THE NEW STANDARD FOR LOGISTICS

Hanwha Vision Logistics Solution

A video-based analytics solution for tracking parcels, safety management, and integrated control.

Barcode Reader (BCR) Integrated Camera

One camera for barcode scanning and high-resolution video, improving parcel management.

Dock Safety / Management
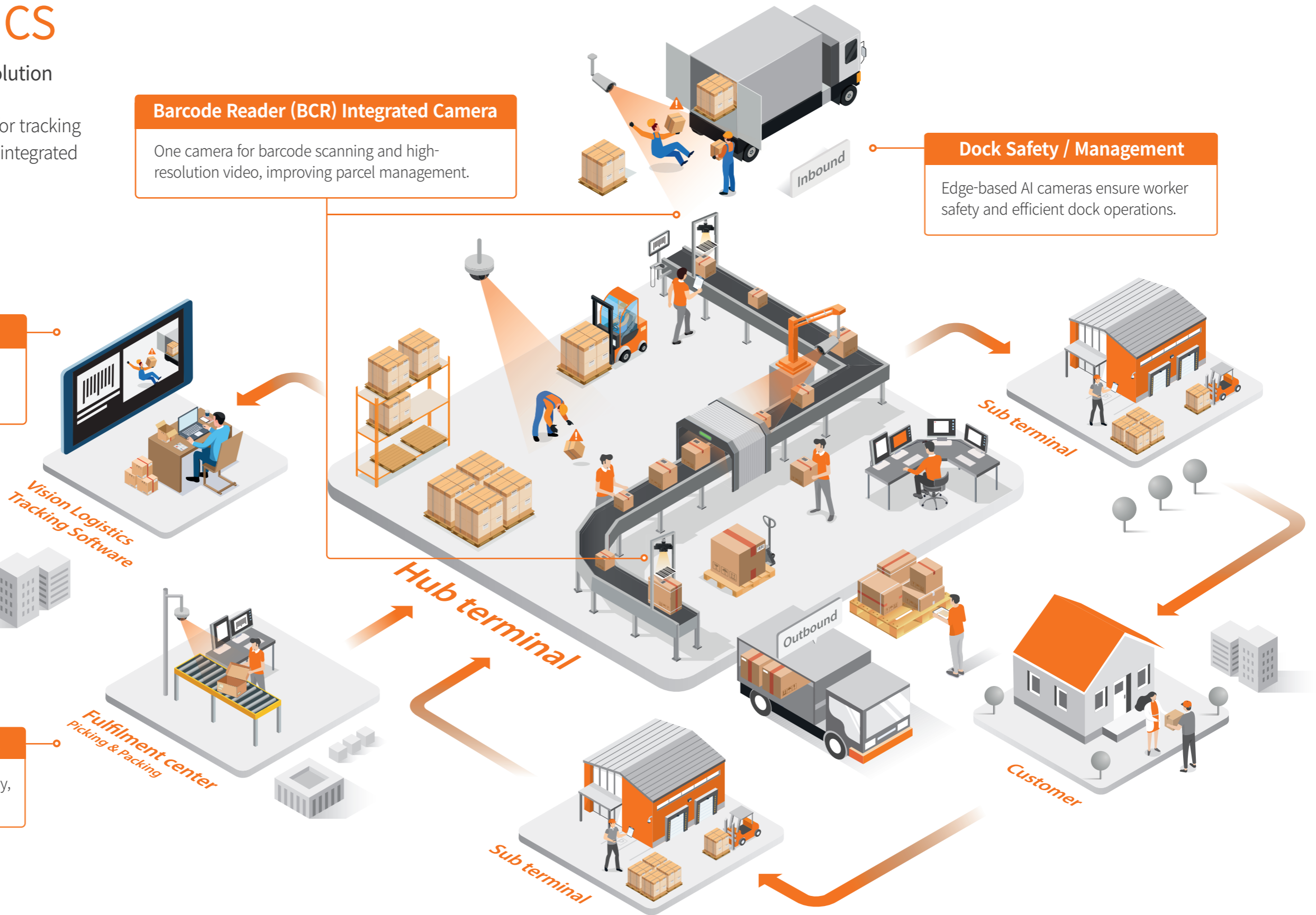
Edge-based AI cameras ensure worker safety and efficient dock operations.

