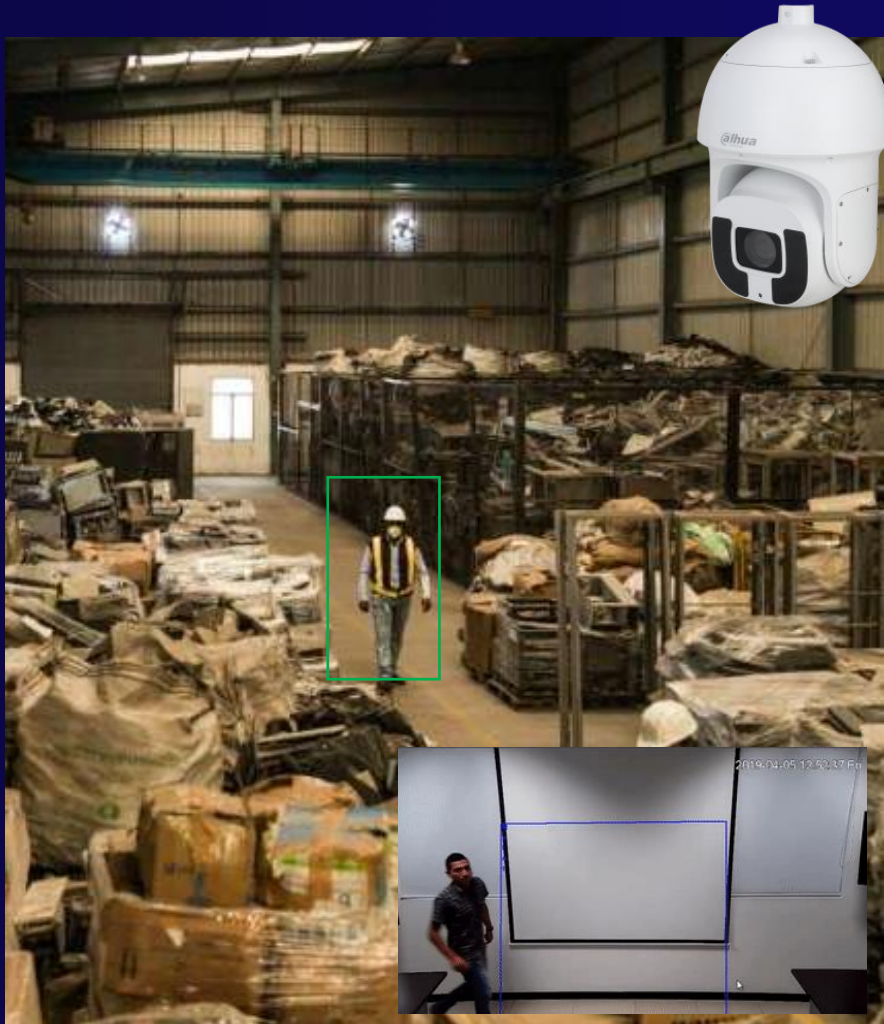
True WDR technology up to 120dB could provide clear image at daytime.



Full Color technology provide color image even in the darkness.



Warehouse Trash Inspection



One of the ways a thief will remove products from the warehouse is to put the product in the trash and recover the stolen property later after the building is closed. This is the main reason for the CCTV coverage on the internal and external main trash collecting bins. TAPA has recognized trash security as being a risk to logistic service providers such as warehouses and transportation companies.



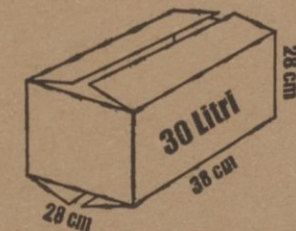
7x24H day and night monitoring : No matter in the daytime or in the darkness evening, Full Color / starlight technology could provide HD video for trash inspections.



Loitering detection : Suspects usually loitering around the trash bins for an opportunity .once the loitering incident detected, an alarm will send to control center.



