

TVT Security Product Introduction

SHENZHEN TVT DIGITAL TECHNOLOGY CO., LTD.

TVT Product Family

Speed Dome

Industry NVR

Industry IPC

Server Product

























Dual Light Perimeter IPC



Dual Lens/Wide FOV IPC







Full Color IPC



Smart Scenario Product



Smart NVR



Analog Product



New business Product



Smart Application Product Cloud Solution Cyber Security







human/vehicle Al

ALISP F1.0

2024Q3

white light full color

Not NDAA

4M Released, 6M 25Q2

6MP

3MP

New Products of 2025

8MP

Released

Not NDAA



8MP

red/blue alarm lights

Matedata Al

2025Q3

12MP



S4-C Series IPC





S4-C 2/4/6/8M resolution, newly add 6M resolution



Support IR and white light, human-vehicle interaction



0.75T computing power, 2M/4M 30fps, 6M/8M 20fps



human/motor vehicle/non-motor vehicle classification, SMD



Support Abandoned/missing object detection, Exception Detection, Line crossing, Region entrance/exiting/intrusion and other intelligent analysis



Support dual system backup



TVT SMD greatly improve the recognition accuracy



human will trigger alarm



Traditional MD



SMD

Traditional MD:

By comparing the images collected in the warning area, the changes of the image are detected, and then the events such as object movement and regional intrusion are identified. The sensitivity and accuracy are relatively low, and it is easy to be affected by environmental factors, the misjudgment and false alarm rate are relatively high.



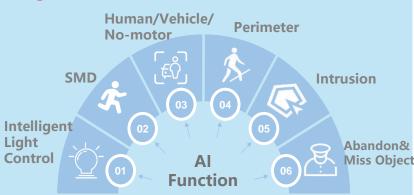
SMD(Smart Motion Detection):

SMD can effectively filter the impact of environmental factors such as small animals, flags, tree swings, light and shadow changes through AI algorithm identification, resulting in accurately detect the alarm caused by human, vehicles, etc., greatly reducing the false alarm rate. Easy to use without complicated setup.

Smart Dual Light S4-C Series IPC







The computing power is increased and the image quality is improved



computing

power

0.75T High



HDR/BSI/NIR improvement

R Super starlight night vision

Rich features and easy to operate

sensitivity



Prime or Zoom lens available



threestream

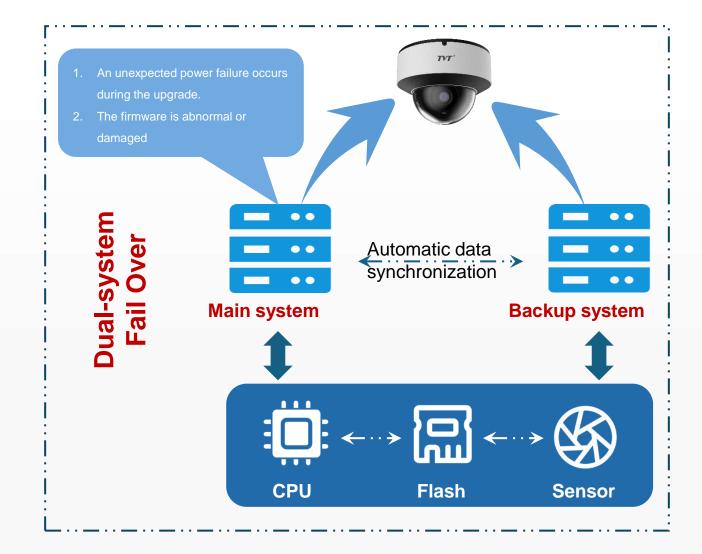


External audio

Dual system backup

TVT

S4 Series improve the flash space of the system, support dual system backup to improve the self-healing capability of the device, and support multiple Al algorithms and scenarios.



S5 Series IPC = ALISP







S5 2/4/6/8M resolution, 2M/4M 30F, 6M/8M 20F



support AI ISP, greatly improved image quality



AV1 enhance video encoding efficiency



Support IR and white light, human-vehicle interaction



Built-in microphone, speaker, red/blue warning lights, supports audible & visual alarms



Transformer AI, Improve AI recognition accuracy



human/motor vehicle/non-motor vehicle classification, SMD



Support Abandoned/missing object detection, Exception Detection, Line crossing, Region entrance/exiting/intrusion and other intelligent analysis



Support dual system backup



S5 Series IPC











AV1 encoding

Supports the latest AV1 codec, eliminating costly H.265/HEVC royalty fees while further improving encoding efficiency

ALISP

latest AI-powered ISP chip, significantly enhancing image quality in low-light environments

Transformer AI

Al large model deployment, achieves higher recognition accuracy, and enables extended Al functionalities

Audible & Visual Alarms

Features built-in red/blue
flashing beacon lights and alarm
siren outputs, synchronized with
Al-driven detection to
significantly improve threat
response efficiency



E4B Series IPC





4MP/6MP/8MP Resolution, 30F realtime



Image Quality Upgrade: AI-Powered ISP + Next-Gen Sensor + F1.2 Aperture Lens



Al Upgrade: 3T Al Power with Transformer Model Acceleration



Lighting Upgrade: Supports infrared & white dual-light illumination with intelligent auto-switching



Feature Enhancement: Built-in speaker, red/blue warning lights, and 4-channel stream support



Audio Improvement: Dual-mic pickup with echo cancellation for enhanced audio clarityt



Security Upgrade: Supports secure boot, UL certification, and face mosaic privacy protection



Reliability Upgrade: dual-system redundancy and NEMA4X industrial-grade protection



