

ABOUT US





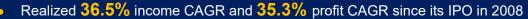
BUSINESS PERFORMANCE

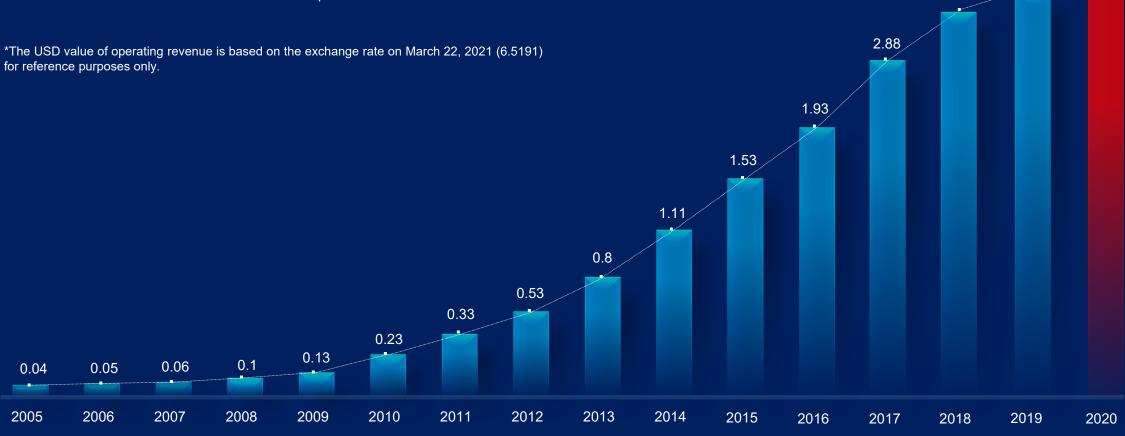


3.73

3.45

• 2020: Achieved CNY 26.466 billion (USD 4.06 billion) in total operating revenue





Units: USD billion

HISTORY



Founding of Dahua Technology, entering the field of video surveillance.

Dahua Technology begins expansion to the overseas market.

IPO on the Shenzhen Stock Exchange on May 20th, 2008

Dahua Technology launches its in-house **HDCVI** technology, which is adopted by the **HDcctv Alliance and** becomes the first international standard . in the domestic security

- Dahua Technology adopts cloud technology.
- Enters the consumer security market by establishing the **Imou** brand (formerly known as Lechange)
 - Founding of its first overseas subsidiary in the USA.

Dahua Technology releases AIOT and SDTV strategies.

Dahua Technology launches GAIA Big Data Platform.

industry. **111** @lhua HDCVI® Θ 2002 2007 2010 2001 2003 2008 2012 CMOS DVR

> Dahua Technology releases the world's first 8-channel realtime embedded DVR.

releases embedded **Intelligent All-in-One Toll Gate Traffic** Camera, which is adopted as the de facto e-policing standard in China.

Dahua Technology adopts CMOS technology and releases HD high zoom ratio camera module. Establishes the first national **post-doctoral** research station in China security industry.

Establishes CMS security service company.

develops hardwaresoftware integrated embedded surveillance management platform. considerably simplifying the deployment and maintenance of surveillance systems.

Dahua Technology obtains CMMI Level 5 certification. solidifying a worldleading position in software development capabilities.

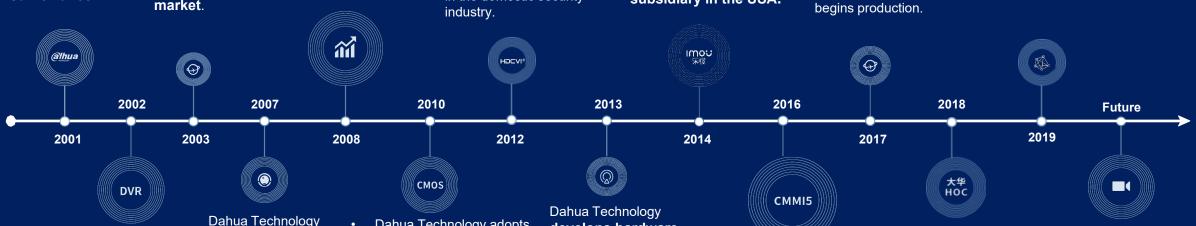
Dahua Technology releases new smart city framework.

Europe supply center begins operations.

Dahua Smart (IoT)

manufacturing park

Dahua Technology will continue to provide smart IoT solutions and services based on its core competencies in video and AI technology.