Auto Tracking : Anyone enter the trash bin area will be tracked and recorded by the camera until he/she left the area.

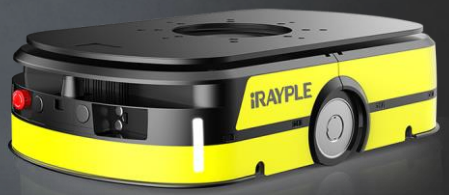


03 How Dahua help to improve your business?

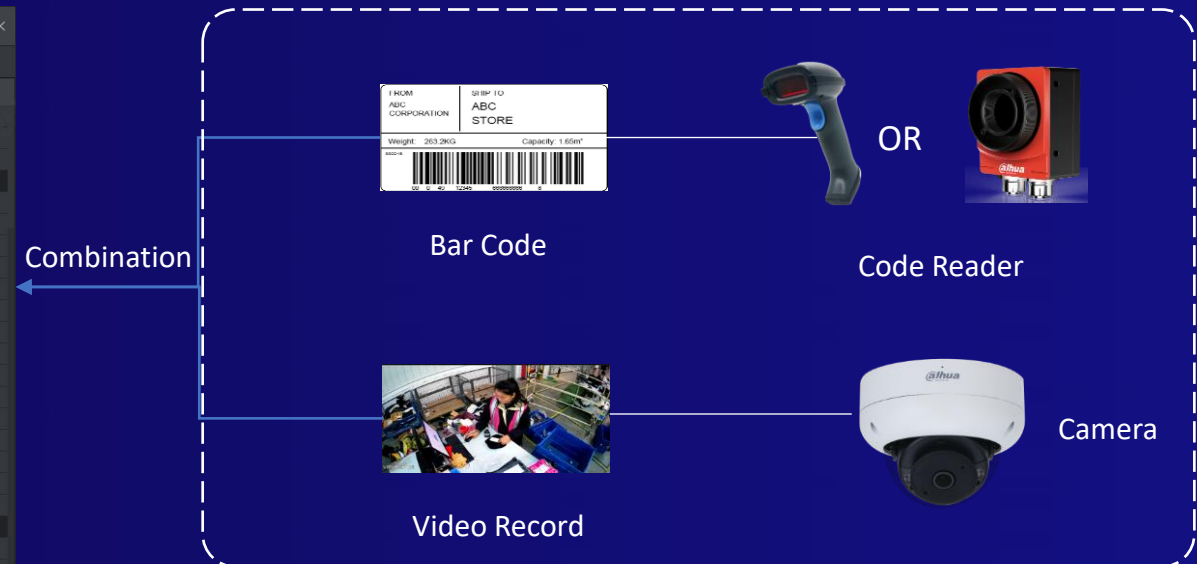
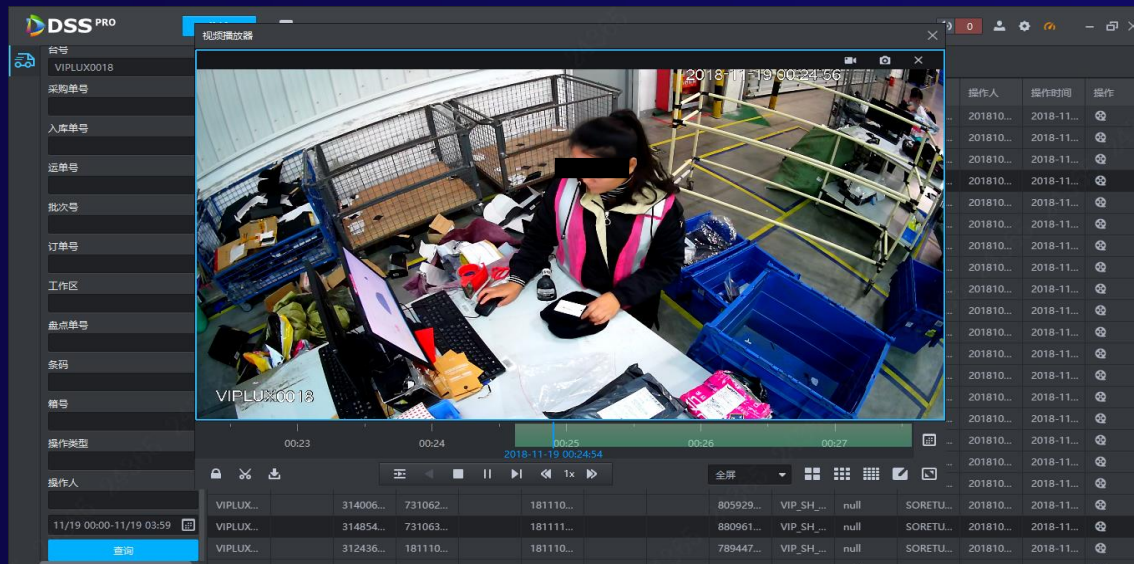
MACHINE VISION