Integrated Control

Industry-leading surveillance system that fuses events and videos for full overview.

Packing Video Management

By matching videos with work history, claims can be easily investigated.

Inbound

Vision Logistics Tracking Software

Fulfilment Center
Picking & Packing

Hub terminal

Sub terminal

Outbound

Sub terminal

Customer

BCR (Barcode Reader) & Video surveillance

Leveraging video and barcode reading solutions for end-to-end parcel management and logistics. Offers end-to-end parcel management using efficient video analytics.

TNS-9050IBC Dual Lens BCR Camera

Barcodes and video are provided in real-time from one camera

Barcode reading cameras, fixed mount

Accurate barcode recognition, even on high-speed conveyors.

Logistics automation offers greater reliability and reduced mis-delivery as well as increased parcel capacity and optimized resources. Combining barcode data and videos provides efficient parcel tracking and management.

Specifications

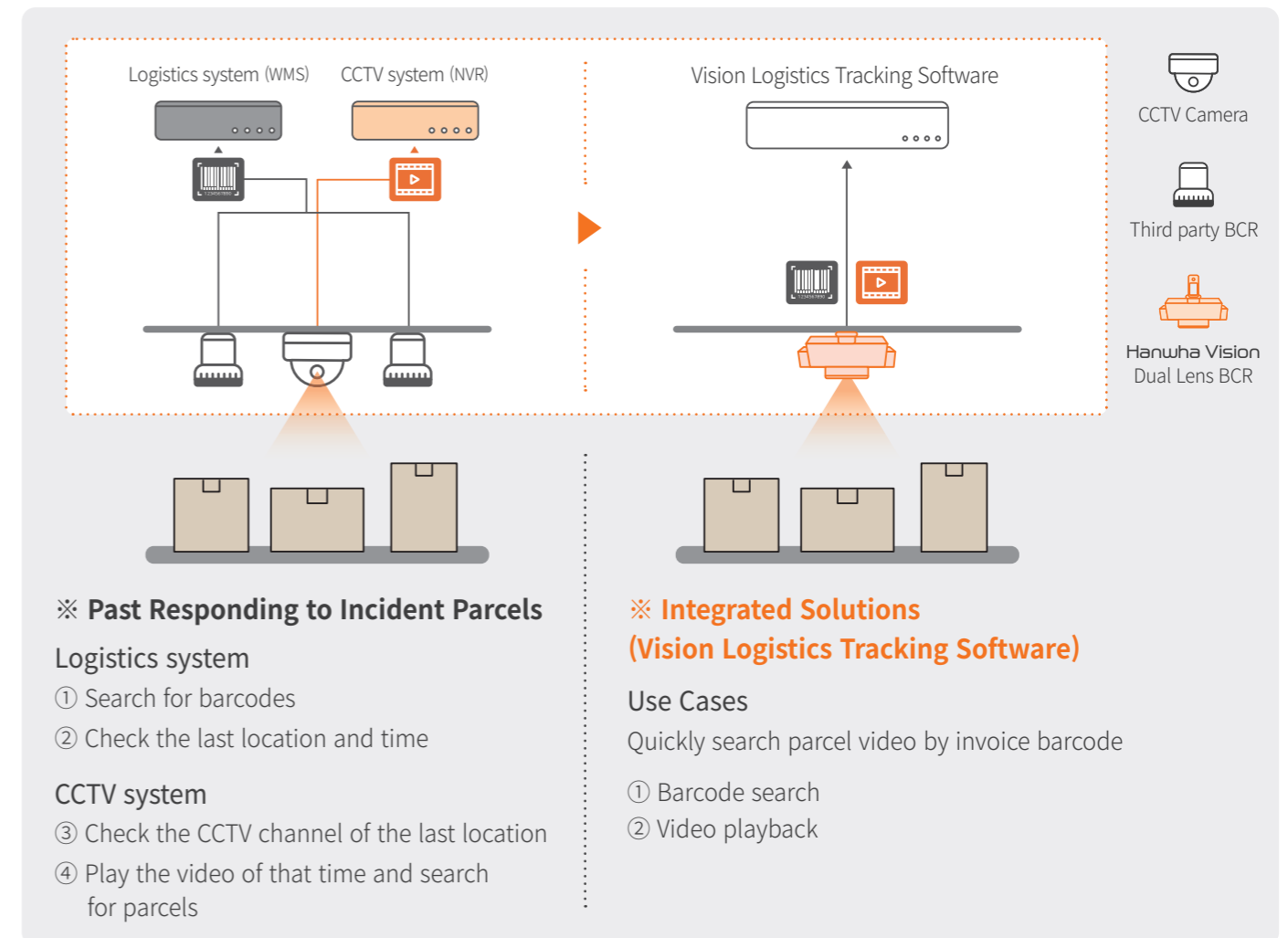|	
Image sensors	Barcode : Global Shutter Mono 1" COMS, 4K(4096 * 2160) Max 20fps CCTV Monitoring : Global Shutter Color 1" COMS, 4K(4096 * 2160) Max 20fps
Lens	25mm 4K LENS(MONO/COLOR), C mount, 16mm/35mm/50mm Switchable
LED Light	Detachable LED module(White LED 32EA), External LEDs available
Analytics (Wise AI)	Barcode recognition - Barcode type: 1D Code, Code128 / Codabar / ITF(Interleaved 2 of 5)
Power	24VDC / Max 28.6W(LED On), Typical 13.7W(LED Off)

