Smart Residential Solution

Intelligent Technology for Residential Buildings

UK & IRELAND

CONTENTS

CURRENT ISSUES

CURRENT SITUATION

Isolated Systems

High Management Costs

Poor Owner Experience

TRENDS

In the residential sector, many customers prefer intelligent and automated services because they are simpler and more flexible. These services have developed technologically over time and are now more user-friendly.

AI
Face recognition, ANPR, Cloud etc.

IoT
Water & Electricity Smart Meters, Voice Controls, Smart TV, Intelligent Curtains/Blinds etc.

Integration
Management of Multiple Integrated Systems

Mobility
Online Service, Pay Online, Call Online etc.

SOLUTION OVERVIEW

**Face Recognition VTO**

Information Release Screen

Face Recognition VTO

Information Release Screen

Panoramic Monitoring

Throwing Items from High Altitude

Blocking Fire Exits

Face Tracking

Littering Detection

Panoramic Camera

AI Camera

AI Camera AI PTZ

FR/FD Camera

Sensor Smart Camera

Lift Controller Face Access

Corridor Camera

Lift Management

Corridor Detection

Video Wall

Absence Detection

Call Management

Time Attendance

Splice Screen

People Counting

Master Station

Time Attendance Terminal

Tower Block

Lift

Public Areas

Management Centre

Pool

Car Park

Home

Perimeter

Entrance and Exit

Active Deterrence AI PTZ

Video Surveillance

Parking Guidance

Anti-theft Alarm

Parking Space Detection

Intelligent Camera

Indoor Monitor

DSS Agile VDP

Video Intercom

Mobile App

AI Camera

Pool Monitoring

Face Terminal Swing Barrier

ANPR Barrier

Visitor QR Recognition

Pedestrian Passage

Vehicle Passage

Visitor Management

SMART SECURITY

AI EMPOWERS RESIDENT SAFETY

Intelligent Security

Simplifies Management of Residents

Blocked Fire Exit Detection

Green Area Protection

Perimeter

High-rise Littering Detection

Swimming Pool Detection

Littering Detection

PUBLIC AREA PROTECTION

Challenges
• It is harder and takes longer to respond to an incident in a large public area.
• Installing multiple cameras increases the cost of the installation, including increased labour costs.
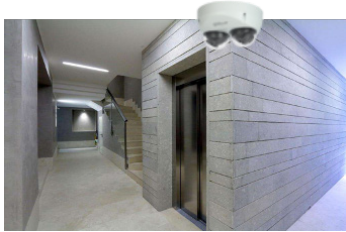
Corridor
• One camera can cover two directions.

Playground
• Stitching 4 cameras covers a large field of view and replaces multiple cameras.

Lift
• Wireless connectivity and small cameras ideally suited for lifts.

Lobby
One camera covers the whole area and provides 360° degree coverage.

Lower Cost
• One panoramic and one Fisheye camera can replace multiple normal cameras to cover a larger field of view.

Easy Installation
• All the devices support an all-in-one and easy to install design.

PROTECTION OF SHARED FACILITIES

Management Centre Entrance
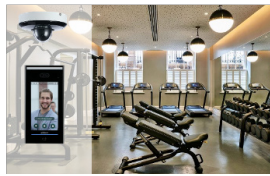
Gym

Laundry Room

Business Centre

Server/IT Room

Facial Recognition

Integrated Overview Cameras
Every time the door opens overview CCTV cameras are recording making it safer and more secure for owners/residents.

Face Recognition Access Control
By using AI-powered face access control owners can use Face images to enter the shared facilities, while unauthorised people won't be able to. This helps protect the safety of the residents and secures the facilities.