✓ 4MP: TD-9x4xE4B

✓ 6MP: TD-9x6xE4B

✓ 8MP: TD-9x8xE4B

2025 Q3

E4BH Series IPC





4MP/8MP Resolution, 1/1.8 Sensor30F realtime, support 4M60F



Imaging Upgrade, AI ISP + F1.0 lens, support P-Iris Full-color optical zoom



Al Upgrade: 3.2T Al Power with Transformer Model Acceleration, Support metadata, Face/vehicle license plate recognition at same time, Software-defined camera framework for flexible Al deployment



Lighting Upgrade: Supports infrared & white dual-light illumination with intelligent auto-switching



Feature Enhancement: Built-in speaker, red/blue warning lights, and 4-channel stream support, 3-day local recording via integrated eMMC storage



Audio Improvement: Dual-mic pickup with echo cancellation for enhanced audio clarityt



Security Upgrade: Secure Boot + TPM 2.0 + TEE + UL, and face mosaic privacy protection



Reliability Upgrade: dual-system redundancy NEMA4X IK10 -40°C cold start (specific housings).



Mechanical Design: optional PTRZ (Pan-Tilt-Rotation-Zoom) support





✓ 4MP: TD-9x4xE4BH

✓ 8MP: TD-9x8xE4BH

✓ 2025Q4

E4BHSeries IPC





- > Al ISP + Next-gen Sensor + F1.0 Aperture Lens
- P-Iris Full-color optical zoom
- dual-light Full-color
- Low-IntensityIllumination withGlare Reduction
- > 140DB/Clear HDR



- Next-Gen Housing
- > PTRZ DOME
- > Upgraded Bracket
 Design
- > NEMA4X
- > All IK10
- Built-in HeatingSystem Enables ColdStart at -40°C



- > TPM/TEE
- Secure Boot
- > UL
- Secure Boot



- Dual MIC input
- Immersive Speaker Upgrade: Louder, Clearer
- Acoustic EchoCancellation
- Support MP3
- Support16bit/48KHz

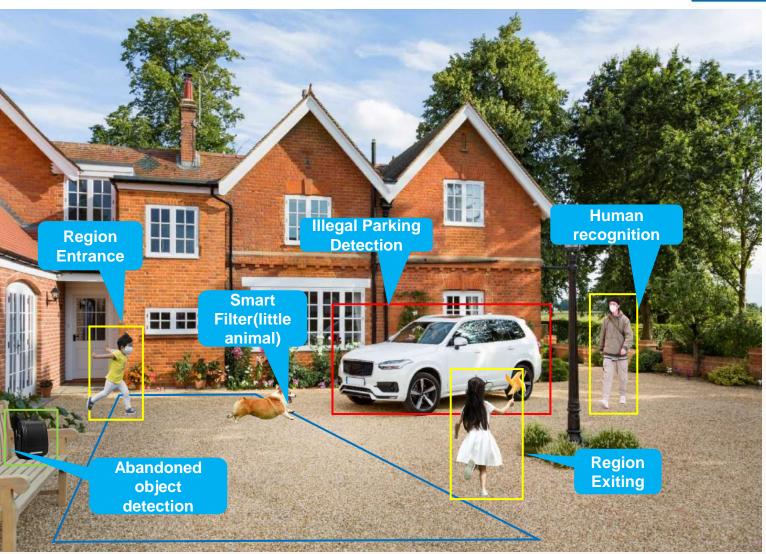


- SDC SoftwareArchitecture
- More Al Features
- Transformer-basedAl
- New Al Audio
 Applications

E4B/E4BH Series Support Multi-algorithm fusion

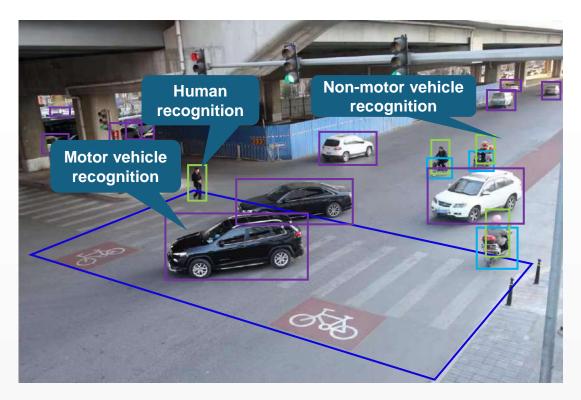




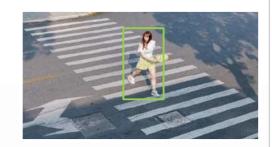


E4B/E4BH Series Support video metadata





The video metadata can be processed in parallel with the human/motor vehicle/non-motor vehicle recognition, and the metadata information of human and vehicles can be captured after the alarm triggered.





Human Metadata

- Attributes: Gender (child, teenager, young adult, middle-aged, elderly)
- ✓ Direction: Front, side, back
- Dress: Long/short sleeves, long/short trousers, skirt
- Color: 13 different colors
- ✓ Wear: Glasses, mask, hat
- ✓ Carry on: Shoulder bag, backpack





Motor vehicle Metadata

- Brands: BMW, Audi, Mercedes-Benz, BYD etc., upto128 different brands
- Colors: 12 different colors can be recognized
- ✓ Types: SUV, car, truck, school bus, special vehicles and other 11 different types
- Time: Identify the major models released after 2008
- Models: More than 12,000 different models can be recognized

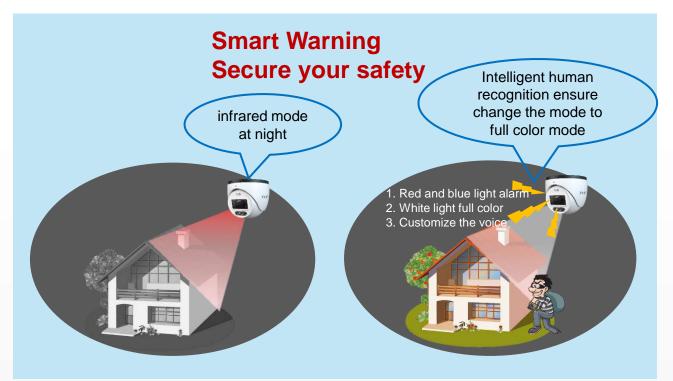




Non-Motor vehicle

✓ Classification: Bicycle ,tricycle, motorcycle, electric tricycle, etc.