Integration with High-resolution video

Combining video surveillance with barcode-based logistics systems enables users to track the entire logistics process, preventing parcel incidents such as loss, damage, etc.

• Scan barcodes from a single camera and record high-resolution video at the same time.

• With high-resolution videos and precise time synchronization, verify the status and journey of parcels.

• Manage the movement history and footage of parcels via Vision Logistics Tracking Software.

Logistics system (WMS)　　CCTV system (NVR)　　　　Vision Logistics Tracking Software

CCTV Camera

Third party BCR

Hanwha Vision
Dual Lens BCR

※ **Past Responding to Incident Parcels**

Logistics system
① Search for barcodes
② Check the last location and time

CCTV system
③ Check the CCTV channel of the last location
④ Play the video of that time and search for parcels

※ **Integrated Solutions
(Vision Logistics Tracking Software)**

Use Cases
Quickly search parcel video by invoice barcode

① Barcode search
② Video playback
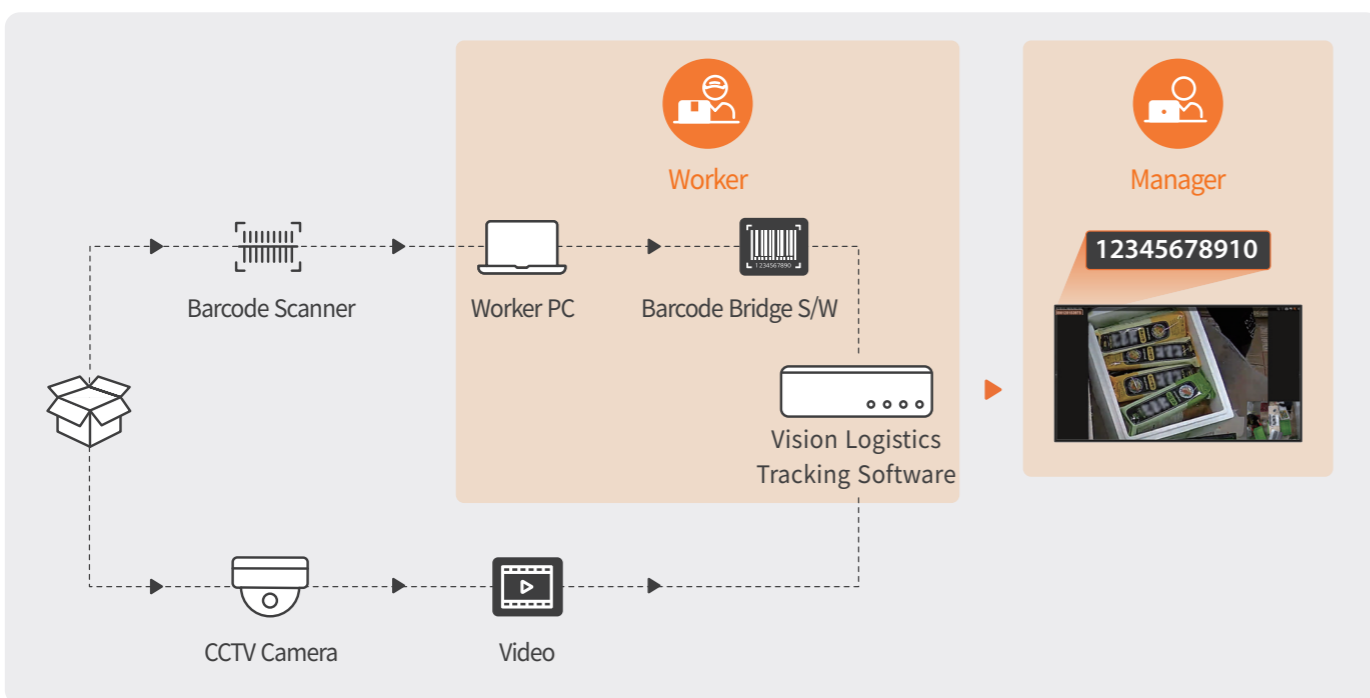
Packing Video Management

The solution helps prevent packing errors and ensures video evidence of each order if customer claims arise.
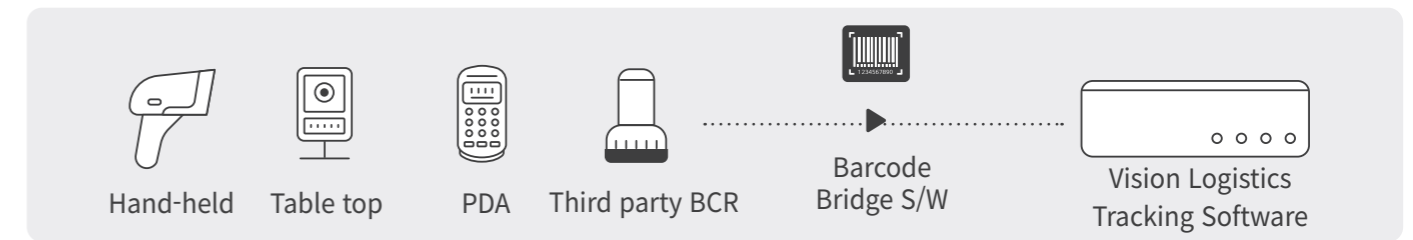
Packing Solution

When incidents such as errors, omissions, or damages occur during the packing process, it enables detailed review of the incident.