SMART LIVING

CONTACTLESS ENTRY

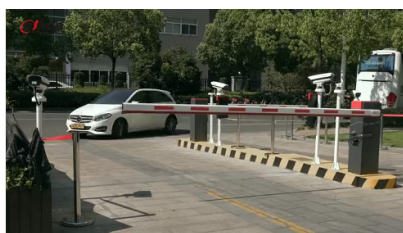**Entrance**

Management Centre

Home

Lift

Apartment Block

Touchless
Use Face access to enter all areas

Efficient
AI technology helps speed up the recognition speed

ANPR

Face Recognition

Function

Personnel Management
- Gate opens with a quick recognition speed of under 0.2s
- Swing Barrier supports ROHS

Vehicle Management
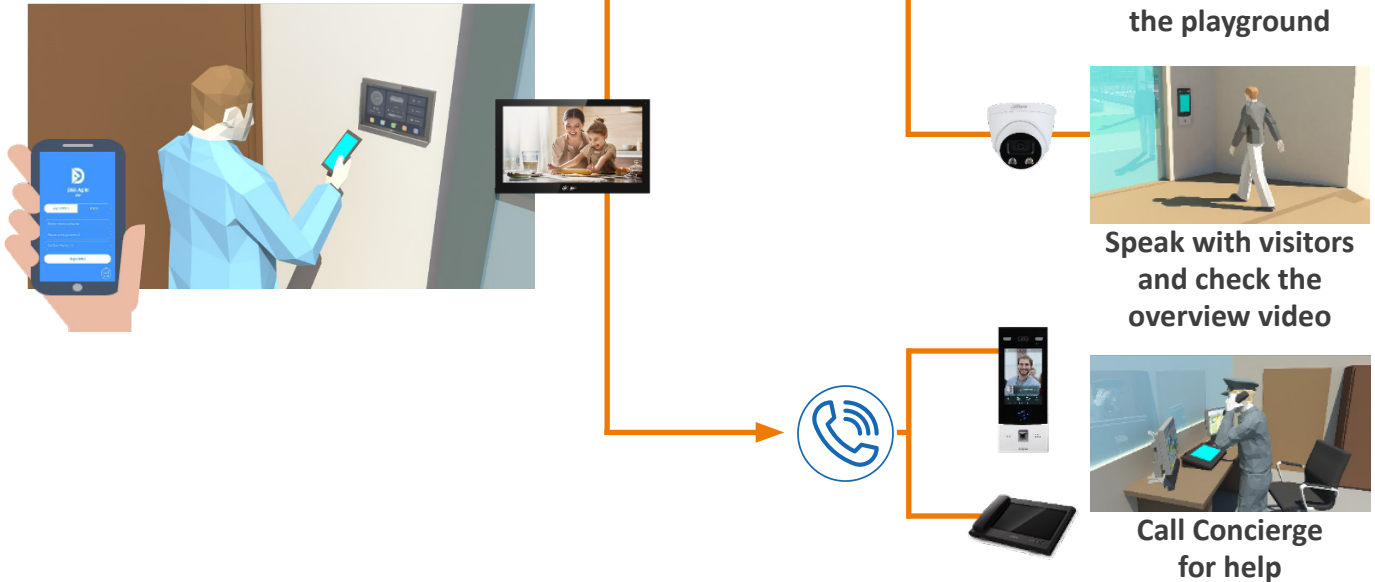- Wide Lane Number Plate Recognition
- Barrier supports ROHS

Lift Control
- Contactless Lift Control
- Supports one card one layer, one card multi-layer and fire protection mode to ensure owner safety

SMART, SAFE HOMES

Functions:
- Supports call forwarding and remote door opening
- Supports public area video integration
- Supports visitor appointments

Monitor your kids in the playground

Speak with visitors and check the overview video

Call Concierge for help

Values

Home Safety
Integrate with public space cameras and remotely check the whole area

Smart Home Control
Owners can use smartphone and VTH to enable smart home control