INNOVATION



- Focused on building core competency and invests about 10% of its sales revenue into R&D
- Maintained high R&D investment of CNY 2.998 billion (USD 460 million) in 2020,
 with Over 50% employees engaged in R&D



National Torch Program Projects



National High-Tech Industrialization Projects



National Projects regarding "core electronic devices, high-end general-purpose chips and fundamental software"



22 National Standards



56
Industry
Standards



240⁺
International Patents
Applications



RED DOT Design Awards



10
IF International Design Awards



50+
International Al
Achievements

5 Institutes

- Advanced Technology Institute
- Al and cutting-edge technology research
- Big Data Institute

Cloud computing, cloud storage, big data technology research

Central Institute

Core technology and new field technology research

Cyber Security Institute

Safety compliance system construction & security technology research

Smart City Institute

Theoretical research and implementation of new smart cities & government digital transformation

^{*}The USD value of operating revenue is based on the exchange rate on March 22, 2021(6.5191) for reference purposes only.

SERVICE



With professional, fast, and end-to-end delivery and service capabilities, Dahua Technology has established an **integrated business center**, **operation and maintenance service center**, **in-depth design center**, **technical service center**, **training certification center**, **and customer service center** to provide global customers with delivery and other services throughout the solution's life cycle, creating a world-leading efficient and professional delivery and service platform.

Global Service Network

Dahua Technology provides users around the world with a multidimensional service network of headquarters, branch offices, and authorized service stations, which aims to improve service experience, user perception, and overall user satisfaction.

Full Lifecycle Delivery and Service System

With an efficient global professional service platform supported by four major systems, Dahua Technology provides customers with efficient, standard, professional and end-to-end delivery and services. It covers consulting and design, integrated delivery, maintenance service, system optimization and professional technical support, continuously creating service value for customers.



















INNOVATIVE BUSINESS

With its deep understanding of the customers' diversified demands, and several years of experience in the smart IoT field, Dahua Technology actively explores new areas including a machine vision & AMR, video collaboration, smart unmanned aerial vehicles (UAVs), smart fire control, automotive technology, smart storage, smart security check, smart display and control, etc., in order to provide more complete solutions to its customers worldwide.

01 MACHINE VISION & AMR



Zhejiang HuaRay Technology focuses on machine vision and mobile robot R&D, production and sales, and has industry leading techniques in image optimization, recognition algorithm, navigation and positioning. Products and solutions of the company are widely used in logistics, automotive, 3C, new energy and pharmaceutical industries. Its visual products include industrial cameras, intelligent cameras, 3D cameras and lenses, which are mainly used for code reading and recognition, defect detection, measurement, and positioning. Its mobile robot products covers latency, traction, forklifting, and sorting, which are mainly used in logistics warehouses and material handling.

02 VIDEO COLLABORATION



Huachuang Vision's mission is to "Make Communication Beyond Distance", with a focus on the design, R&D, production, sales and technical services of audio and video conferencing systems. Independent R&D of a comprehensive range of conferencing products includes video conferencing hardware terminals, software terminals, conference cameras, omnidirectional microphones, conference multi-point control units, conference management systems, cloud video platforms, etc. It also provides solutions for industry video conferencing uses, including executive meetings, distance learning, tele-medicine, tele-finance, remote help, and emergency command systems. The company has perfectly inherited the innovative gene of Dahua Technology. The technical R&D team accounts for 60% of employees at Dahua, and the company continues to increase allocation of expenses on product technology R&D.

03 SMART FIRE CONTROL SMART DRONE



Zhejiang Hovfree focuses on the R&D, sales, training and service support of intelligent UAV and intelligent robot. Based on audio and video technology of Technology, it integrates advanced navigation flight control, platform stabilization, power system, open communication, display control, active safety, and other core technologies in order to provide professional solutions for industry customers. Its products have been widely used in emergency command, forest fire prevention, road inspection, environmental monitoring, etc.

SMART Cities SOLUTIONS



Wisualarm is a fire prevention products and solutions provider. Leveraging on the technological advantages in video analysis, cloud computing, big data, smart IOT, etc., Wisualarm provides fire prevention and fire extinguishing services to help cities achieve comprehensive fire management. Based on various business scenarios, Wisualarm brings customers a wide range of products and solutions with a fire management software, which can be applied on building, energy, retail, banking, education and other industries.

INNOVATIVE BUSINESS



AUTOMOTIVE Transmit ion TECHNOLOGY

06 SMART STORAGE

7 SMART SECURITY CHECK

08 SMART DISPLAY AND CONTROL











With more than ten years of industry

With video as its core, Zhejiang Huaruijie Technology is engaged in smart driving business, providing advanced automotive electronics products and solutions to the world, and actively expanding automotive's before and after market. Its products cover a full range of on-board cameras, on-board terminal hosts, active safety products, auxiliary driving devices, panoramic 360 viewing system, etc. They have been widely used in freight logistics, public transport, school buses, sanitation trucks and other application scenarios.

