

VUNex NVR
VUNex AI
VUNex MLOps
VUNex FR
VUNex AC
VUNex Mobile



# **Safety First, Security Always**

## Retail

Video Surveillance	Access Control	
Attendance Management	Theft Analysis	
Fallen	Re-ID	
Intrusion/Loitering	Situation Sharing	
Abnormal Sign	Autotraining	
Remote Control	Events	

## **Industry**

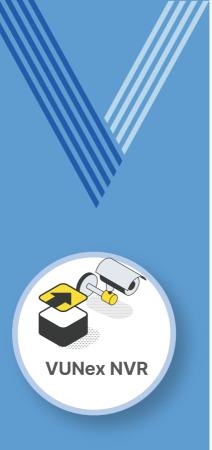
Video Surveillance	Restricted Areas	
Push-to-talk Apps	Fire Analysis	
Dangerous Behavior	Smoke Detection	
Crash Analysis	Import/Export	
Safety Gear Detection	Remote Control	
Power Control	Autotraining	

## **Building**

Video Surveillance	Access Control		
Fire Analysis	IoT Integration		
Re-ID	License Plate Recognition		
Intrusion/Loitering	Remote Control		
Situation sharing	EV Integration		
Broadcast Integration	Lighting Control		

## **SMB**

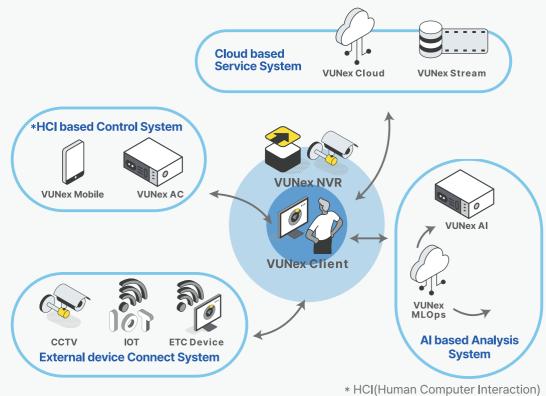
Video Surveillance	Restricted Areas		
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Intrusion/Loitering	Re-ID		
IoT Integration	Broadcast Integration		
Data Bl	Situation Sharing		
Events	Autotraining		



### **Video Surveillance**

- Video management and recording
- Real-time event monitoring

A unified security platform powered by an edge-based operation server, provides seam-less integration of video surveillance, Al-powered analytics, access control, and IoT devices. VUNex NVR provides intelligent monitoring and SOP-driven (Standard Operating Procedure) automated response services, leveraging advanced Al and IoT technologies.



#### **Features**

#### **Seamless Integration with Multiple Devices**

• Compatible with legacy systems, supporting CCTV, IoT devices, Al edge servers, and more

#### **Rapid Response**

•Instantly access critical incidents with real-time alerts

#### **Scalable Edge Architecture**

- Supports 4, 8, and 16 channels with edge servers, featuring a modular and scalable design
- $\ast$  Server-based configurations available for 32 channels and above

#### **Comprehensive Event Management & SOP Integration**

• Provides SOP-based automated event response, real-time event analysis reports, and actionable insights

#### **High-level Security & Reliability**

•Offers centralized security policy management, redundancy, and secured data backup

#### **MAP-based control UI**

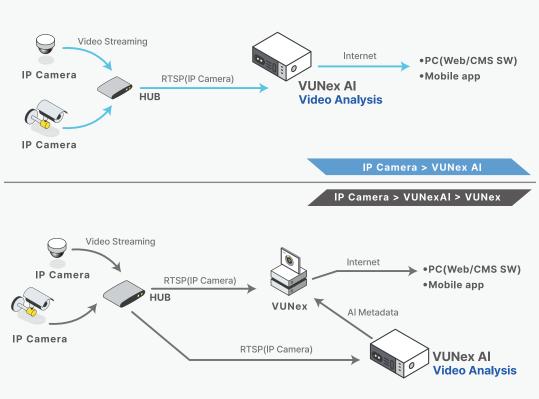
• Enables event monitoring and video analysis with location-based visualization on interactive maps



## **Video Analysis**

- Object recognition and behavior analysis
- •Al MLOps optimization for purpose-driven applications

A high-performance edge-based platform designed for real-time video analysis, enabling efficient surveillance and monitoring. advanced deep learning-powered video analytics with adaptive modes deliver optimized solutions for diverse industrial environments, supporting up to 16 channel analysis.