Open API and Easy Integration
Our Android VTH supports an open API and embedded 3rd party apps
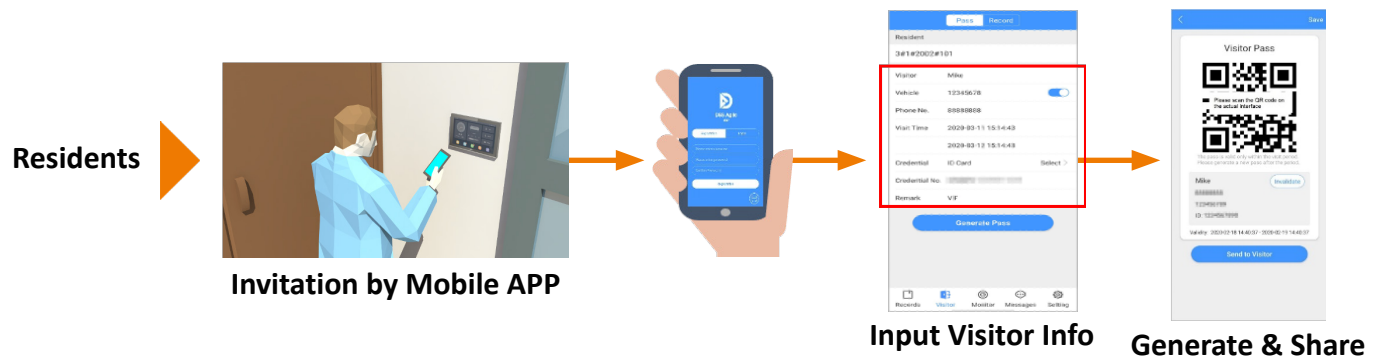
Mobile Service
Owners can use APP to answer calls, check the video, recieve alarms and book visitor appointments
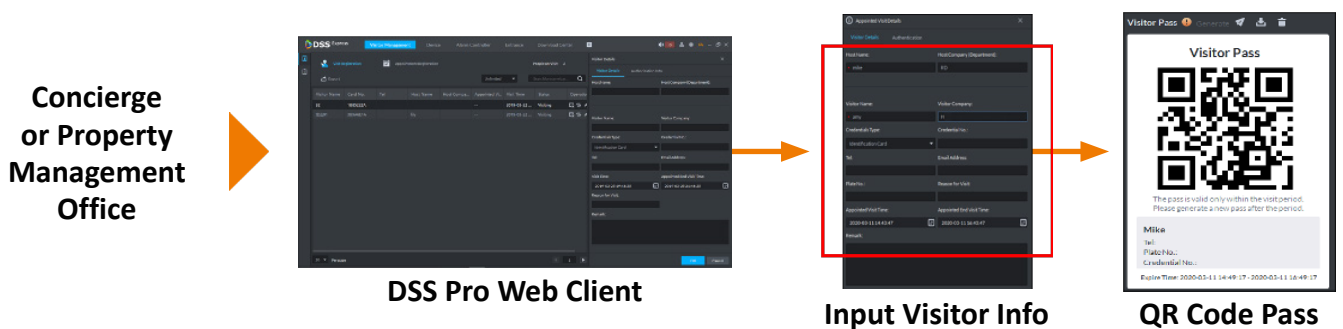
VISITOR MANAGEMENT

Challenges:

• There are lots of external contractors coming in and out on a daily basis which causes safety and security concerns.

• Visitor management records mostly rely on manual data inputting which is hard to manage and inefficient.

General Visitors

Residents

Invitation by Mobile APP

Input Visitor Info

Generate & Share

Temporary Visitors

Concierge or Property Management Office

DSS Pro Web Client

Input Visitor Info

QR Code Pass

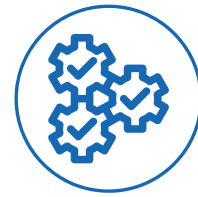| Personnel Entrance	Vehicle Entrance	Apartment Block and Lift

Notes: After generating a QR code, the number plate number will automatically upload to DSS.
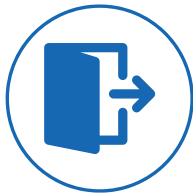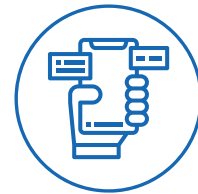
Pre-registration