Dahua Memory focuses on the R&D, manufacturing and sales of storage products, and serves the consumer market with standards that meet the high requirements of the industry. The company keeps innovating and researching in the storage field, and provides advanced memory card, SSD, U-Disk, PSSD, DRAM, NAS and other products to the world. Its business covers consumer, enterprise and industrial markets, and meets the needs of various application scenarios, providing a new storage experience to its world-wide users.

As a supplier of equipment and systems for smart security check, Zhejiang Dahua Iscan Technology Co., Ltd integrates the security industry with a myriad of technologies such as artificial intelligence, big data and Internet of Things, providing reliable, convenient and advanced smart security check equipment and services to its global customers. Their products have been widely used in logistics, transportation, factories, shopping malls, museums and other public places.







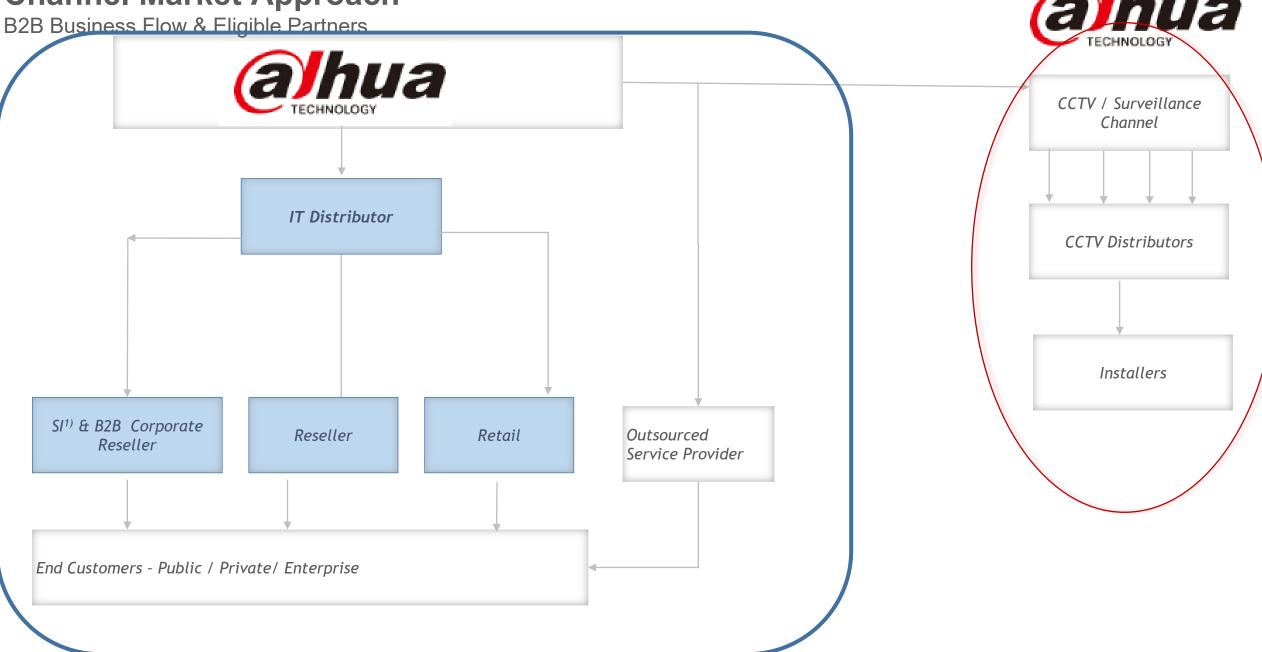








Channel Market Approach



Images and Graphics SMART SOLUTIONS



















Monitor | Product Family – Digital Signage Solution



Ultra Series









Positioning:

- Project-type products;
- Interface facing down;
- Rich interface types;

DHI-LM32-S200

DHI-LM43/49/55-S200

DHI-LM43/49/55-S400

DHI-LM65-S400

Light Series







DHI-LM22/24-F200



DHI-LM32/43-F200



DHI-LM43/50/55/65-F400

plastic shell material;Support 7*24H;

Commercial Series





DHI-LM19-A200

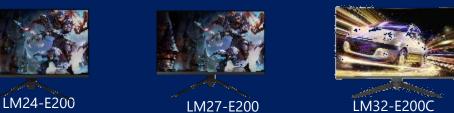


DHI-LM22/24-H200

DHI-LM22/24/27-A200



DHI-LM22/24/27/32-B200



IT pipelines;

- for commercial office scenarios;
- Anti-blue light design, eye-protective
- IT pipelines;
- For personal home and Internet bar ;
- High refresh rate(≥144HZ);
- Immersive experience.