Smart Dual Light Full Color IPC Secure your safety at night

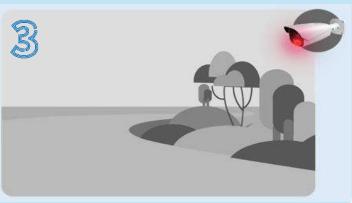


Smart Lighting:

- In regular scenarios, ipc is working at infrared mode at night to reduce light pollution.
- 2. When someone is detected to enter the monitoring area, ipc will switch to white full-color mode, it support voice and light alarm or voice shout to warn the person to leave the area.
- 3. After the person leaves, ipc will switch back to infrared mode.

The light will be on when people come and off when people leave





Intelligent human recognition reduces misjudgment



E4B Series greatly improves night vision performance in extremely low light (static scenes)



Night vision image details optimization in static scenes





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4M E3B-A 0.04Lux



E4B Series Highlighted Upgrades

✓ At extremely low illumination, the E4B series has a significant improvement in image clarity, brightness, noise suppression, color reproduction, color saturation and other aspects, with richer colors, appropriate image contrast, and better permeability.

E4B Series greatly improves night vision performance in extremely low light (motion scenes)



Night vision image details optimization in motion scenes





4M E4B 0.04 Lux

4M E3B-A

0.04Lux





E4B Series Highlighted Upgrades

✓ In low-light motion scenes, the E4 series night vision images have less motion trailing, more realistic moving object target recognition, less noise, and more obvious contours. Better color retention and lower color noise.

E4BH Dual light Full Color, dramatically improves imaging quality



0.07Lux Environment



E3BTraditional ISP

E4BH AI ISP Full Color

TVT E4BH series, all developed based on intelligent AI ISP algorithms, significantly improve imaging processing in terms of noise elimination, color reproduction, wide dynamics, high light suppression and other aspects through AI algorithms, with F1.0 lens, comprehensively improving the image quality of dark light scenes.



C4 Series, AI ISP black light technology





4MP/6MP resolution, full line equipped with F1.0 Iris, black light imaging



Stacked CMOS technology, the latest stacked ultra-starlight sensor greatly improves the image quality



Full line equipped with warm white light, intelligent white light, or flashing alarm



2Tcomputing power, 30 frames real-time encoding(full series), full line support AI ISP, greatly improved image quality



human/motor vehicle/non-motor vehicle classification, SMD



Support Abandoned/missing object detection, Exception Detection, Line crossing, Region entrance/exiting/intrusion and other intelligent analysis



Enriched interfaces, built-in MIC, alarm, audio, SD card slot, reset, one key disarm



Support dual system backup



✓ 4MP: TD-9x4xC4

√ 6MP: TD-9x8xC4

Fixed/motorized lens optional

C4-A Series, fully upgrading to black light imaging





C4-A Series New

✓ 4MP: TD-9x4xC4-A

✓ 8MP: TD-9x8xC4-A



4MP resolution, full line equipped with F1.0 iris, black light imaging



1/1.8" CMOS, the latest stacked ultra-starlight sensor greatly improves the image quality



Full line equipped with warm white light, intelligent white light, or flashing alarm.



2T computing power, 30 frames real-time encoding(full series), full line support AI ISP, greatly improved image quality



human/motor vehicle/non-motor vehicle classification, SMD



Support Abandoned/missing object detection,

Exception Detection, Line crossing, Region entrance/exiting/intrusion and other intelligent analysis



Enriched interfaces, built-in MIC, alarm, audio, SD card slot, reset



Support dual system backup

C4H Series, black light grade flagship product





4MP resolution, full line equipped with F1.0 iris, black light imaging



1/1.8" CMOS, the latest stacked ultra-starlight sensor greatly improves the image quality



Full line equipped with warm white light, -PA series support dual light, Built-in speaker, red/blue warning lights.



3.2T computing power, 30 frames real-time encoding(full series), full line support AI ISP, greatly improved image quality



Human/vehicle classification, Al-Metadata, simultaneous Al

- ✓ Object detection ✓ Heat map
- ✓ Exception
 ✓ Face detection
- ✓ Perimeter alarm ✓ Face Capture



- ✓ Intrusion ✓ Loitering
- ✓ Enter/Leave Area ✓ Illegal parking
- ✓ Counting by line ✓ Abnormal sound detection
- ✓ Counting by area ✓ Video metadata



Enriched interfaces, built-in MIC, alarm, audio, 1TB SD card slot, 8GB eMMCm,reset,(Motorized models support CVBS and RS485 interface)



Support dual system backup



✓ 4MP: TD-9x4xC4H

C4H Series

✓ 8MP: TD-9x8xC4H

Fixed/motorized lens optional

C4H-A Ultimate Full-Color Performance





C4H-A Series New

✓ 8MP: TD-9x8xC4H-A

Support Fix lens 2025Q3



8MP resolution, full line equipped with F1.0 iris, black light imaging



1/1.2" CMOS, the latest stacked ultra-starlight sensor greatly improves the image quality



Equipped with warm white light, Built-in speaker, red/blue warning lights.