• Integrated barcode recognition and video systems to manage worker status and improve customer claim response times in fulfillment centers(e-commerce, 3PL, etc.).
• Risk-free solution that requires no modifications or configuration changes to existing software.
• The Barcode Bridge S/W transfers barcode data to the video management system (Vision Logistics Tracking Software).
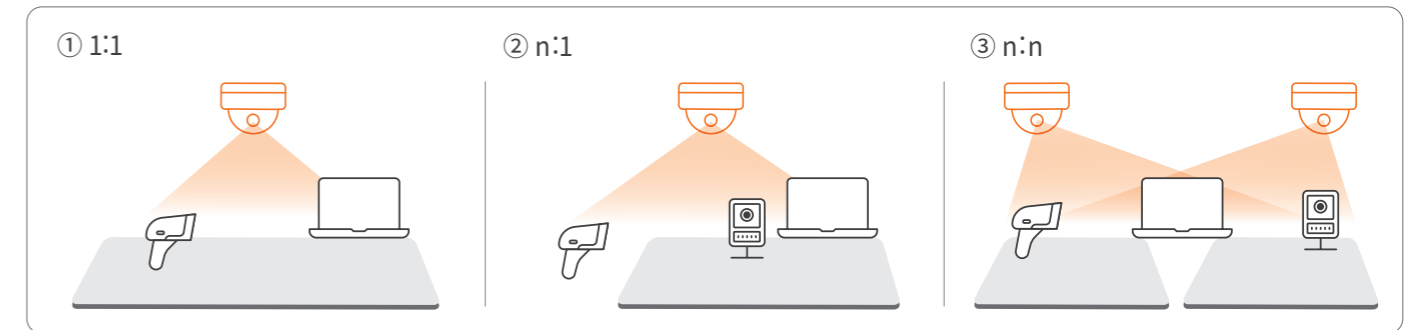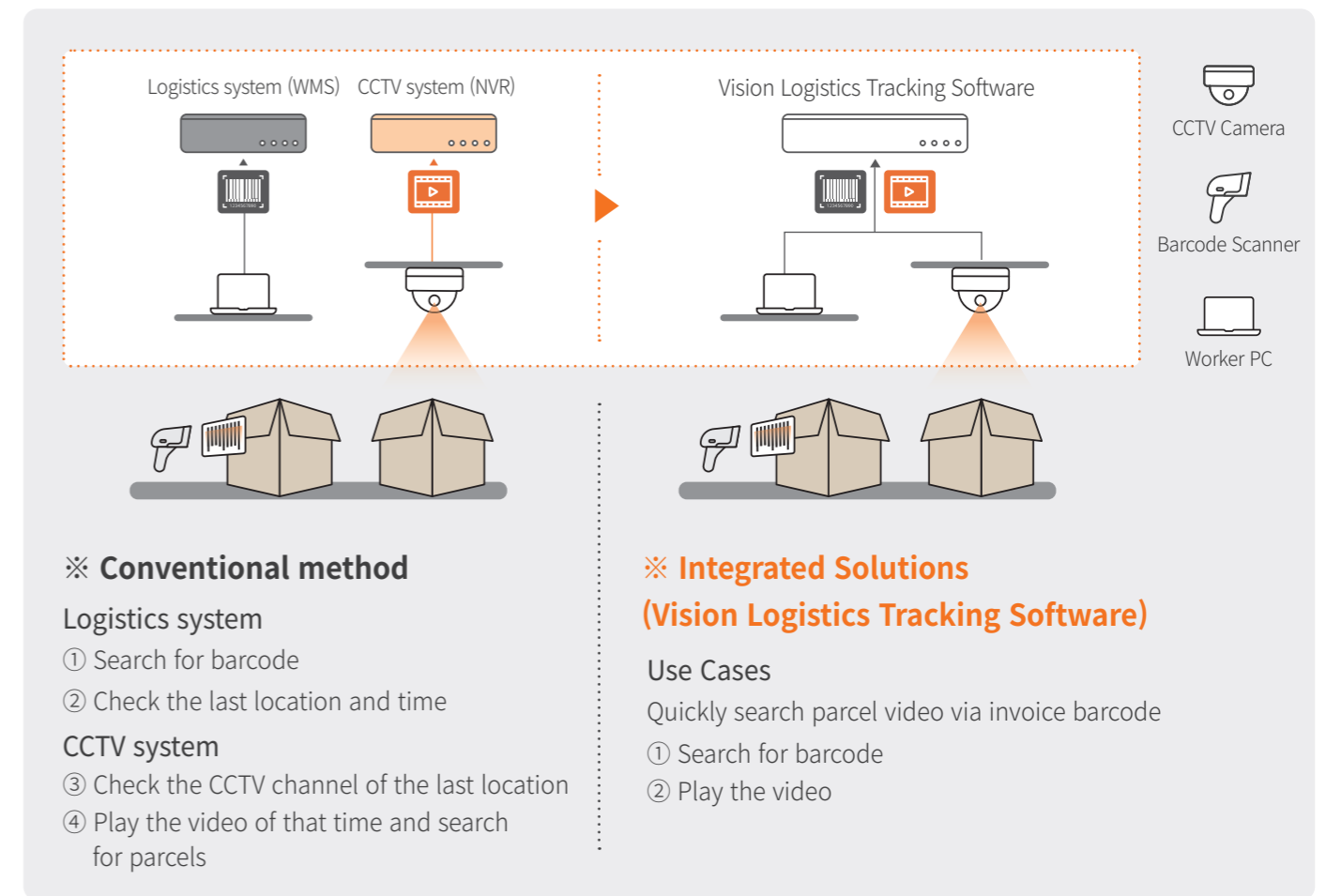
Worker