Series











LS550UDM-UG

LS550UDM-UF

LS550UCM-UF 22.11 LS490UCM-UF LS460UCM-UF

- High-end
 - commercial project
 - Factory-calibrated color between and in each screen
- DP daisy chain

LS550UEH-UG LS550UEM-UG

LS550UEH-ECNEW

LS550UEM-EG



DHL460UDH-ES

DHL460UDM-ES (Delisting, without

LS550UDH-EG LS550UDM-EG

LS460UDM-EF

LS460UCM-EF

LS650KCM-EF

HOT

- LS550UCM-EF
- LS490UCM-EF

- commercial project
- Factory-calibrated color between each screen (Under development)
- HDMI daisy chain

Basic

Ultra

Essential

daisy chain)

LS550UCM-BF

LS460UCM-BF

- commercial channel
- Cost-effective

0.88mm

1.7/1.8mm

3.5mm

Bilateral Seam

L.E.D. – Naked Eye 3D





Present and Future





- > Immersive and realistic content
- ➤ Bigger imagination space, deeper memory
- > Stronger attraction to see and stay





Product Family (TV)

Frameless

Smart TV Series



DHI-LTV32-SA/SNX00 DHI-LTV40-SA/SNX00



DHI-LTV43-SA/SNX00



DHI-LTV50-SA/SNX00



DHI-LTV55-SA/SNX00



DHI-LTV65-SA/SNX00

DHI-LTV75-SA/SNX00

DTV Series



DHI-LTV22-LDX00



DHI-LTV24-LDX00



DHI-LTV32-LDX00



DHI-LTV40-LDX00



DHI-LTV43-LDX00



ATV Series



DHI-LTV22-LNX00



DHI-LTV24-LNX00



DHI-LTV32-LNX00



DHI-LTV40-LNX00



DHI-LTV43-LNX00



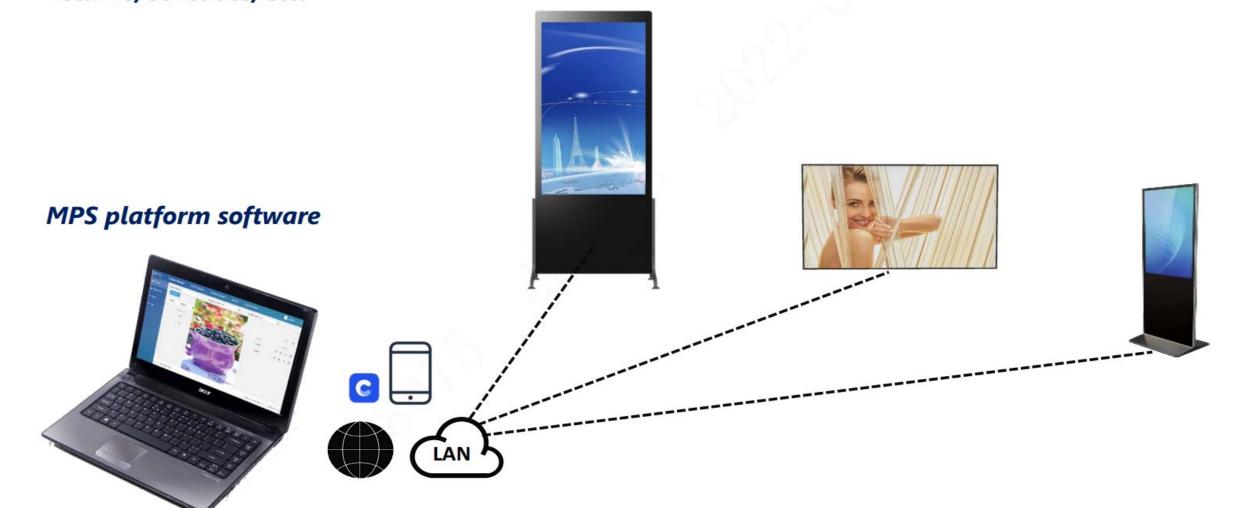




Media Publish System



Dahua MPS platform realizes point-to-multipoint monitor management, including content, volume, schedule, etc.



