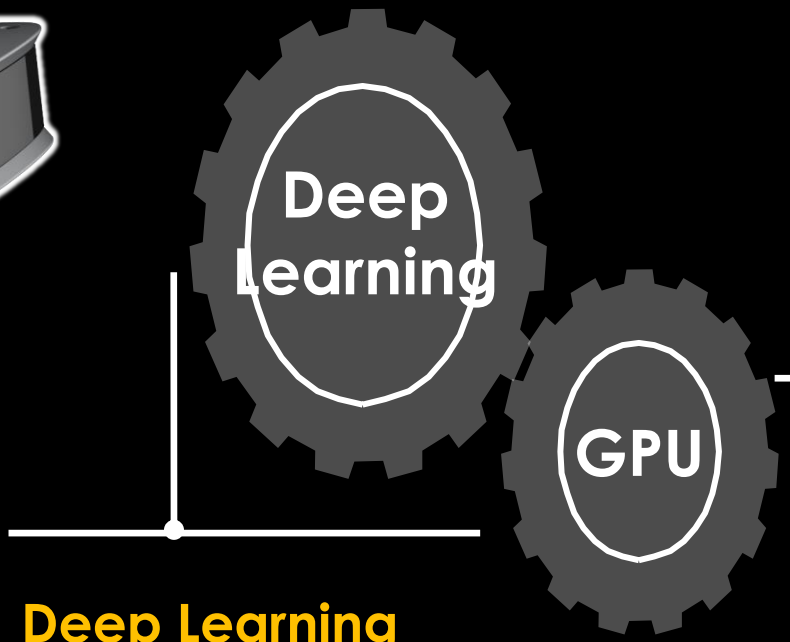
HIKVISION

# iDS-2CD8426G0/F-I

## Indoor Dual-lens Face Recognition Camera




**GPU**

Integrated with a powerful GPU, responsible for face analyzing, and comparison.

**Deep Learning Algorithm**

Adopts the latest and self-developed deep learning algorithm.

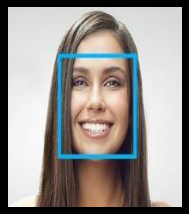
Outputs real-time face comparison results.

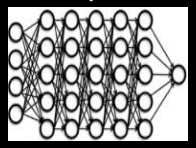
# Traditional Algorithm VS Deep Learning

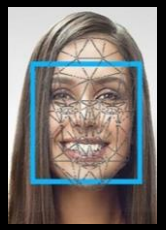
## Traditional algorithm

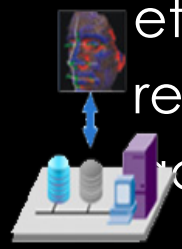
Features are manually specified by human. It is difficult to specify all the features.

## Deep Learning algorithm


Face Photo


Deep learning


Face feature specified

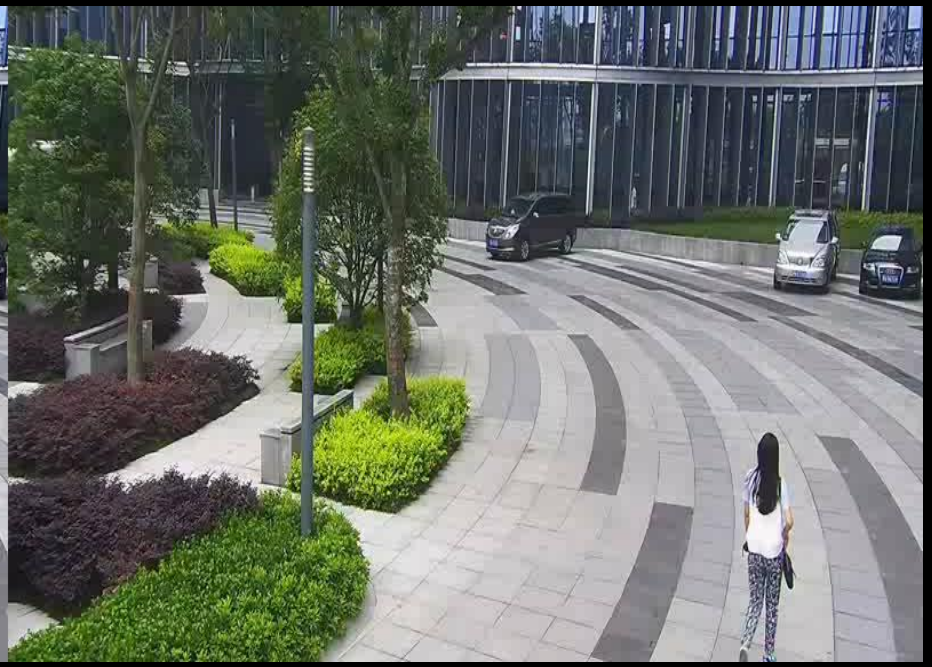

Identifies face characteristics

Features are concluded by algorithm automatically .

Abstract features (such as eyes, nose, cheeks, foreheads, etc. ) are specified to realize a higher accuracy.