4T computing power, 30 frames real-time encoding, support AI ISP, greatly improved image quality



Human/vehicle classification, Al-Metadata, simultaneous Al

- *****
 - ✓ Object detection ✓ Heat map
 - ✓ Exception
- ✓ Face detection



- ✓ Perimeter alarm ✓ Face Capture
- ✓ Intrusion
- ✓ Loitering
- ✓ Enter/Leave Area ✓ Illegal parking
- ✓ Counting by line ✓ Abnormal sound detection
- ✓ Counting by area ✓ Video metadata



Enriched interfaces, built-in MIC, alarm, audio, SD card slot, reset



Support dual system backup

Full-Color Product Series Comparison







- ✓ 1/1.2 Stack CMOS, F1.0 Lens, AI ISP;
- ✓ White light, Built-in speaker, red/blue warning lights
- ✓ 4T Al power



- √ 1/1.8 Stack CMOS, F1.0 lens, AI ISP
- Enriched interfaces, built-in MIC, alarm, audio,RS485;
- √ 3.2T Al power, Human/vehicle classification, Al-Metadata, simultaneous Al-
- -PA series support dual light, Built-in speaker, red/blue warning lights

1/1.8 Stack CMOS, F1.0 lens, AI ISP;

- ✓ Stack CMOS, F1.0 lens, AI ISP;
- ✓ Full line equipped with warm white light;
- √ Human/vehicle classification, simultaneous AI;
- Enriched interfaces, built-in MIC, alarm, audio, SD card slot, reset, one key disarm

Comparison testing of night vision imaging under extreme low illumination without supplementary light





Enhanced C4H (F1.0, 1/1.8")



First Generation Fullcolor C2H (F1.0, 1/1.8")



Standard C4 (F1.0, 1/2.9")



Mobile Phone



license plate recognition products









Infrared/white light optional, stronger light filling distance



1/1.8 "super large sized sensor, high performance CMOS, super starlight imaging



Support license plate capture within 120km/h, capturing accuracy \geq 99%.



Support plate capture, unlicensed car, license exposure, driving direction, character tolerance, vehicle attribution (color, color, car type, car brand/model and other information)



Built-in relay, support camera control/platform control/manual control of gate open/close/stop and other operations, support connecting tos to screen display device display captured plate number

Binocular People Counting Terminal

TVT

Application Scenarios



Restaurant



Cinema



Entrance of elevator



Ticket window



Office hall



Park entrance



Kindergarten



Property hall



Swimming pool



√ 4MP: TD-9742A3-PC



Human-device interaction: Support binocular recognition, dual sound pickup, two-way talk, intelligent alarm linkage

Passenger flow statistics: classified statistics of people entering and leaving data; separate statistics of children's data; support target height filtering, headcount detection, overcrowding detection, retrograde detection, etc.

Report analysis: real-time data upload and cycle upload,



Report analysis: real-time data upload and cycle upload, support daily, weekly, monthly and yearly reports, categorized statistical analysis.

180° multi sensor camera



First-generation dual lens Panoramic



4M*2 binocular 180 ° splicing, 8MP 30F



2.25T AI power, Human/vehicle classification, Metadata, simultaneous AI



Built-in dual MIC and speaker, support two-way intercom, support multiple customized voice



Support infrared white dual light intelligence, red and blue light and audio alarm

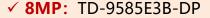


Audio input and output, alarm input and output, support

SD card, hardware reset and other rich interfaces



IP67 & IK10, 6KV lightning protection, surge protection, gas discharge, etc



TD-9482E3B-DP



Second-generation dual lens Panoramic



8M*2 binocular 180 ° splicing, 16MP 30F



18T Al power, Support Transformer Al



1/1.8" CMOS, F1.0 lens, AI ISP Full color

√ 16MP: TD-95C5E4BH-DP

TD-94C2E4BH-DP

2025Q4

180 ° ultra wide FOV camera





2.7T high computing power, real-time full frame coding



Support intelligent lighting, starlight, ultra-wide FOV 180° view



Support human/vehicle/non-motorized vehicle intelligent detection and identification, multi-AI algorithm fusion parallel.



- ✓ Objection Abondoned/Missing
- ✓ Abnormal detection
- ✓ Line Crossing detection
- ✓ Intrusion detection
- ✓ Enter/leave the zone
- ✓ Target Counting by Line/Area
- ✓ Heat map

- ✓ Crowds gather
- √ Face detection
- ✓ Loitering detection
- ✓ Illegal parking detection
- ✓ Sound abnormal detection
- √ Video Metadata



Rich interfaces: built-in MIC, audio/alarm, CVBS, 512GB SD card, reset,etc



IP67&IK10, 6KV lightning protection, surge prevention, gas discharge, etc



Ultra Wide Angle 180°



✓ 4MP: TD-9544E4B-FV

Release time: 2025 Q3

Dual head non-stitching camera





2.25T computing power, 4M*2 real-time coding, support dual channel AI



Built-in speaker, stereo double MIC, two-way intercom, support multiple customized voice



Support human/vehicle/non-motorized vehicle intelligent detection and identification, multi-Al algorithm fusion parallel.