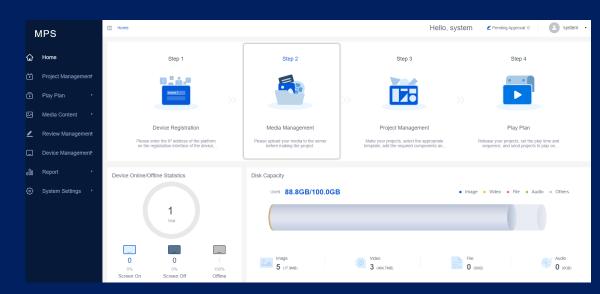


Digital Signage | New Platform



■ MPS V3.2

- New design of UI &UE;
- Enrich the elements of program production, which is easy to use and can improves the program quality;
- Can customize the program template, support U disk import and export, reduce the investment of customized development;



■ MPS Mobile (IOS & Android)

- Support mobile app management to improve the user experience and bid controlling ability;
- Support program production, terminal information display, authority approval, terminal timing switch on and off;
- Compatible with mainstream mobile phones in the market;

(PS: The APP based on MPS version 3.2)





Dahua DeepHub





Intelligent Whiteboard

Touch screen support smooth writing Multiple writing modes



Wireless Projection

One-tap projection Multi-terminal projection



Video Conference

Built-in 4 Comera & mic (Optional)
Video conferencing software





File Management

Easy content save and sharing Local document and media file support



LCD Touch Display

Sharp & clear display vs projectors 4K for clear presention & media playback





USB Tracking Camera

HT-SD500

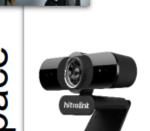


Solutions



space Personal





1080P Webcam (AF) HTI-UC325



1080P Webcam HTI-UC300



4K Webcam (AF and Auto framing) HTI-UC390



Headset HT-ER200



room people 2



All-in-one USB Camera DH-VCS-C4B0



room

people

S



65" UHD Smart Interactive Whiteboard



4K UHD Integrated **USB** Camera DH-VCS-C5A0



Wired/Bluetooth Microphone DH-VCS-MCA400(optional)



room

meeting

people

2

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86" UHD Smart Interactive Whiteboard



USB PTZ Camera DH-VCS-C5B0



Wired/Bluetooth Microphone DH-VCS-MCA400







Smart City Development In China

2008, start the idea of "Smart Earth"

2012, China starts the program to build 90 smart cities

2015, China brings the idea of "New Smart City concept"

2019, smart city become full coverage for all industry, and support each other

2008-2011 Digital

2012-2015 Network 2016-2018 Information 2019 Smart

Driven by industry application

Key technology: Digitalization, transmission

Feature: the constructions are separated into different industries, small and dispersed

Driven by new technology

Key technology: Wireless, Network, Centralization

Feature: it's the explore period based on government requirement, more unified

Driven by requirements

Key technology: AI, Big data

Feature: Different cities focus on their own pain points, and tend to build a unique solution only for their city

Driven by requirements

Key technology: Data mining, cloud

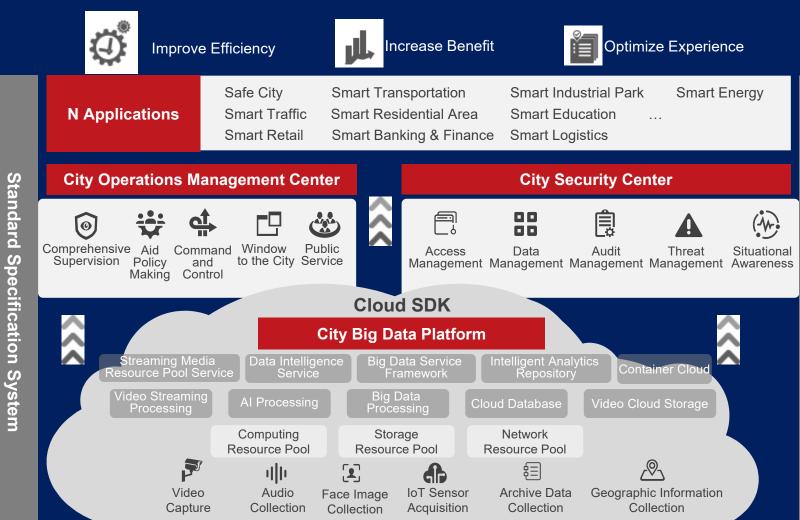
Feature: a platform responsible for safety, traffic, transportation, parking, etc. all types of city management

ahua

HEART OF CITY (HOC)

Dahua Heart of City (HOC) is a smart city development engine supported by Full Sensing, Full Intelligence, Full Computing, and Full Ecosystem (4 Full) capabilities. It realizes the construction of a "1 platform, 2 centers, N applications" (1+2+N) new smart city framework for application at the city, industry, and commercial level.