# Traditional Algorithm VS Deep Learning

Dual lens DeepinView camera



Traditional camera

# Deep Learning Algorithm Improvements

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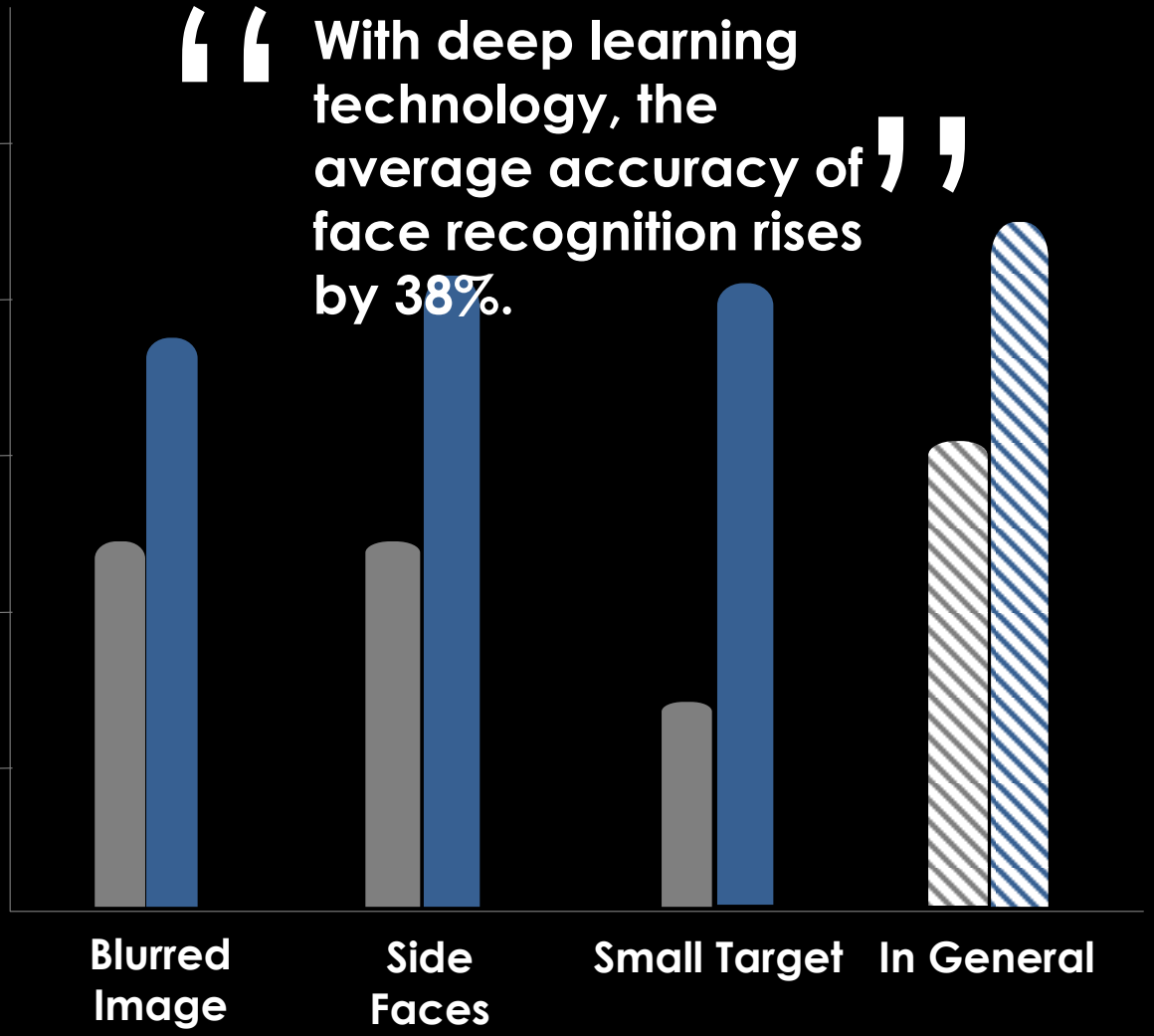
Deep Learning