✓ Crowds gather

✓ Face detection

✓ Loitering detection

✓ Video Metadata

✓ Illegal parking detection

✓ Sound abnormal detection



- ✓ Objection Abondoned/Missing
- ✓ Abnormal detection
- ✓ Line Crossing detection
- ✓ Intrusion detection
- ✓ Enter/leave the zone
- ✓ Target Counting by Line/Area
- ✓ Heat map



Audio input and output, alarm input and output, support SD card, hardware reset and other rich interfaces



IP67&IK10, 6KV lightning protection, surge prevention, gas discharge, etc



√ 2 x 4MP: TD-9844E3B(D/PE/AR2)

Flood Light IPC





Resolution: 4MP×2 stereo cameras with 180° panoramic stitching

8MP real-time video encoding



2.25T Al support Transformer



Dual lighting system (IR + white light), Built-in siren with red/blue warning LEDs



Wi-Fi 5 dual-band (2.4GHz/5GHz) transmission, Bluetooth configuration interface



Dual-microphone array with noise suppression



64GB embedded eMMC storage, Cloud storage synchronization support



2000-lumen LED illuminator, Adjustable brightness and color temperature control



2025Q4 Release

4G/solar products



Solar panel



60W solar panel, Maximum power consumption < 7W, 4G keepalive mode < 2W;



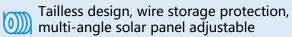
23Ah/12.8V lithium battery, support 5 days continuous rainy day work



Support battery management, power display, low temperature protection, and other health check



Integrated Management



IP67

IP67, can resist 12 grade typhoons, stable and reliable

Smart monitoring



4MP, F1.0, 1/1.8 "CMOS , built-in 64GB EMMC, SD card, RS485 interface



Ultra starlight imaging, 7×24h full color, smart lighting, F1.0



Built-in 4Gand WIFI module



Support human/vehicle, two-way intercom



PIR, wide detection range, high sensitivity, fast wake up

Application scene



Second-Generation Solar-Powered Camera





TD-9946SP2(D/G5/AW2) 2025Q4

Item	Current product	Second-Generation
resolution	4M 1/1.8	4M/8M 1/1.8
Full color	F1.0 white light	F1.0 AI ISP dual light
lens	fix focus	fix/MVF focus lens
Al	0.75T	4T Transformer
Communication	4G	4G/5G/WiFi/eSIM
Storage	SD Card	SD Card, build in 64G eMMC
Low power	PIR	PIR, AOV
Audio	MIC, Speaker	Dual MIC, Loud Speaker
protection	IP67, Level 12 typhoon	IP67, Level 12 typhoon, GPS, Gravity sensor-based anti-tampering
others		DC output, bigger battery, Alarm

Eco solar energy



8W solar panel, flexible battery health management



maximum power consumption < 5W, 4G alive mode < 1.2W;



Built-in MIC and speaker, 4M, F1.0, 1/1.8 ", PIR, 4G full Netcom, WIFI, SD card,



Upgrade to intelligent dual light, white + infrared + red and blue light alarm



AOV Supportower consumption without missing video record, low ping



Explosion-proof series products







- ✓ fixed lens bullet: TD-9842AE-FB(D/PE/AR5)
- ✓ fixed focus dome: TD-9842AE-FD(D/PE/AR3)
- ✓ Motorized bullet: TD-9842AE-AB(D/AZ/PE/AR5)



4MP, high computing power hardware, starlight imaging, full FPS coding



Corrosion-resistant 304 stainless steel, rust prevention



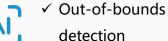
Ooptical grade high strength, high light transmission and explosion proof glass, dustproof, waterproof and oil proof lens



Passed the national IIC grade gas + dust flameproof double highest level certification

✓ Item sitting

- ✓ Thermal map
- ✓ Anomaly detection
- ✓ Face detection



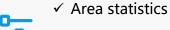
√ Face capture

detection

✓ Wandering detection

✓ Area intrusion detection

- ✓ Stop detection
- ✓ Enter/leave the zone
- ✓ Abnormal sound detection
- ✓ Over the line statistics
- ✓ Video structuring





Built-in MIC, alarm interface, audio interface, SD card, reset.



IP68 dustproof and waterproof protection, not afraid of harsh environment



Upgrade to support dual system disaster recovery backup

Edge computing product - AI BOX



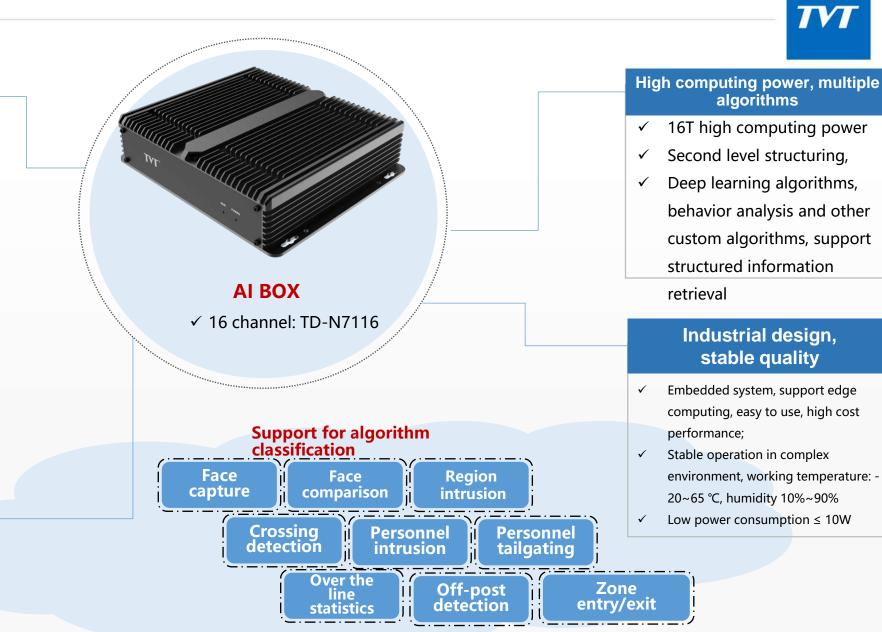
algorithms

Device management capability

- Supports 8/16 channel video input
- H.264&H.265 decoding, up to 8MP resolution IPC, 4K ultra-clear picture quality
- Support 100,000 face library, 10 groups of portrait library management; Support face capture comparison

Flexible in multiple scenarios

- Support RTSP/1400/API and other flexible ways to connect to the upper platform
- Supports dual network port, full duplex RS485, SD card
- Support local intercom



Smart WIFI kit







Intelligent dual light, SMD AI, smart white light, human-computer interaction function



SMD intelligent detection effectively filter the impact of environmental interference, greatly reduce the false alarm rate.