Dahua Heart of City features a top-level design based on giving cities '4 Full' capabilities to drive urban development, achieving goals to "Improve officiency, Increase benefit, optimize experience," and in-depth design principles based on "solving customer business pain points and creating economic, social, and business value through scientific and orderly construction and operation from a global perspective."



Product Ability

25+ Product lines

Thousands different products

Dedicated design for every detail

Command

Multi-billion level size of database management

Al enabled products covers from camera side, edge side and center side, AI ability can even be called from a shared AI pool, to reach the maximum of the Al efficiency

Powerful video capturing products for low light, long distance, and other complex situation

Thermal imaging, radar detection, multi-lens products beside video method

RFID, ID, 5G products to rich the sensing elements

Special industry products such as machine vision, speed testing, drone, etc. to enhance ultra performance

Video platform products cover projects from 100 to million channels, more than 100+ protocols to connect different products

Transmission products like switch, wireless are specially designed for video and picture transmission

IPSAN products for medium and small size project, cloud storage products for large scale project

Splicing LCD video wall is very popular for video monitoring, and small pixel indoor LED are best for command center

Dahua video matrix can control the video display for huge quantity screens and large size LED video wall

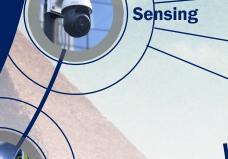
Operator desk management system can make the team operation flexible and smooth





Al & Big Data







Platform

Al Ability Big Data Ability

- **Face Detection**
- **Face Recognition**
- **Video Structure**
- **People counting**

- General Video Connect **Center AI process**
- AI data collection
- Data process
- **Edge AI enable**

Al Box

- Second level result
- response
- Multi million library **Model analysis**







Picture mark

Behavior mark

Multi task

Training Platform

Camera

Sophisticated Algorithm

Body



- **Face recognition**
- Full body clothes
- Belongings
- **Behavior**
- movement

Vehicle



- **ANPR**
- Vehicle type
- Vehicle color
- **Driving behavior**
- **Driver behavior**

Motorcycle



- Number plate
- **Bike Color**
- **Passenger**
- **Driver clothes**
- Helmet



- Traffic situation
- **Perimeter**
- Entrance
- **Public** area

Strong Computing





SMART TRAFFIC MANAGEMENT

Taking video-centric AI technology as its core, the Dahua Smart Traffic Management Solution deeply integrates with traffic management tasks to enhance traffic control and command operations capabilities. This solution fully empowers traffic management reforms and assists traffic management departments in building a "4-in-1" modern service mechanism led by intelligence research, efficient flat command operation, precise maneuvering, as well as real-time supervision and control. It drives the transformation of traffic management mechanisms and improves traffic management capabilities.

SOLUTION HIGHLIGHTS

Ease Traffic Congestion

This solution integrates AI, radar, video and other IoT sensing technologies to serve various congestion scenes at urban intersections, sections, viaducts, etc., realizing a closed loop of business value including blockage point positioning, blockage cause analysis, congestion remedy early warnings and reduce traffic accidents, helping traffic and evaluation, and efficiency improvement of road traffic.

Traffic Safety Warning

For situations involving big trucks' blind spots while turning right, oncoming traffic on mountain corners, and bad weather, the solution applies video object sensing to actively detect management to transform from post-disposal to preprevention.

Urban Green Parking

With high demand for temporary parking in urban areas, the solution launches "Green Parking", which integrates on-site parking, timing, and online reminders to provide free parking within the prescribed time. This alleviates the problem of short-term parking and improves convenience for the residents.

Smart Control of Non-motor Vehicle

By integrating video, RFID and other IoT sensing methods, the solution conducts real-time and dynamic supervision of more than 7 types of illegal behaviors related to using electric vehicles including: running red lights, overload, not wearing helmets, and parking over the line. It significantly enhances the traffic safety awareness of drivers and maintains the urban traffic order.

KEY CASES



28 ASEAN Summit Traffic Project, Laos

During the 28 ASEAN Summit, Dahua Technology assisted Laos in building an intelligent traffic management system. The company helped achieve effective control of vehicles entering and exiting the core areas of the summit. With detection system in place for over speeding, red light violations, etc., it effectively reduced local traffic violations and ensured safe travel.



Traffic Enforcement Project, Serbia

Dahua Technology has successively deployed smart traffic systems in 5 important cities in Serbia since 2015. This solution solved light pollution problems and developed Serbian and EU multi-country license plate recognition algorithms to control the vehicles entering and leaving EU countries. It also includes a customized collection, transmission, storage and management mechanisms for the Serbian traffic system.