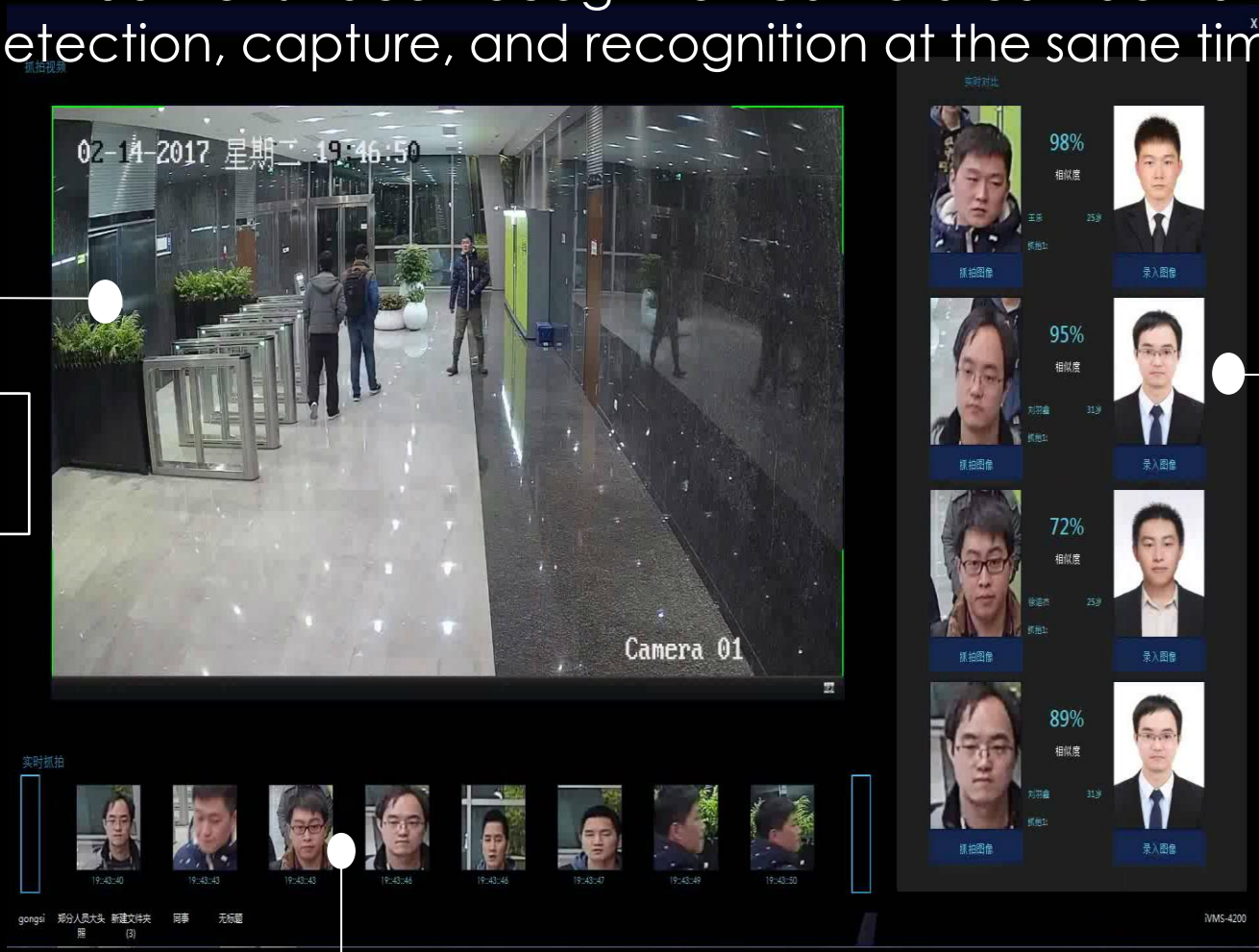
Non Deep Learning

“With deep learning technology, the average accuracy of face recognition rises by 38%.”



# Indoor Dual-Lens Face Recognition Camera

Hikvision Dual-Lens Face Recognition camera can do human face detection, capture, and recognition at the same time.




**Live View (Detection)**

**Comparison Results (Recognition)**

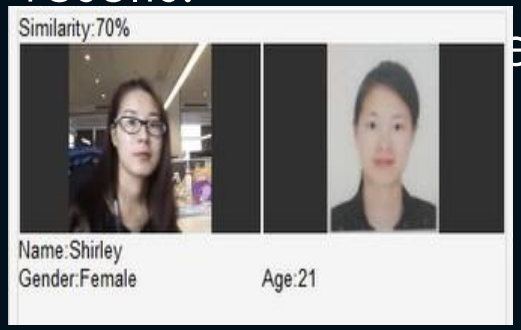
**Real Time Captured Face (Capture)**

# Detection and Capture

- It can detect and capture up to **30** faces at the same time.
- It can capture 1080p pictures and crop facial images simultaneously.
- Captured pictures can be stored in the SD card/NVR.

# Recogniti

- The captured picture gets compared with the database and the result displays
- Output face compare results:




ender

**Face Libraries**

- Supports up to **30,000** pictures per face library, and face data size should less than **3G** in total(3 Libraries)
- Pictures inside the libraries can be uploaded via Web or VMS.
- Captured pictures can be

# Acceptable Photos For Face Libraries

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**Types** **EXAMPLES**

ID Photo

Digital Photo

Captured Photo

**Requirements**

## Pixels and Size:

- 40 <Min. Pupil Distance <300 (recommended: 60) pixels.
- 20KB <Photo Size<300KB

## Face Angle :

Left/Right<45° (recommended: <25°)

Up/Down<25° (recommended: <15°)

## Format :

JPEG

# Installation & Configuration

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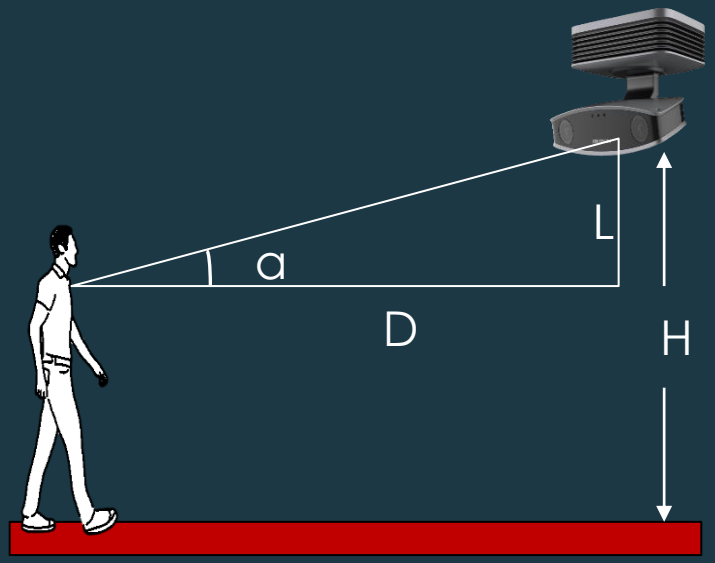
# Installation Recommendation

How to choose the right position?




| Model | Capture Width | Lens | Distance | Installation Height | Angle (a) |
|---|---|---|---|---|---|
| 8426 | 2.5m | 4mm | 1.9m | 1.8m | 10° |
| 8426 | 2.5m | 6mm | 2.9m | 2.0m | 10° |
| 8426 | 2.5m | 12mm | 5.7m | 2.5m | 10° |
| 8426 | 2.5m | 16mm | 7.6m | 2.9m | 10° |

**Tips**

- The camera should be installed in the front of the people entering direction, the horizontal angle should be <10°, the less angle is, the better the result will be.
- The camera should be higher than the people, recommended angle of depression is a=10° to avoid

# Installation Recommendation

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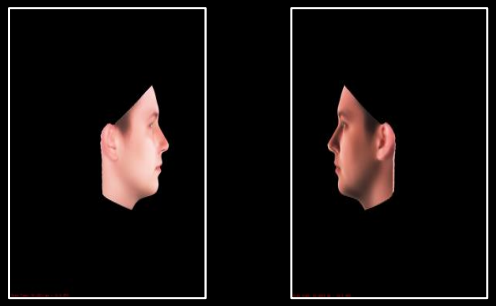
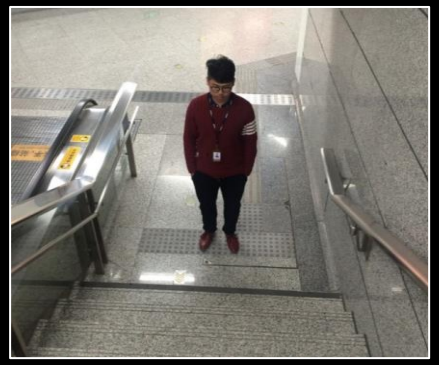
Capture requirement of human face direction