#AGV

#PARCEL TRACKING



Video Parcel Tracking System — One barcode, Multi video



High Flexibility

Compatible with third part business platform and video platform

Industrial Code-Reading Camera and Lens

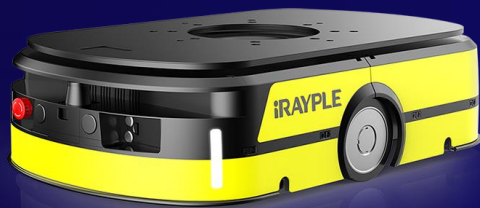
Clear image, high speed, support 1D &2D codes, high recognition rate

Visualization Tracing

View the target video based on the code information



AGV System _ Latent Lifting AMR



Maximum Load Capacity : 600 KG to 1000kg



Shock mitigation system



Multiple carrier adaptability



Dual laser 360° detection

8 / H

Working time

1.5 H

Fast Charging

10 mm

Accurate Navigation

Pallet Forklift Code-Reading Solution

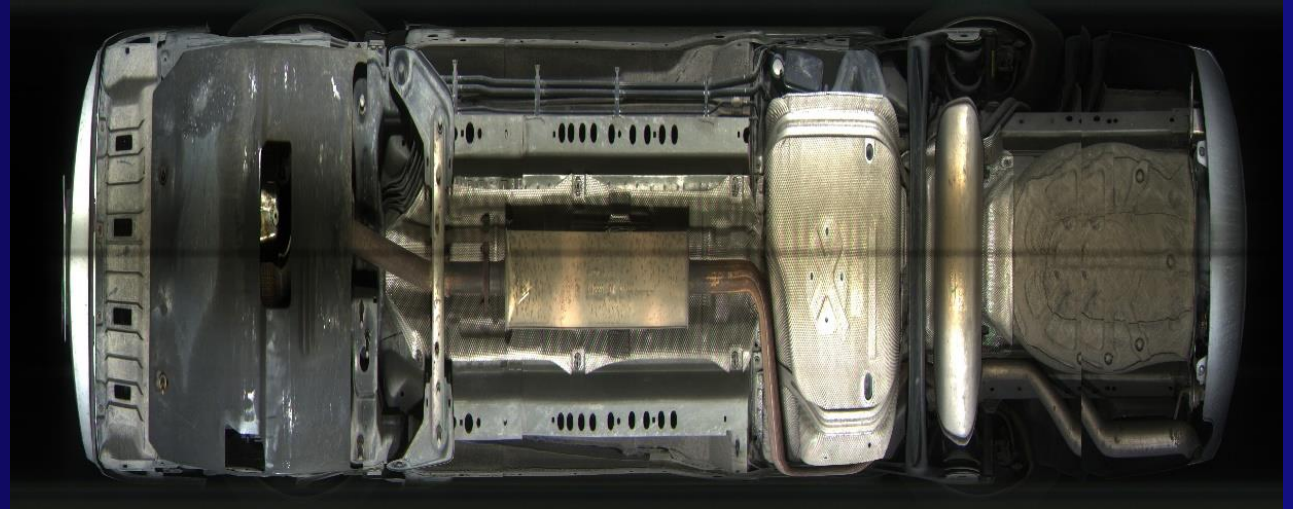


Labor Saving: The operation is carried out on a single pallet, with high accuracy and avoiding a large amount of secondary workload.