Strict Authority Control

APP Embedded Integration
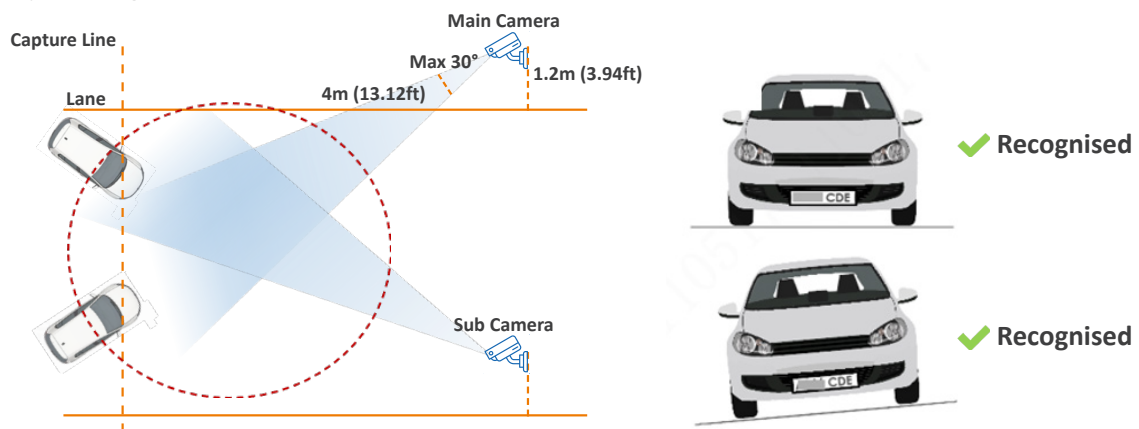
Automatic Sign-out

Digital Visitor Records

**APP Operation**

WIDE LANE NUMBER PLATE RECOGNITION

Challenge

• In some residential areas the lanes are very wide and it is difficult to divide into two lanes.
• The driving direction of the vehicle is unknown and the front of the vehicle will tilt to the left or right, resulting in the failure of the number plate recognition.

Capture Line

Main Camera

Max 30°

4m (13.12ft)

1.2m (3.94ft)

Lane

Sub Camera

✔ Recognised

✔ Recognised

• Wider recognition area
• Suitable for multiple driving directions
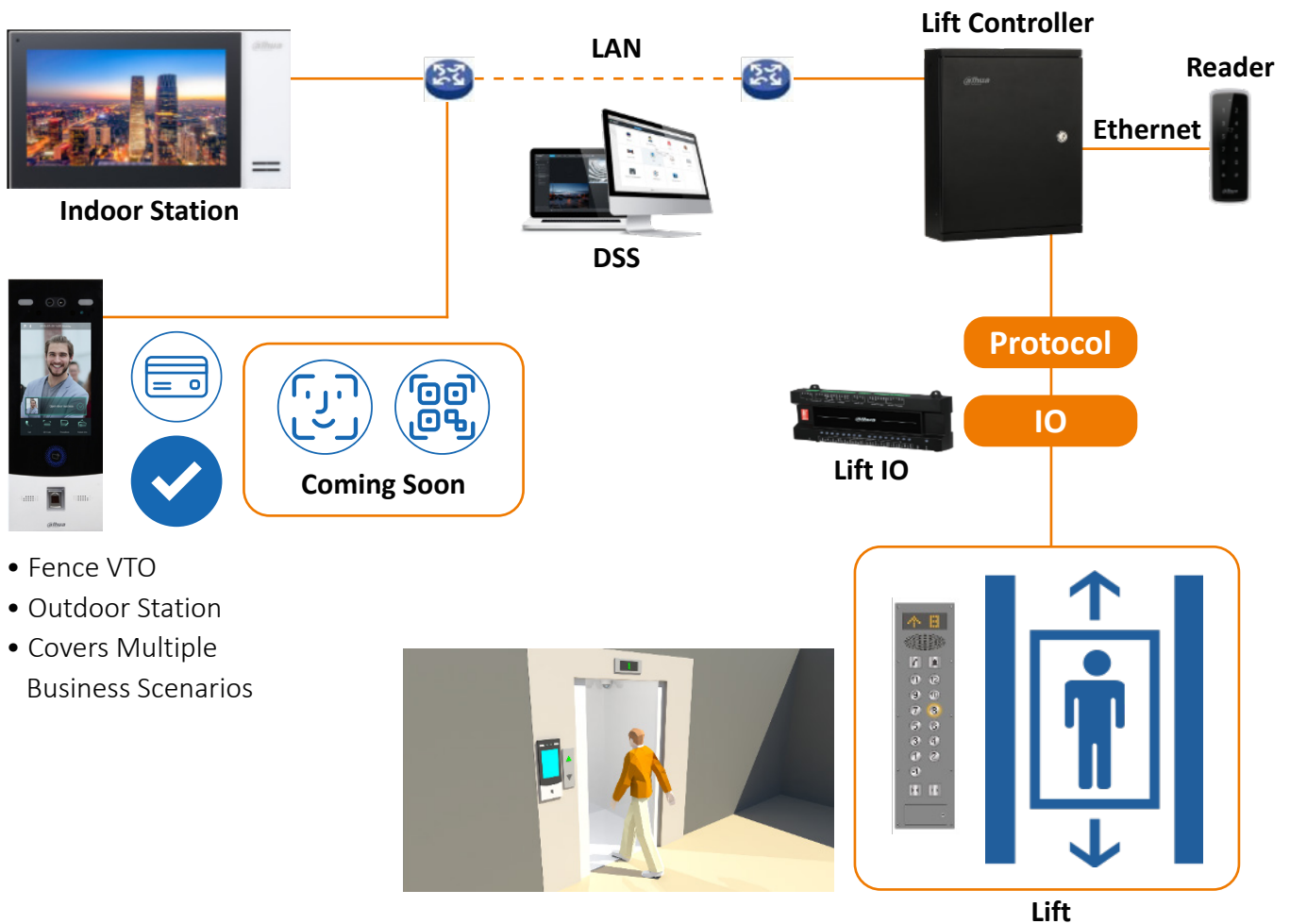
Number Plate Recognition
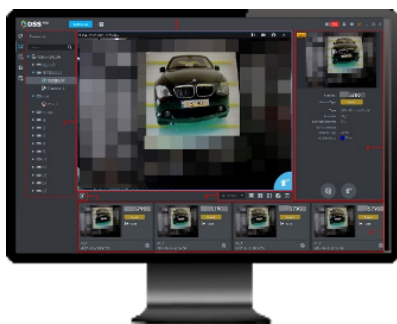
Search Results