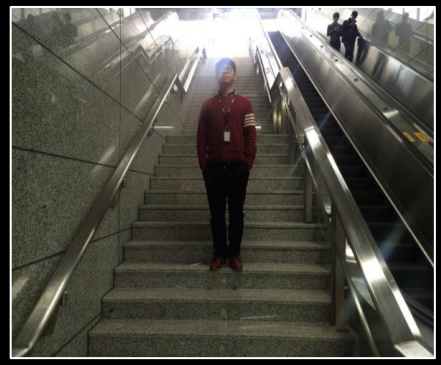


Left/Right<90°

Up/Down<30°

✅ ✅ ❌ ❌

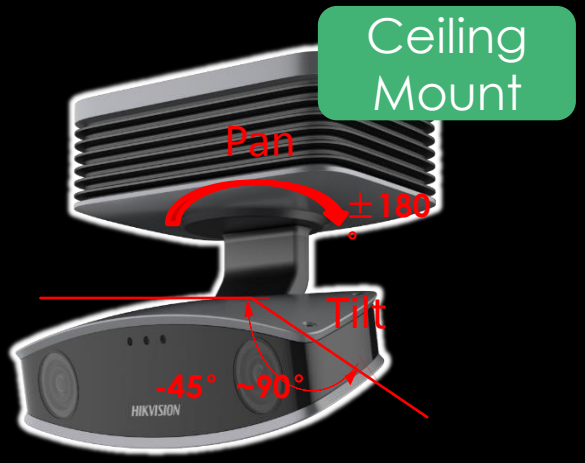




# Installation

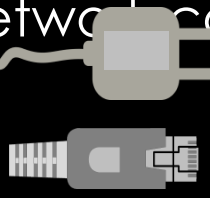
**Dual-lens Face Recognition Camera**

iDS-2CD8426G0/F-I




**Installation Graph**

Easy installation, only one power line and one network cable



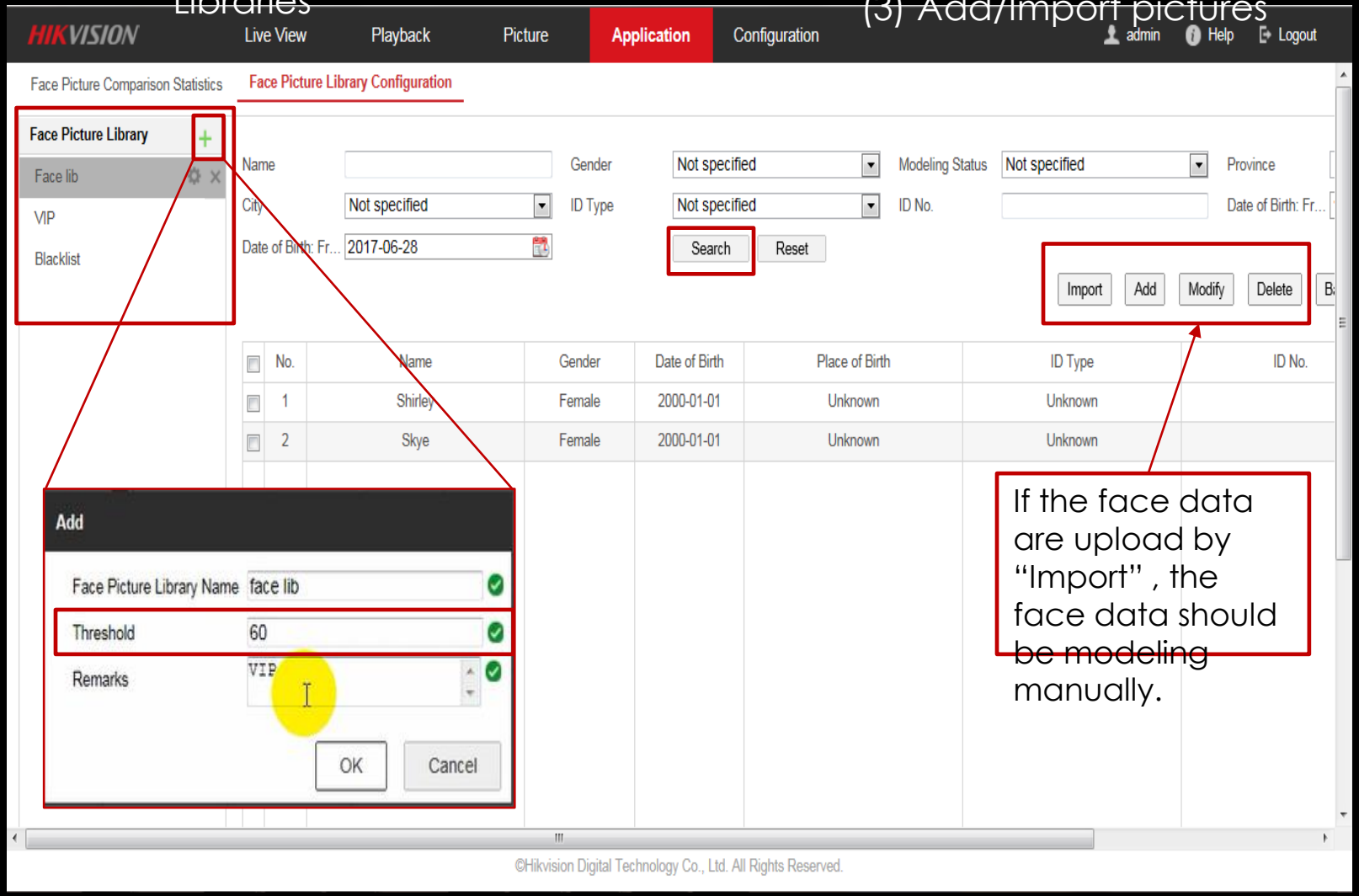
**DC3 6V**

# Web Configuration

## ① Create the Face Picture Libraries

Support 3 Face Picture Libraries

(1) Add a face library
(2) Set Threshold, recommended: 70
(3) Add/Import pictures