Built-in MIC, support DWDR, HLC, DNR, BLC, ROI, privacy mask, flashing alarm and other functions



2.4Ghz Wifi ,one-click pairing, channel encryption, up to 80 meters stable transmission distance.





Support up to 8MP pixel IPC access

Series 30 WiFi NVR



Support up to 4K image display, $3840 \times 2160@30$ fps full frame



Support 4*1080P decoding capability, 4/8 synchronous preview or playback



Maximum input/forward bandwidth: 64Mbps/64Mbps



IPC intelligent detection and linkage, according to time slice, events, labels and other intelligent retrieval



2.4Ghz WIFI, one-click pairing, channel encryption, support 4/8 channel WIFI interconnection,



WiFi IPC

√ 4MP: TD-9441S4L-C(D/WF/AW2)

WiFi NVR

√ 4 channel: TD-3004H1-A1-WF

√ 8 channel : TD-3008H1-A1-WF

2025Q2 release



TVT 30 series basic universal NVR





30 Series NVR

- ✓ 1 disc 4 channels: TD-3004H1-B1-B (POE optional)
- ✓ 1 disk with 8 channels: TD-3008H1-B1-B (POE optional)
- √ 1 disk with 16 channels: TD-3016H1-A1
- ✓ 2 discs with 32 channels: TD-3032H2-A1





Supports up to 8MP IPC access



4K image output display, the highest resolution 3840 × 2160@30fps



4/8 channel :4*1080P decoding capability, 16/32 channel : 6*1080P decoding capability



Support up to 16 synchronous playback, a variety of splitted segments



Up to 160Mbps/160Mbps bandwidth



Support intelligent retrieval according to time slice, event, label and so on, efficient extraction of video information



Support manual alarm, sensor alarm, detection alarm, abnormal alarm, event alarm



Support front-end IPC multiple intelligent detection access and linkage

TVT 31 Series Lite version NVR





Support up to 8MP resolution IPC access



Support up to 4K ultra HD display, the highest resolution 3840 × 2160@30fps



Decoding capability: normal mode 8*1080P, AI mode 6*1080P (Enabling AI mode will take up 2*1080P decoding performance)



Support up to 16 synchronous playback



Up to 192Mbps/192Mbps bandwidth



Intelligent retrieval according to time slice, event, tag and so on



Support manual alarm, sensor alarm, detection alarm, abnormal alarm, event alarm and other types



Pre-detection access and linkage, human/vehicle detection and detection at NVR side.



31 series NVR

1 disc position:

√ 4 CH: TD-3104H1-B2-B (POE optional)

✓ 8 CH: TD-3108H1-B2-B (POE optional)

√ 16 CH: TD-3116H1-B2-B (POE optional)

2 disk positions:

✓ 8 CH: TD-3108H2-8P-B2-B

√ 16 CH: TD-3116H2-B2-B (POE optional)

✓ 32 CH: TD-3132H2-B2-B

4 disk positions:

✓ 32 CH: TD-3132H4-B2-B



33 series standard NVR





Support up to 16MP resolution IPC access



Support up to 4K display, A3H series upgrade support 8K picture quality display



Normal mode 16*1080P, AI mode 14*1080P (Enabling AI mode will take up 2*1080P decoding performance)



Input/forward bandwidth: Up to 768Mbps/768Mbps



Dual NIC ports, supports dual output mode, A3H series upgrade supports four-screen linkage, RS485 and other rich interfaces



Intelligent retrieval according to time slice, event, label and so on, efficient extraction of video information



Support manual alarm, sensor alarm, detection alarm, abnormal alarm, event alarm and other types



Full series supports post-intelligent AI detection and predetection access and linkage, supports second level structuring



Support 10000 face database, support multi-channel face detection and face comparison









33 series NVR

1 disc slots:

√ 8 channel: TD-3308H1-B2-B

2 disk slots:

√ 16 channel: TD-3316H2-B2-B

✓ 32 channel: TD-3332H2-B2

4-disc slots

√ 16 channel: TD-3316H4-B2

√ 32 channel: TD-3332H4-B2

8 disk slots:

√ 32 channel: TD-3332H8-B2/B3

√ 64 channel: TD-3364H8-B3

16 disk slots:

✓ 64 channel: TD-3364H16-B3

√ 128 channel: TD-33128H16-B3

TVT 33 series standard NVR (A3H series)







Supports up to 16MP resolution IPC access



32*1080P in common mode, 24*1080P in AI mode (AI mode will take some performance)



Support 8K image quality, up to 7680×4320@60fps



Input/forwarding bandwidth: 640/640Mbps



SATA*8, E-SATA*2, single disk 10T, support RAID 0/1/5/6/10



Dual gigabit port, 16ch amarm in/8ch out, RS485, local intercom, 4HDMI out



6T high computing power, face comparison, license plate recognition and other rich AI functions





Up to 16MP resolution IPC access is supported



32*1080P in normal mode, 24*1080P in AI mode (AI mode will take some performance)



Supports 8K quality, up to 7680×4320@60fps



Input/forward bandwidth: 640/640Mbps (64 channels), 768/768Mbps (128 channels)



SATA*16, E-SATA*2, single disk 10T, support RAID 0/1/5/6/10



Dual igabit NIC port, 24ch alarm in/8ch out, RS232, RS485, local intercom, 4HDMI output



6T high computing power, face comparison, license plate recognition and other rich AI functions

35 series high-end industry NVR







Supports up to 16MP resolution IPC access



Normal mode 32*1080P, AI mode 24*1080P (AI mode will take some performance)