### **Features**

#### **High-performance Edge Video Analysis**

- •Mini Edge: Supports 4 channel analysis and event transmission
- PRO Edge: Supports 8 channel and 16 channel analysis and event transmission

#### **Optimized Network Efficiency**

•Minimizes traffic consumption by transmitting data only upon event detection, reducing operating costs

#### **Seamless Camera Compatibility**

•Supports RTSP-based video sources and ONVIF (Planned)

#### Metadata-Driven Decision Making

•Enhances operational intelligence through metadata integration, supporting data-driven decision-making in various business environments

#### Flexible Connectivity

Provides versatile integration with support for REST API,
 MQTT, and various other protocols

#### Deep Learning-Powered Analysis Engine

• Enables detailed event detection, handling both simple events and complex scenarios with precision

Object Analysis	Intrusion	Loitering	Line Crossing	Counting
Prolonged stop	Clusters	Theft	Abandonment Trash	Fallen
Violence	LPR	Falling objects	Reverse Driving	Eye-Tracking analysis
Re-ID	Fire	Smoke	Attribute	Safety gear detection

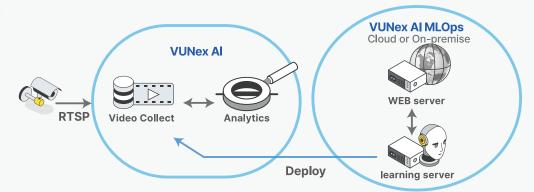
\* The analysis function can be combined in various, ways but there may be limitations on simultaneous analysis due to hardware performance issues



## **Al Automation**

- Upgrading an existing Al model
- Create a new Al model

An MLOps(Machine Learning Operations) solution that manages entire Al components. It covers data preparation, Al training, model management, model deployments, and dashboard pages for comparison among the trained Al models.



## **Features**

#### Automation of learning data generation

 Increased efficiency of human resources through automation with automatic labeling and new object tracking functions

#### **Automatic labeling**

 Automating labeling and adding new classes through a high-performance pre-trained model

#### **Automated GPU Resource Allocation**

- •GPU resources are automatically allocated for efficiency through intelligent orchestration
- \*Availability may vary depending on the hardware and environments

#### Adaptive Al models by industry

• Directly learn desired objects in various industrial environments such as factories, logistics, transportation and security

#### Model comparison dashboard

• Simultaneously display pre- and post-learning videos on the dashboard to track history and choose the best model

#### Al-assisted data validation

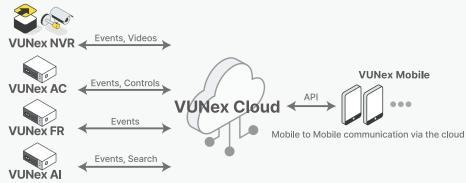
•Improves automatic labeling validation with advanced editing tools and Al-assisted labeling for new objects



## **Sharing Situation**

- Walkie-talkie communication with automatic translation support
- Situation transmission and system control

New communication tools based on video surveillance systems that can be applied to a variety of fields. provide situation transmission and voice system control services to users grouped by events and videos identified through Al video surveillance.



## **Features**

#### **Push-to-Talk-based communication**

•Switching between voice transmission and reception mode using the PTT button

#### Voice command-based real-time control

• Supports real-time control function with voice commands on mobile devices

#### **Chat-based communication**

- Both voice conversation and text input are saved as chat records to support real-time communication
- •Real-time translation of all conversations into various languages

#### Various operating environments

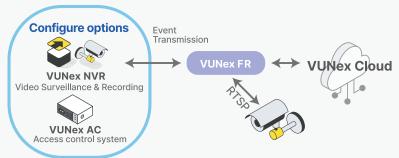
 Supports Android and provides iOS/Web (planned) Multi-plat form operating environment



## **Facial Recognition**

- •Identifying objects based on facial recognition
- Small/Light Face Recognition Devices

A solution that realizes safe and convenient user management and provides stable and efficient face recognition in various environments. provide an excellent security and convenience to customers through innovative use of facial recognition technology. stand-alone Type, Extensibility of Cascade Form.



#### **Features**

#### Provide various connections and expandability

- Connection up to six cameras simultaneously to detect faces from multiple angles and locations
- Providing a linkage and expandability with existing systems

#### Provide service reliability and convenience

- Providing UI/UX of system settings and monitoring functions through web browsers
- Provide security and convenience through cloud-based external API linkage

#### Precise facial recognition algorithms

• Real-time analysis of camera footage using a precise facial recognition algorithm

#### **Facial recognition settings**

- Set the facial recognition reliability value, detection size, matching sensitivity, similarity and display of matching result quantity
- Set the facial analysis frame interval and same faceredetection time

#### Real-time dashboards

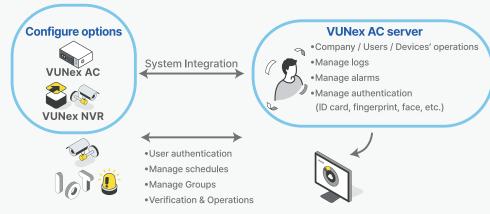
- Real-time camera image analysis to recognize users and display analysis results
- Displays a local map of the location where the camera is installed



### **Access Control**

#### Analysis of abnormal signs in access terminal management

A highly scalable facial recognition access control solution that works with other services. provide remote control services with a non-face-to-face access control solution based on facial recognition.



## **Features**

#### **Operation management of access control**

- Providing convenient access control and management services
- Facial recognition and time stamp of visitors

#### **Abnormal sign management**

• Check all signs of abnormal entry and facial expressions of users

#### Real-time dashboards

•Display various events occurred in the access zone

#### **User health management**

- Verification of visitors wearing masks
- •Contact person report for the same area and time zone

#### Flexibility for advancement

 Integration with wide range of devices and services through APIs





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