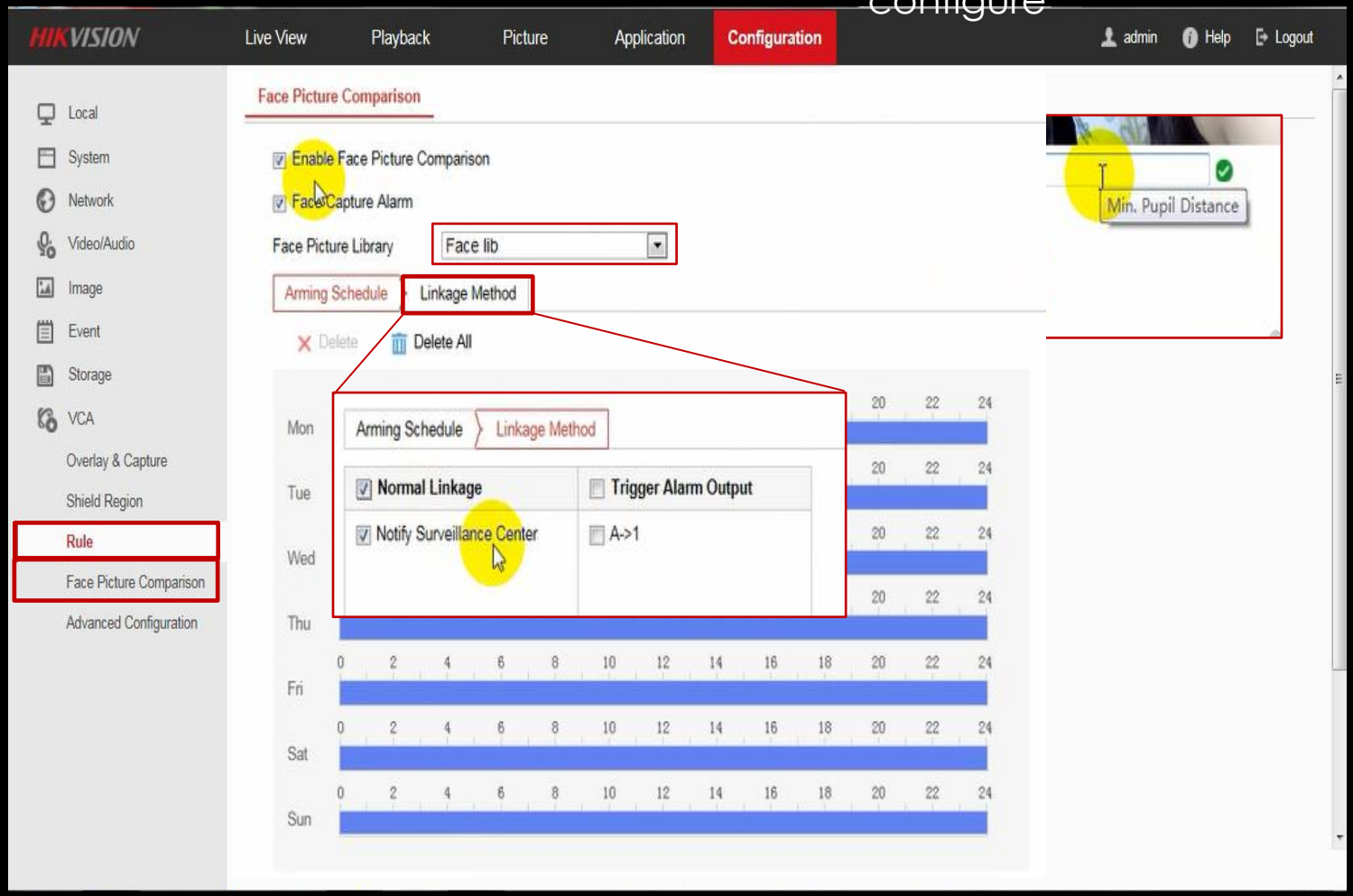
# Web Configuration

## ② Configure Rule

Rule, face picture comparison

(1) Min. Pupil Distance should be >40 (recommended: 60) pixels.