Supports 8K image quality up to 7680×4320@60fps



Bandwidth:320/320Mbps (32 channel), 640/640Mbps (64 channels)



Redundant dual power supply



SATA*8, E-SATA*2, single disk 10T, support RAID 0/1/5/6/10



Dual gigabit NIC port, 16 alarm in 8 out, RS232, RS485, HDMI*4



6T high computing power, face recognition comparison and other rich AI functions





Support up to 16MP resolution IPC access



32*1080P in normal mode, 24*1080P in AI mode(Optional double decoding card



Supports 8K quality, up to 7680×4320@60fps



Input/forward bandwidth: 768/768Mbps



Redundant dual power supply



2 gigabit NIC port, SATA x 24, MiniSAS x 2,RAID 0/1/5/6/10



Alarm interface 24 in 8 out, RS232, RS485, HDMI*4



6T high computing power, face recognition comparison and other rich AI functions

A3H series NVR features enhancement



16MP Access Resolution

Access IPC maximum resolution increased from 12MP to 16MP



Super decoding performance, the output quality is upgraded from 4K to 8K, with the highest display resolution up to 7680×4320@60fps

6T AI Performance

Improves capability of intelligent AI by NVR, channels support detection by NVR upgrade from 4 channels to 8 channels, support video structured parsing, support local face database matching







Four-screen Linkage

The interface is more plentiful, the 2-way output display is upgraded to 4-way HDMI, which can support four-screen linkage display.



HDMI

640M Network Bandwidth

Superior network bandwidth transmission, support 640Mbps input and output, support a variety of network applications

Al Super resolution output

Support AI arithmetic output ultra-highdefinition display, through AI to strengthen the IPC image details, so that 2M IPC through the HDMI display output can get 4K effect (AI Super resolution function 2024Q1)

TVT Next-generation 31 Series Lite NVR With AI large models





Support up to 8MP resolution IPC access



4T AI computing power, supporting AI large models; AcuSearch high-precision object retrieval, universal object detection, and enhanced target identification.



Support up to 4K ultra HD display, the highest resolution 3840 × 2160@30fps



Decoding capability: normal mode 8*1080P, AI mode 6*1080P (Enabling AI mode will take up 2*1080P decoding performance)



Support up to 16 synchronous playback



Up to 192Mbps/192Mbps bandwidth



Intelligent retrieval according to time slice, event, tag and so on



Support manual alarm, sensor alarm, detection alarm, abnormal alarm, event alarm and other types



31 series NVR

1 disc position:

✓ 8CH: TD-3108H1-B2-X (POE optional)

√ 16CH: TD-3116H1-B2-X (POE optional)

2 disk positions:

✓ 8CH TD-3108H2-8P-B2-X

√ 16CH: TD-3116H2-B2-X (POE optional)

✓ 32CH: TD-3132H2-B2-X

4 disk positions:

✓ 32CH: TD-3132H4-B2-X

2025Q4

TVT Next-generation 33 Series standard NVR With Al large models





Support up to 16MP resolution IPC access



20T/40T AI support AI large models; AcuSearch high-precision object retrieval; universal object detection with enhanced target identification; algorithmic self-learning to adapt to human/vehicle scenarios and reduce false positives; large-model text search for rapid target retrieval via text input



Support up to 4K display, A3H series upgrade support 8K picture quality display



Normal mode 16*1080P, AI mode 14*1080P (Enabling AI mode will take up 2*1080P decoding performance)



Input/forward bandwidth: Up to 768Mbps/768Mbps



Dual NIC ports, supports dual output mode, A3H series upgrade supports four-screen linkage, RS485 and other rich interfaces



Intelligent retrieval according to time slice, event, label and so on, efficient extraction of video information



Support manual alarm, sensor alarm, detection alarm, abnormal alarm, event alarm and other types



33Series NVR

8 disk positions:

✓ 32CH: TD-3332H8-A3H-X

✓ 64CH: TD-3364H8-A3H-X

2025Q4发布

TVT Next-generation 35 Series standard NVR With Al large models





Supports up to 16MP resolution IPC access



40T AI support AI large models; AcuSearch high-precision object retrieval; universal object detection with enhanced target identification; algorithmic self-learning to adapt to human/vehicle scenarios and reduce false positives; large-model text search for rapid target retrieval via text input; algorithmic autonomous training enabling on-scene target detection on NVR devices and quick deployment of scene-adapted algorithms



Normal mode 32*1080P, AI mode 24*1080P (AI mode will take some performance)



Supports 8K image quality up to 7680×4320@60fps



Bandwidth:320/320Mbps (32 channel), 640/640Mbps (64 channels)



Redundant dual power supply



SATA*8, E-SATA*2, single disk 10T, support RAID 0/1/5/6/10



Dual gigabit NIC port, 16 alarm in 8 out, RS232, RS485, HDMI*4



8 disk:

✓ 32CH: TD-3532H8-A3H-X

✓ 64CH: TD-3564H8-A3H-X

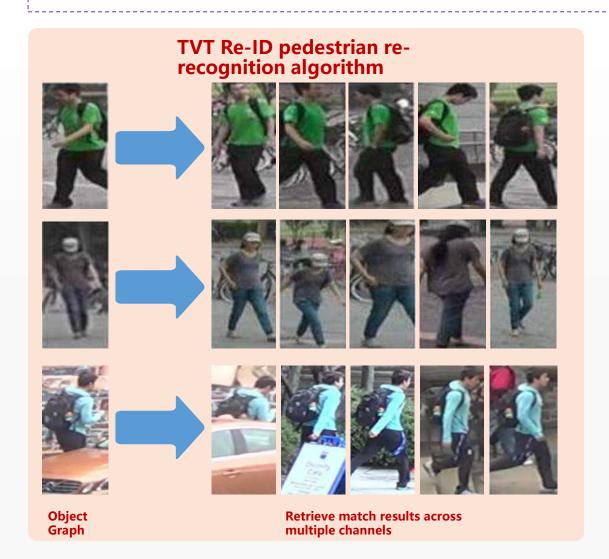
202504

AcuSearch algorithm, from "face recognition" to "people recognition"