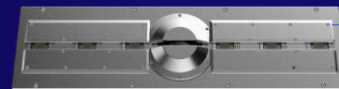
Avoid profits loss: The solution is connected with parcel volume and weight measurement. Avoid loss of profits due to end user's misrepresentation of package volume and weight.

Traceable: each time the goods are forked, the pictures of the goods packaging can be taken, which is convenient for further tracing.

UVSS System



- High resolution line scan camera captures details with 180° field of view, engages the users with a sharp and clear color image.
- High frame(max 26KHz) support high Vehicle Speed to 80km/h without the disruption of traffic flow.



UVSS scan module



ANPR CAMERA



04

Central Management

VIDEO MANAGEMENT SOFTWARE

#ALARMS MANAGEMENT

Video management system – Dahua DSS PRO



DSS Pro is a Comprehensive and Expandable VMS. Beside its basic CCTV functions, it also supports GIS map, system maintenance, ANPR, People Counting and etc. You also can extend functions, Traffic, Business Intelligence, Mobile via add-on modules.

- ✓ Advanced VMS: supports special functions, like auto-register, thumbnail search.
- ✓ Add-on modules promote the software value.
- ✓ Openness can satisfy the project integration.
- ✓ Supports distributed system and cascading, it's more suitable for medium and large projects.



Live View



Playback



Event



Video Wall



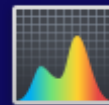
Map



ANPR



Face Recognition



Thermal



DSS Mobile Client

Watch video, handle alarm

Anytime,

Anywhere



Video management system – Dahua Video Wall



In security center applications, Dahua provides the Video Management Platform (VMP), decoders, splicing controllers, and network keyboards.

Ultra-narrow BtB width 0.88, 1.7/1.8, 3.5 mm

High Definition 4K, 1080P

Multiple input interfaces 24h/7 reliable operation

Industrial grade panel HDMI/VGA/DVI/DP/CVBS/USB

Multiple installation modes Floor-standing, wall-mounted, front-maintenance



Matrix



LCD wall



04
KEY PRODUCT

Key Products



ITC437-PW6M

Access ANPR Camera



SD5A Series PTZ

WizSense Network PTZ Camera



H-IPC-PFW5849P-A180-E2

4K Full-color 180° Splicing Camera



PSDW81642ML-A360

Panoramic camera



IPC-HFW5849T1-ASE-LED

4K Full-color Fixed-focal



IPC-EBW81242-AS-S2

12MP IR Fisheye



TPC-BF2241

Thermal Hybrid Bullet Camera



IPC-HDBW5449R-ASE

full-color Fixed-focal Dome

Key Products



ASC2208C-S

Access Controller



ASI1201E

Water-proof RFID Standalone



ISC-D7 SERIES

Walk-through Metal Detector



ISC-H001

Hand Held Metal Detector



NVR5XXX-I/L

WizMind Network Video Recorder



Vto2 SERIES

Video Intercom



LM32

Monitor



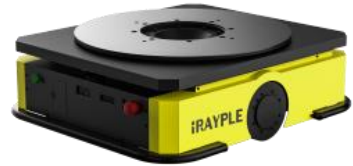
DSS PRO

VMS

Key Products



R7000 series
High speed code reader



C100-Q
Latent Lifting AMR



F150
Forklift AMR



5000 Series
Line scan camera

05
PROJECT CASE



Parcel Tracking Project _ GLS Netherlands



GLS is the one of the largest ground-based parcel delivery service providers in Europe. Processes and supply chains are prone to error. Irregularities, broken goods and loading errors are some of the common issues that occur daily. They want to find a smart solution to care for this.