Barcode Scanner → Worker PC → Barcode Bridge S/W → Vision Logistics Tracking Software

Manager

12345678910

CCTV Camera → Video

System configuration

The SSM Appliance interfaces with various barcode devices to receive barcode information.

Hand-held Table top PDA Third party BCR Barcode Bridge S/W Vision Logistics Tracking Software

• A flexible system configuration to meet a wide range of requirements.

① 1:1   ② n:1   ③ n:n

• Unify video and logistics systems via Vision Logistics Tracking Software to trace package history.

Logistics system (WMS)   CCTV system (NVR)   Vision Logistics Tracking Software

CCTV Camera

Barcode Scanner

Worker PC

※ Conventional method

Logistics system
① Search for barcode
② Check the last location and time

CCTV system
③ Check the CCTV channel of the last location
④ Play the video of that time and search for parcels

※ Integrated Solutions (Vision Logistics Tracking Software)

Use Cases
Quickly search parcel video via invoice barcode
① Search for barcode
② Play the video

Dock Safety / Management Solutions

Dock operations, including vehicle entry/exit, can be made highly efficient and safer by combining events.

Dock Safety

AI cameras are trained to recognize certain dangerous scenes, sending an event alarm to Vision Logistics Tracking Software to prevent incidents.

Operational Scenarios

1. Detect Person in Dock Clear Zone
2. Broadcast warning to worker (1st)
3. Detect container entry into the dock
4. Detect container + worker at the same time
5. Broadcast warning to worker/driver (2nd)
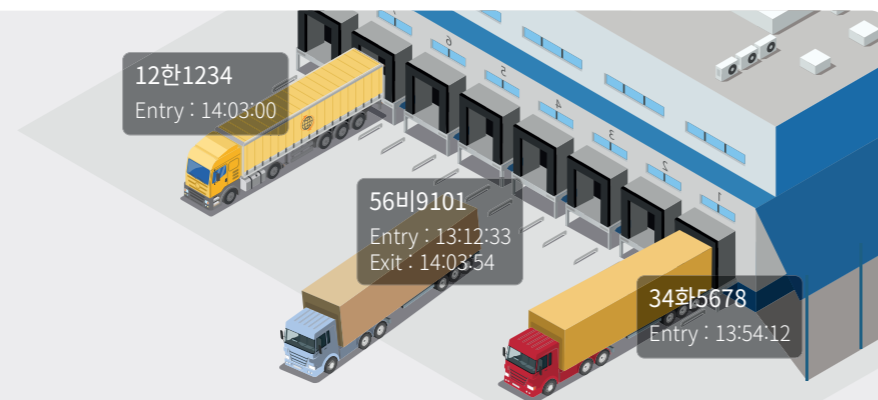6. Worker/driver act immediately

Visual warnings and audio messages are issued when people and vehicles are both detected in a defined dangerous zone.