Ulaanbaatar Traffic Project, Mongolia

Dahua Technology provided a sophisticated ITS solution consisting of ANPR system, violation detection and speed measurement systems to cover 28 roads and 8 intersections in Ulaanbaatar. The requirements analysis, solution design and project delivery only took three months to complete, overcoming the challenges of extreme climate conditions and lack of technical support. This solution provided the local transportation department of Ulaanbaatar with a sustainable, growing, and well-maintained security system.



SMART PARKING

The Dahua Smart Parking Solution consists of roadside parking, garage parking, urban parking grading guidance systems, urban parking platforms, mobile apps and other subsystems. It provides convenient parking services for car owners, advanced parking operation systems for enterprises, and long-term scientific parking management for city operators.

SOLUTION HIGHLIGHTS

Optimizes Experience: Saves 70% of time looking for a parking space, providing convenience to drivers.

Increases Benefit: Reduces labor cost by 80%, and increases operating efficiency by 80%.

Improves Efficiency: Controls traffic violations, alleviates traffic congestions, helps to enhance the image of the city and promotes the construction of smart cities.

KEY CASES



Residential Apartment Underground Parking Project, Serbia

The Dahua Smart Parking Solution provides the residents of this apartment complex with convenient entry & exit experience by utilizing ANPR technology, and also allows quick location of available parking spaces for visitors. The solution includes more than 100 parking detection cameras and 4 access cameras, enabling effective parking management and CCTV surveillance operation in the area.



Airport Parking Project, Denmark

The Dahua Smart Parking Solution reduces searching time for available parking spaces and provides the management with clear overview of the 1,217 parking spaces in the parking garage. Dahua Technology's easy-to-use parking software, PMS PRO, allows the garage management to monitor occupancy, assess accidents, search through data and export reports. At the same time, the integration of ANPR and video analytics makes it easier for drivers to find available parking spaces and locate their vehicle in the massive parking garage.



Shopping Mall Parking Project, Czech Republic

As one of the most prosperous shopping malls in Prague, the shopping mall has a total of 2,240 parking spaces. Dahua Technology provided its garage with 925 parking spot detection cameras, 5 find-my-car kiosk, 20 guidance screens, etc., which greatly enhance the parking experience of drivers, and help the shopping mall attract more customers.

Smart Forest - Fire Detection Solution



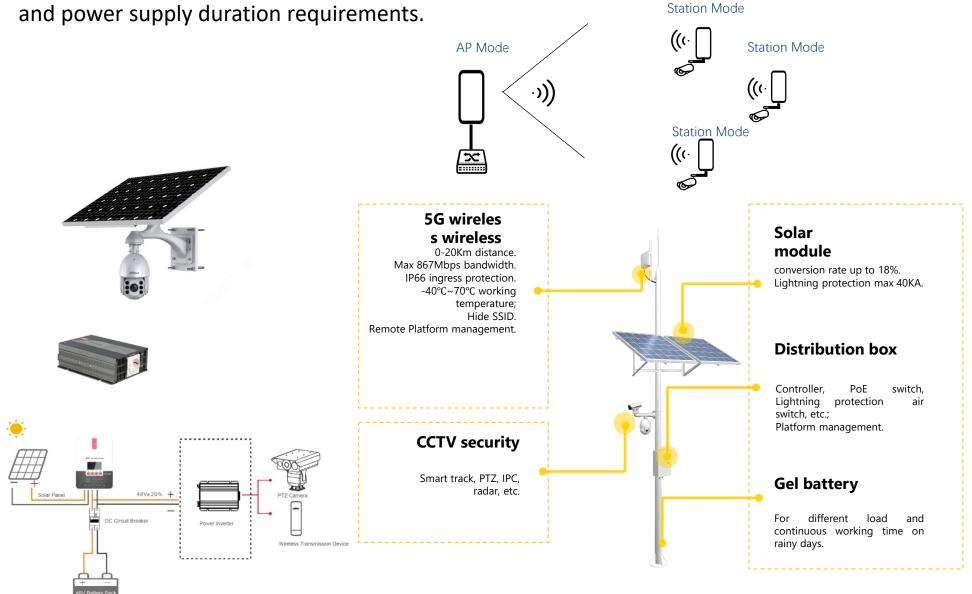


• Early fire detection





Different from the traditional way, the off-grid scheme uses solar energy and wireless transmission technology to meet the needs of monitoring deployment outdoor. it solves the problems of wiring, construction period and maintenance, Sperate system can arbitrarily combine according to customer needs to meet the requirements of different power supply equipment









DSS Platform







Homepage

Live View 1













Live View

View live video. Supports multiple-window preview, PTZ control, snapshot, instant playback, tour and etc.



Record Playback

Supports central or front-end devices record playback, fast and slow playback, locking record and etc.