Solution highlights:

- Keep the entire supply chain and other processes in view.
- Record the status of goods at every point in time and down to the last detail.
- Parcel tracking (Machine vision code scanner).

Benefits:

- ✓ Process visualization provides you with the full picture.
- ✓ Each shipment is recorded at each point, with no gaps, and documented in video images without any additional work.
- ✓ Process visualization links video images with scanned codes. Thus, the state of each shipment can be found within seconds.
- ✓ Potential thieves are now aware of our high level of security and are heavily discouraged from committing crimes.

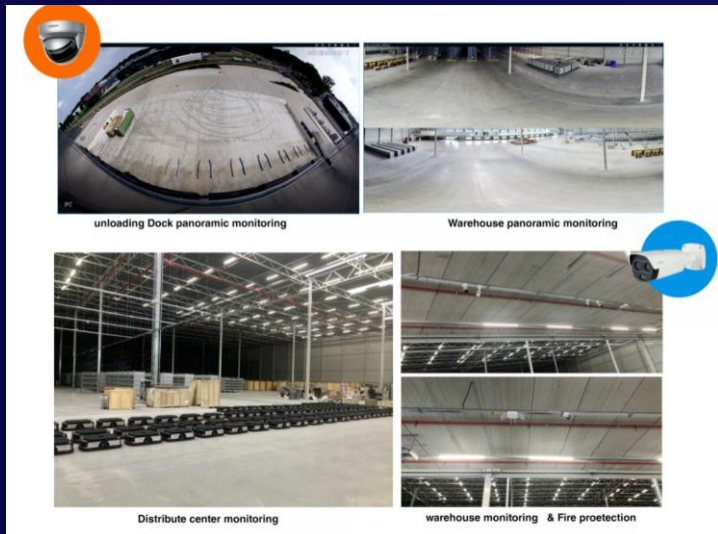
Logistic Park and Warehouse Project _ JD Logistics



JD Logistics company lately launched their first logistics park in Venray, Netherlands. The warehouse spreads out over a total area of 12000m2, complying with C3 warehouse standard. Dahua, as the total physical security system provide, delivers whole intelligent logistic security solution for this logistics park, including CCTV, access control, transmission network, management platform.

Solution highlights:

- Thermal camera to overheating detection;
- Access control associated to video surveillance camera;
- Perimeter defense based on thermal technique;
- HD Video monitoring covers all important spot inside the warehouse;
- All-in-one management platform for all security devices operation, administration and maintenance.



Benefits:

- ✓ Reliable fire precaution and prevention;
- ✓ Insight of all suspicious intrusion attempt;
- ✓ All-environment proof perimeter protection;
- ✓ Enabling AI-enhanced detection in case of any suspicious motion all the time;

Ingram-Micro Parcel Tracking Project



There is always dispute exists such like commodity missing or damaged when the parcel is delivered to customer. Ingram Micro want to record the commodity in parcel which is passing a fixed point on conveyer belt before delivering to the customer. Once dispute happens, they will generate a box contents statement which contains the snapshot of the commodity for the customer, to prove the parcel is intact before delivered to the customer.

Solution highlights:

- Machine vision camera to scan the barcode.
- 2MP dome camera to record the parcel content.
- DSS to combine barcode/PI number/parcel number/time with video footage and it's able to output package info including a snapshot of parcel content with PDF format.



Benefits:

- ✓ 100% scanning rate and 100% recognition rate.
- ✓ Record the parcel content clearly
- ✓ Thanks to the high performance of hardware and advanced algorithm, the barcode can be recognized with 100% of accuracy.
- ✓ The Ingram Micro LOGISTICS is satisfied with the performance that combines Barcode/PI number/parcel number/time/and parcel content snapshot.



ENABLING A SAFER SOCIETY AND SMARTER LIVING

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