AI Camera
Vision Logistics Tracking Software
IP Speaker
LED Warning light

Dock Management

12한1234
Entry : 14:03:00

56버9101
Entry : 13:12:33
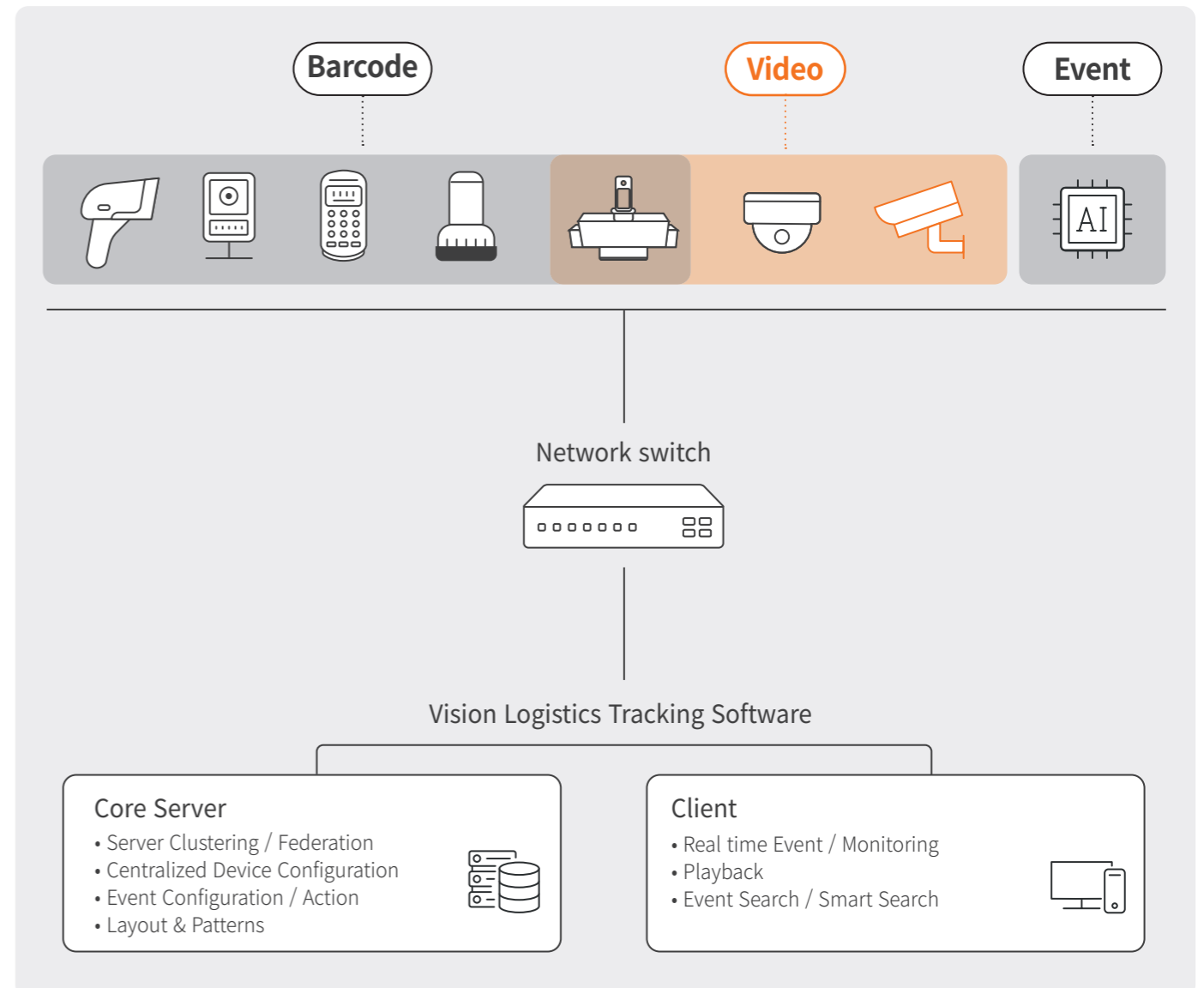Exit : 14:03:54

34화5678
Entry : 13:54:12

ABC 123
ANPR
Vehicle Number Recognition

Duration
Event history entry / exit

Integrated Control

Vision Logistics Tracking Software is an integrated control software platform that facilitates operations with various solutions.