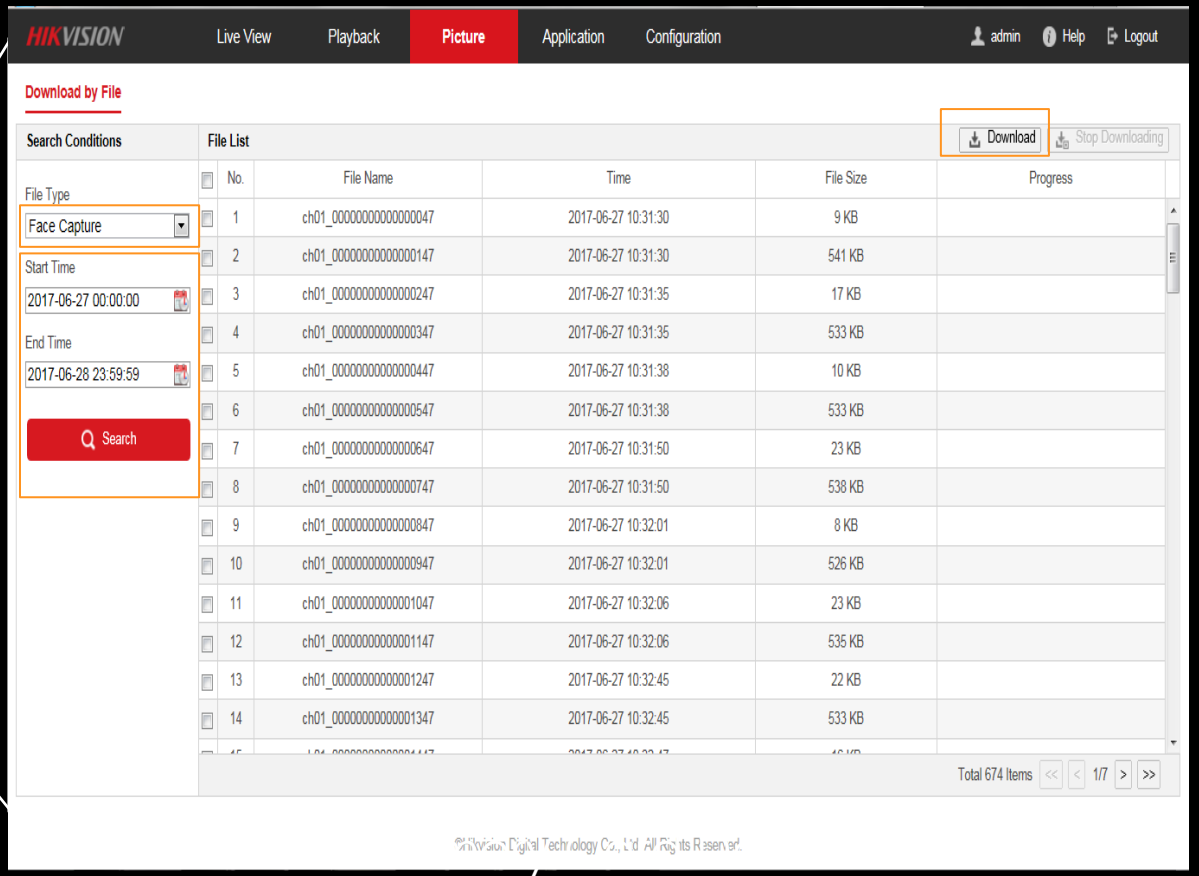
(2) Choose different Face Library to configure



# Download Captured pictures

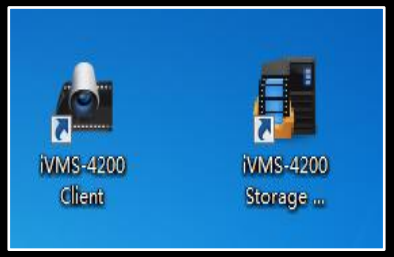
(1) Insert a SD card
(2) Search “Face Capture” and download

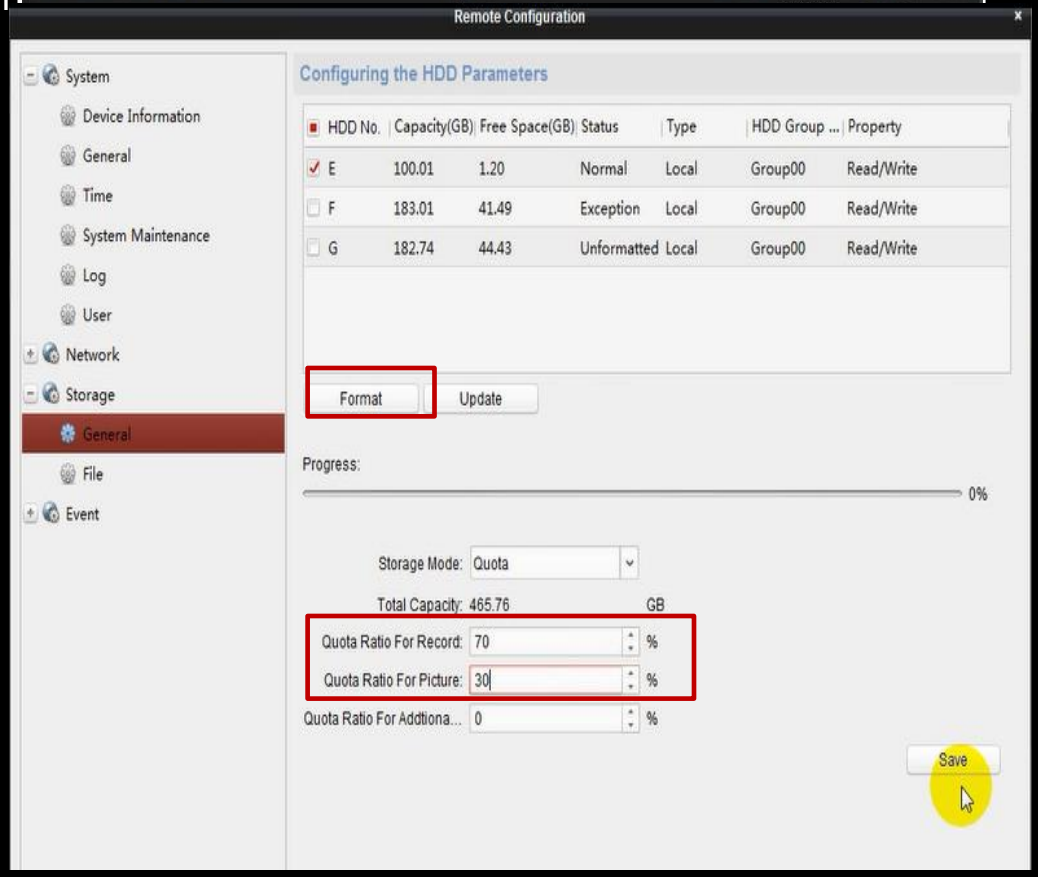
Insert a SD card



# 4200 Configuration

(1) Install the customized 4200 version V2.5 (include iVMS-4200 Client & iVMS-4200 Storage Server).
(2) Open storage server and client
(3) Add the Storage Server into Client
(4) Configure