Precise Recognition Missing Nothing

• When a vehicle passes by, as long as the recognition result of one of the two ANPR cameras matches the white list, the system will open the barrier automatically. [Barrier open time <0.5s]
• Based on a physical connection, camera A and camera B are able to take pictures synchronously.

No Duplicate Records

• Only one instance of passing-by will be recorded.

LIFT CONTROL

Indoor Station

LAN

DSS

Lift Controller

Reader

Ethernet

Protocol

IO

Lift IO

Coming Soon

- Fence VTO
- Outdoor Station
- Covers Multiple Business Scenarios

Lift

1. Residents Returning Home

- Enable residents to arrive at their own floor using access card

2. Residents Leaving Building

- The owner presses the call lift button
- Supports being able to remotely restrict access to certain floors

3. Visitor Mode

- Visitors call security staff or residents via VTO
- Visitor enter into lift within a certain time frame

4. Other Features

- One card multi-layer management
- Fire alarm integration

SMART PROPERTY MANAGEMENT

BETTER SERVICE, BETTER EXPERIENCE

Indoor Station

Outdoor Station

01 Simple Communication between Residents and Property Managers
• "One Click" to call concierge for help or view cameras
• Quick response and efficient communication channel

02 "One Click" Information Releases
• Send messages to one or multiple residents
• Send messages or advertisements on digital signage

Software

Master Station

AI Camera Version EOL

Digital Signage

Information Releases
• By using MPS, property manager can release messages instantly.
• Supports different display modes.

Serving Adverts
• Displays advertisements

FLEXIBLE AND OPEN

Challenges:
• There are lots of issues with traditional property management, such as false time and attendance, absenteeism etc.
• It is difficult to unify the management of the property management personnel responsible for looking after the estate.

Process

1. Personnel Management
Set AI access control devices or attendance devices at attendance points

2. Attendance Time
Fixed attendance time
Flexible attendance time

3. Attendance Shift
Cyclical Mode: by day, week and month

4. Shift Arrangements
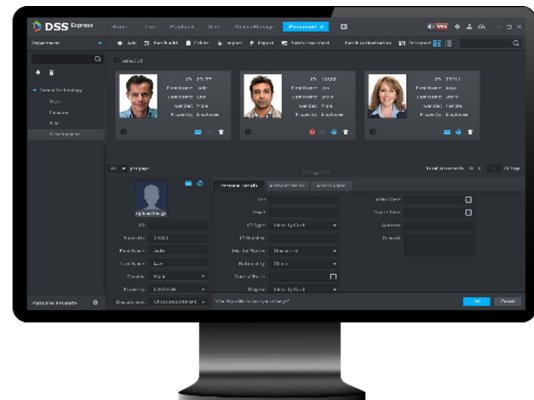Personnel shifts and department shifts

5. Attendance Reports
Attendance reports, card-swiping records and abnormality reports

Values

• Flexible time and attendance management deters behaviour such as false time and attendance