Barcode   **Video**   **Event**

Network switch

Vision Logistics Tracking Software

Core Server
• Server Clustering / Federation
• Centralized Device Configuration
• Event Configuration / Action
• Layout & Patterns

Client
• Real time Event / Monitoring
• Playback
• Event Search / Smart Search

Vision Logistics Tracking Software

		XRP-4310DB4	XRP-4210B4	XRP-4110B2	XRP-4010B2
Display					
Network Camera	**Video Input**	Max 128CH (※If clustering, 132 CH)	Max 72CH (※If clustering, 132 CH)	Max 36CH (※If clustering, 132 CH)	Max 16CH (※If clustering, 132 CH)
	Resolution	CIF~32MP			
	Resolution	Wisenet, ONVIF			
Decoding	**Local Display**	Dual if Full HD monitor, Single if UHD monitor			
	Screen Division	1/4/9/16/25/36/49/64/72/81/100/121/132/Custom/Auto Mode			
	Resolution	1920fps@640x360 (128 division), 2160fps@720p (72 division), 1080fps@1080p (36 division)			
Performance					
Operating System	**Embedded**	Windows 10 IoT Enterprise LTSC(SSM preinstalled)			
Record	**Compression**	H.265, H.264, MJPEG, WiseStream(H.264, H.265)			
	Recording Bandwidth	Max 400Mbps			
	Resolution	32MP ~ CIF			
	Mode	Normal, Schedule (Continuous / Event), Event (Pre / Post), Event Profile, ARB, Dual-Track			
	Event Trigger	Video loss, Camera event(Sensor, MD, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face Detection, Audio Detection, ANPR, Bestshot), AI Event (Face, Appearance, Face mask, Vehicle)			
	Event Action	Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification			
Search & Play	**Playback Bandwidth**	Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification			
	User	Max 1024 User (132ch concurrently)		-	-
	Simultaneous playback	Max 128CH (※If clustering, 132 CH)	Max 72CH (※If clustering, 132 CH)	Max 36CH (※If clustering, 132 CH)	Max 16CH (※If clustering, 132 CH)
Storage	**Supported HDD**	SATA 6GB/s (6, 8, 10, 12, 16 TB Enterprize)		SATA 6GB/s (6, 8, 10, 12 TB Enterprize)	
	HDD Slot	SATA 3.5" 16ea		SATA 3.5" 8ea	
	RAID	1/5/6/10/50		1/5/6/10	
Backup	**File Backup**	AVI, SEC			
	Function	Manual Backup, Onetime Schedule Backup , Schedule Backup , Privacy Masking Backup			
Network					
Protocol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, DHCP(Client), SMTP, ICMP, IGMP, ARP, DNS, DDNS, SNMP(Client), HTTPS, ONVI (Profile-S), SUNAPI(Client)			
DDNS		Wisenet DDNS			
Security / Viewer Software		HTTPS(SSL) Login Authentication / SSM Client, SSM Mobile			
Function					
Failover / ARB		Active&Active, Active-Standby / Support			
Environmental					
CPU		Intel Core i7-8700T		Intel Core i5-8500T	
RAM		16GB RAM			
OS HDD		M.2 SSD 128GB			
Operating Temperature/Humidity		+0℃ to +40℃(+32℉ to +104℉) / Less or equal to 80%			
Electrical					
Power Input		100 ~ 240V AC, 50 ~ 60Hz			
Power Consumption		285W Dual	285W Single	Max 180W	
Dimension (WxHxD) / Weight		440 x 132 x 548.1mm (Including Cover: 571.1mm) / 14.05kg(Excluding HDD)	440 x 132 x 548.1mm (Including Cover: 571.1mm) / 13.30kg(Excluding HDD)	438 x 86 x 434.9 mm / 9.1kg(Excluding HDD)	