Emap

Visual display of device installation area, supports map preview, playbackalarm and etc.



Event Center

Listing events by event level, you canprocess alarm and search history al-



Video Wall

Decoding live video and video record to video wall, supports video tour.



Download Center

Multiple methods to export record file from central server and front-end storage device.



Personnel Management

Add user and details, supports to issue card, private password and other authorization.



Access Control

Remote control of A&C device, supports door group authorization and unlock rule setup



Attendance Management

Personnel shift arrangement, record the attendance information and generate attendance reports.



Video Intercom

VDP device call and management, supports to send message to VTH.



Visitor Management

Visitor appointment and registration-, supports temporary permission management, visit record search.



Alarm Host

Zone arm/disarm, subsystem arm/disarm, Zone and subsystem status mon-



Face Recognition

Supports real-time face detection and comparison, history face detectionand comparison searching and etc.



Business Intelligence

Providing the reports via integrating business data to help people making business decisions.



Flow Analysis

Easily know the passenger flow via people counting and passenger distribution via heatmap.



Thermal

Supports Getting real-time heatmap,point, line and pane temperature analysis and heatmap exporting.



ANPR

Supports real-time license plate recognition, vehicle passed record search ing and etc.



Traffic

Supports vehicle violation searching,vehicle average speed measurement and generating traffic flow reports.



Target Detection

Human, motor vehicle, non-motor vehicle detection, extracting object at-



Entrance

Access license plate snapshot, suppo-

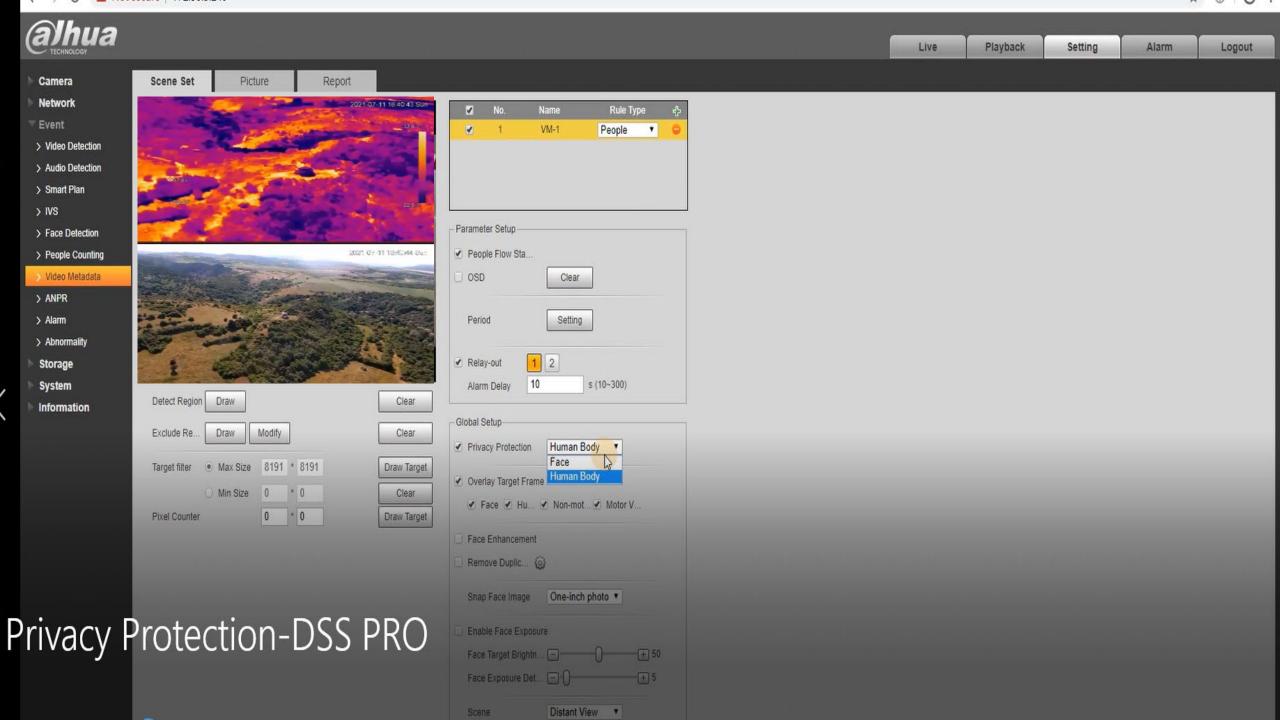


Radar Smart Track

Position speed dome direction via ta-



Privacy Protection-DSS PRO



Action Landing | AR Panorama





THANK YOU