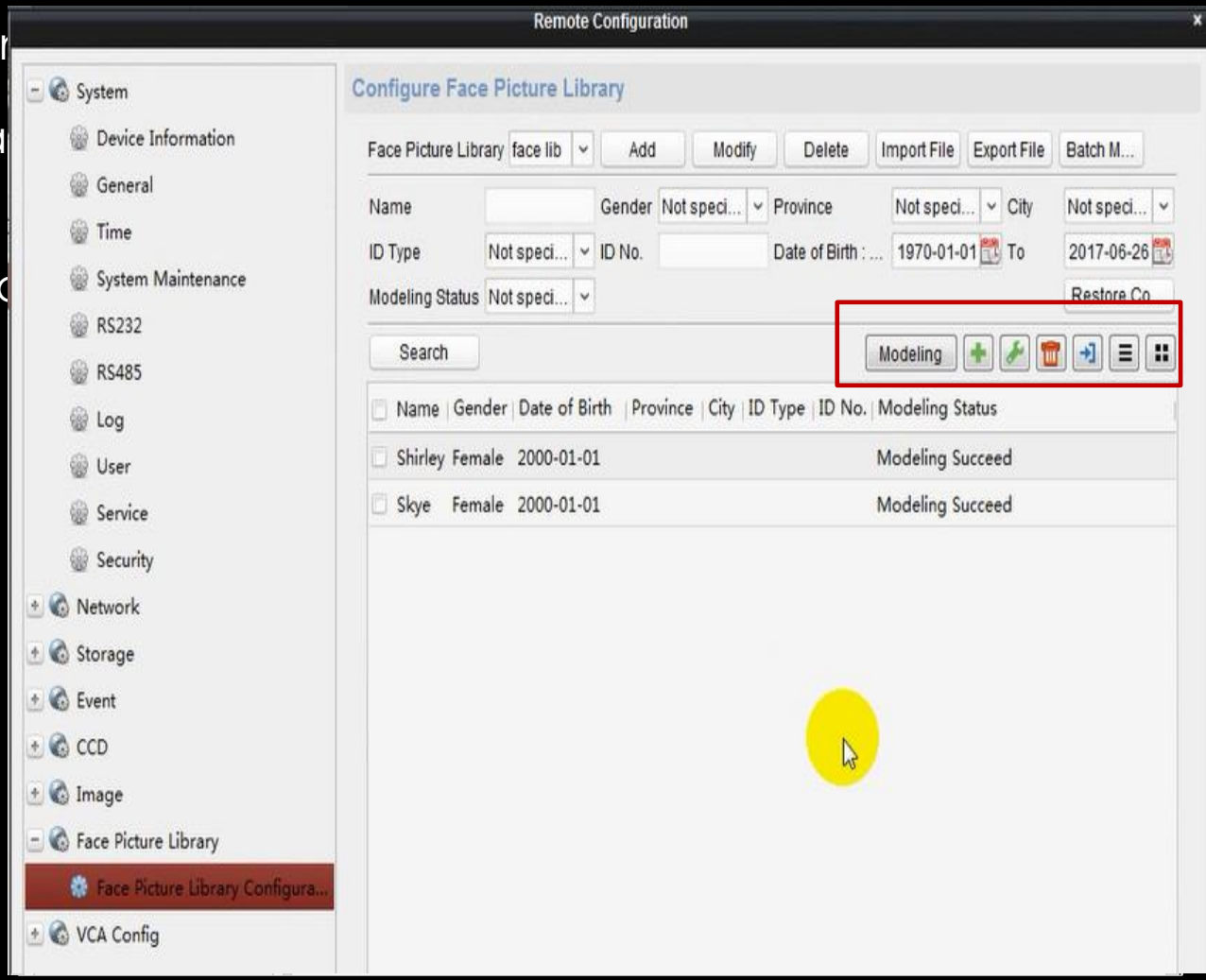
# 4200

# Config uration

(1) Add device to Clier

(2) Configure the stora schedule

(3) Configure face libr



# 4200

# Perfor

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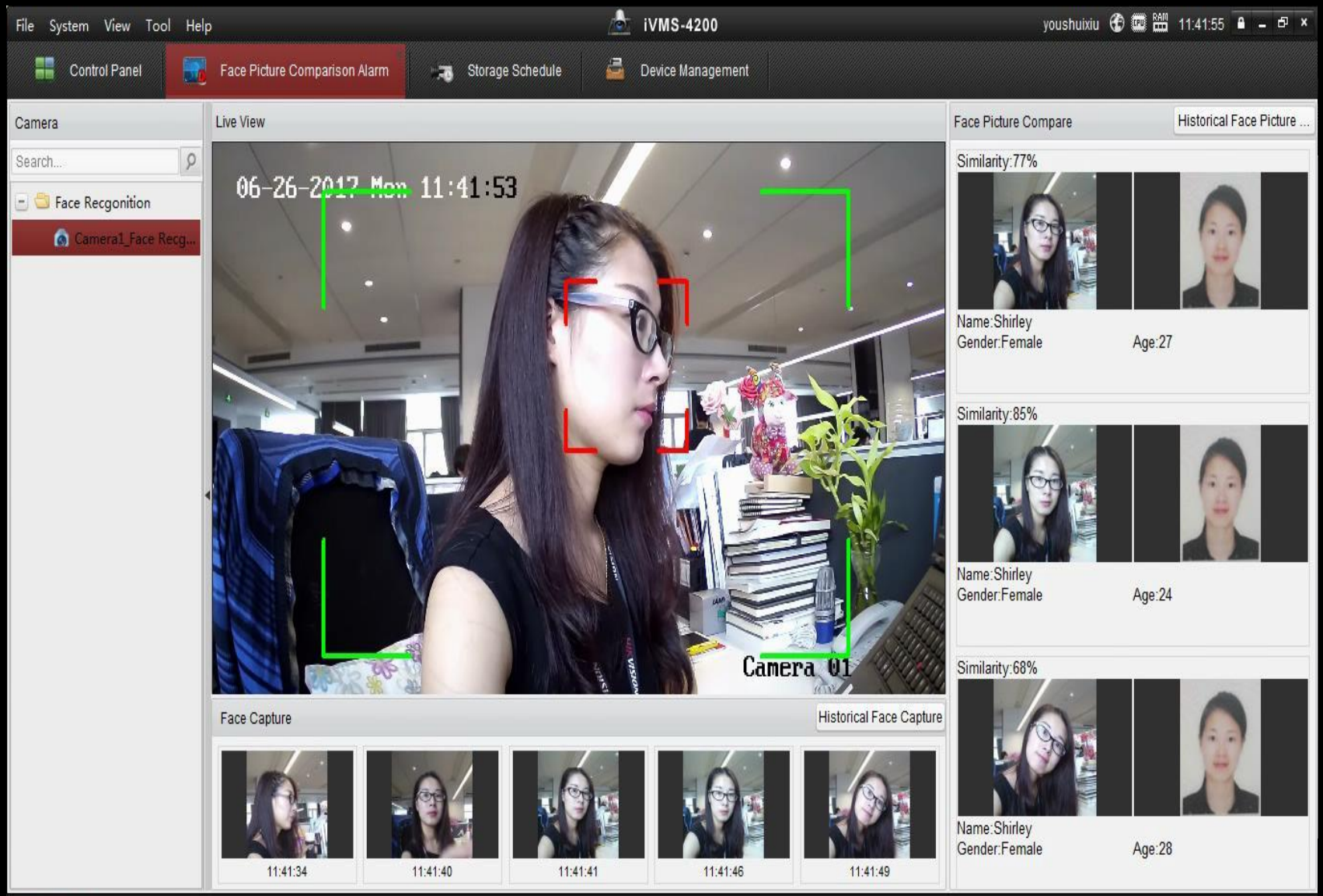

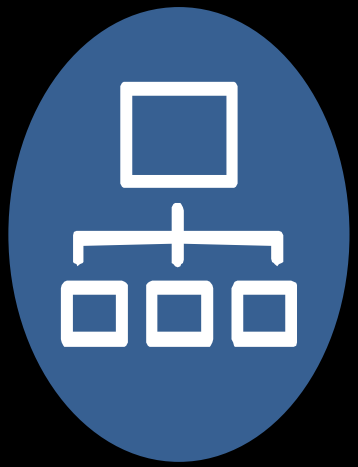

# Applications

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# Types of systems

## Small & medium system

8426

Customized iVMS-4200 V2.5

Normal NVR

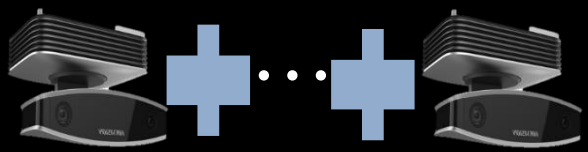
SD Card

### Functions

- Real time face detection and capture
- Real time face comparison
- Download captured pictures
- Record video

## Large system

Max 64



8426

DeepinMind NVR

DeepinMind server

### Functions

- Manage multiple devices
- Real time face detection and capture
- Real time face comparison
- Download captured pictures
- Search by face

# Application Scenarios

## Retail

**Shopping mall**

**Bank/Hotel**

- Provides information such as name, age and gender to help the market manager make reasonable strategy.