• Open API and easy integration output standard API of time and attendance data for 3rd party integration

SMART SOFTWARE MANAGEMENT FOR A SMART COMMUNITY

Visitor Management
• Multiple visitor identification modes
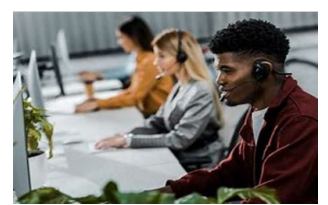• Visitor management
• Authority control

Video Management
• Simple live view helps to maintain order
• Multiple playback modes helps to retrieve evidence quickly

Event Management
• Event centre makes guards respond immediately in relation to unusual events

Call Centre Management
• Supports multiple simultaneous call answering
• Supports integration with 3rd party call scheduling systems

Better service from concierge and powerful platform enhances operator efficiency.

DSS Pro

CASE STUDIES

Central Avenue
Bostandyk, Kazakhstan

Background

Central Avenue is a high class residential complex built by the BI Group. The project consists of 13 buildings and almost 1,000+ dwellings in total.

Solution

Video intercom: 10-inch Android VTH indoor monitors. Entrance & Exit: ANPR cameras for vehicle identification. Public areas & lobby: 300 channels of CCTV cameras and back-end devices.

Central management: Dahua software platform for centralised management.

Result

Improves traffic efficiency, enhancing the living experience for residents.

Fort Dunlop
Birmingham, UK

Background

Much of the site's previous video surveillance system was no longer meeting basic requirements.

Solution

Installed over two phases, the design consists of a total of 96 static and PTZ cameras from full HD to 4K resolutions.

Result

The Dahua CCTV system has assisted the management of Fort Dunlop in ensuring the security of its staff, visitors and of the building.

KEY PRODUCTS

5MP WDR IR Eyeball AI Network Camera

IPC-HDW5541HP-AS-PV

4MP Full Colour Bullet AI Network Camera

DH-IPC-HFW5442TP-AS-LED

4x8MP Multi-Sensor Panoramic IR Bullet Network Camera

DH-IPC-PFW83242P-A180

4MP 25x Starlight+ IR PTZ AI Network Camera

SD5A425XA-HNR

Face Recognition VTO

VTO7541G

Indoor Monitor

VTH2421FB (W)-P

10-inch Android Digital Indoor Monitor

VTH5341G-W

Master Station

VTS5240B

Face Recognition Standalone Terminal

ASI8214Y-V3

Swing Barrier Turnstile

DHI-ASGB8xxX-L/R/D

Lift Controller

DHI-ASMH21

Floor Standing Digital Signage

DHI-LDV55-SAI200

55'' FHD Video Wall Display Unit (Ultra Narrow Bezel 3.5mm)

DHL550UCM-ES

2 Megapixel Full AI Access ANPR Kit

IPMECS-2201C-IR

Barrier Gate

DHI-IPMECD-301x

Comprehensive and Expandable VMS

DSS Pro

Address & Telephone

Dahua UK & Ireland (Head Office)
Quantum
60 Norden Road
Maidenhead
Berkshire
SL6 4AY

Tel: +44 (0) 1628 613 500

Technical Hotline: +44 (0) 1628 613 500

Dahua UK & Ireland (Leeds Office)
Ground Building
No.3 White Rose Office Park
Millshaw Park Lane
Leeds
LS11 0DL

Official Website

www.dahuasecurity.com/uk

Dahua Email Contacts

Sales: sales.UK@dahuatech.com

Tech: support.UK@dahuatech.com

Social Media

Linked in
Dahua UK & Ireland

facebook
Dahua UK & Ireland

You Tube
Dahua UK & Ireland

Dahua UK & Ireland

NOTES

NOTES

Driving Innovation to an AIoT Future

* AIoT is the convergence of Artificial Intelligence (AI) and the Internet of Things (IoT) where connected devices meet human interface. This is enabling unlimited possibilities through the integration of connected devices and security solutions.

DAHUA UK & IRELAND