- Identifies the VIP and informs the market manager thus improving their service.
- Identifies the habitual thief and gives warning to avoid loss

## Security

**Custom**

**Government**

- Informs the security when a suspect wants to escape from the custom/airport
- Improves the speed of finding a suspect by security system

# Successful Cases

## Bank project——VIP customer recognition

### Project List

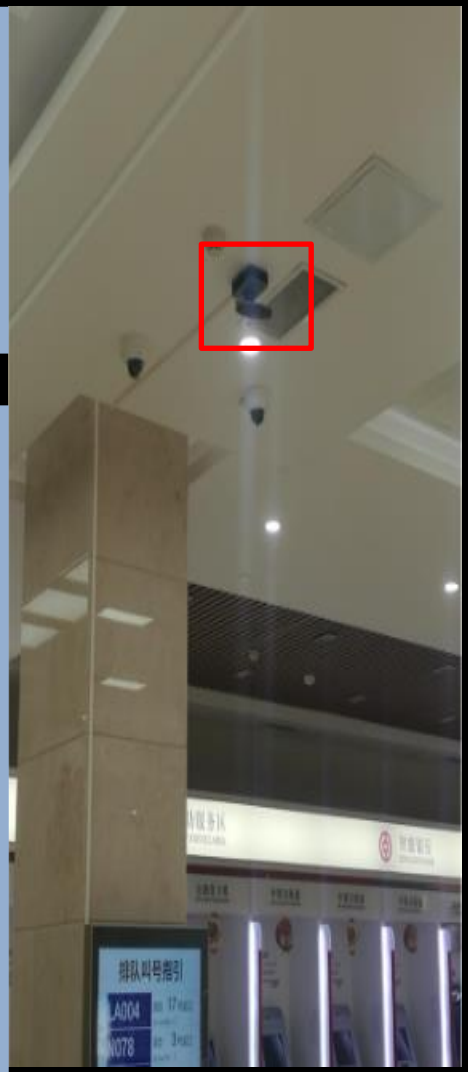
- Camera：iDS-2CD8426G0/F-I
- VMS：Bank IVMS-8100
- VMS：4200

### Functions

- Adopts iDS-2CD8426G0/F-I to do face capture and face comparison and cooperates with the bank VMS 8100 to provide VIP customer service.

### User Benefits

- Low cost, high efficiency, high accuracy
- Recognizes VIP and informs the bank staff to arrange some VIP services to improve their experience



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# THANK YOU