Limitations of current face recognition algorithm:

The monitoring area of a single camera is limited, and the overlap of the monitoring range between different cameras is very low, and is limited by the installation position and deployment density of the capture camera, difficult to capture a clear face, difficult to quickly identify, locate and track the target



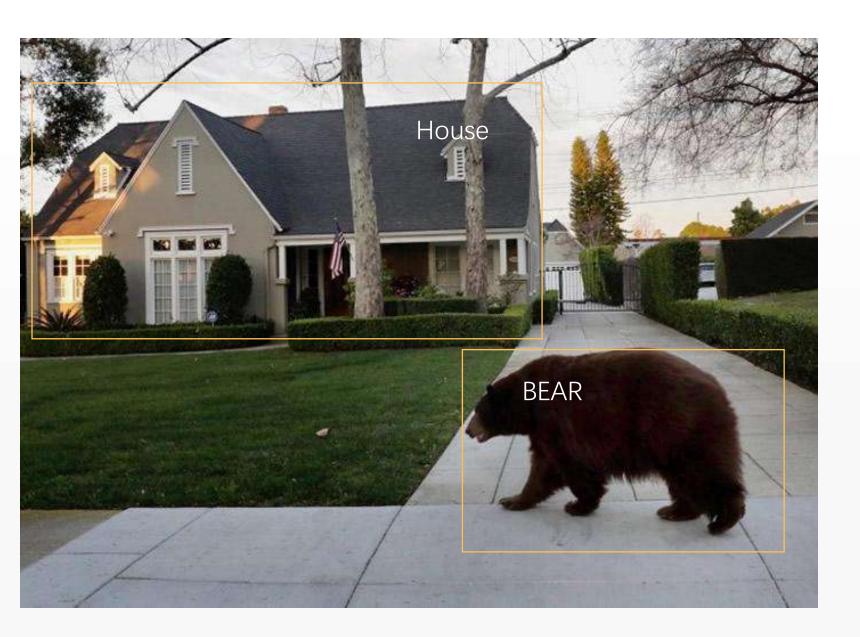


The same Re-ID pedestrian re-recognition algorithm (TVT AcuSearch) can effectively distinguish and identify the target portrait from a variety of complex situations such as messy background, diversity of posture, different lighting environments, and possible occlusion.

The cognitive level of AI intelligence is advanced from "face recognition" to "person recognition", and effectively supplements face recognition in the application, bringing significant improvement in efficiency.

Universal Object Recognition via Large Models





Universal Object Recognition

- ✓ Zero-shot Learning;
- ✓ Supports expanded recognition of objects and animals
- ✓ Enhance algorithm accuracy

Large Model Text Search, Text Description Generation, One-Click Navigation



User-friendly, text box input, oneclick navigation

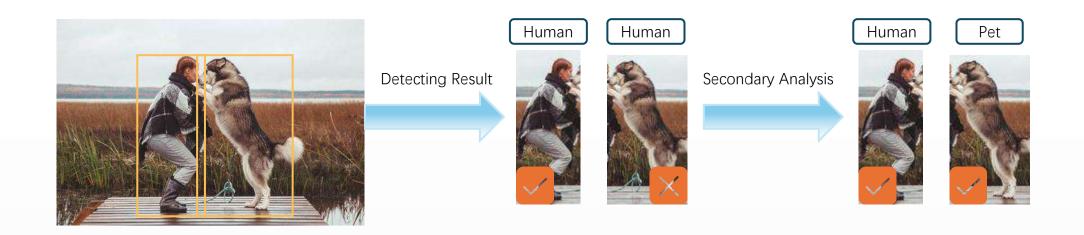
Open-ended
Fuzzy Language
Retrieval

Works seamlessly with most of TVT IPC



Large models with self-learning, continuously enhancing accuracy with use



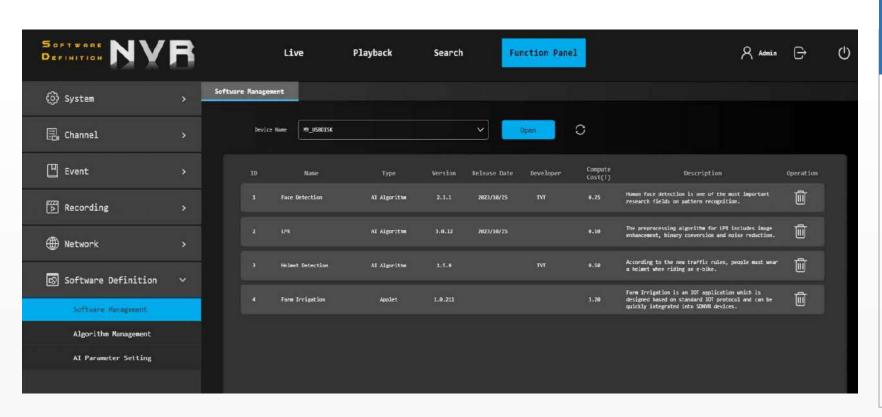


Large models with self-learning

- ✓ human and vehicle perimeter detection;
- ✓ Secondary recognition by large AI models to improve accuracy
- ✓ Autonomous relearning to identify misclassified objects, Significant reduction in misrecognition rate after subsequent use

Large model algorithms capable of autonomous training





Large model algorithms training

- ✓ NVR local algorithms training;
- ✓ Rapid algorithm iteration and direct use
- ✓ Simple operation, no algorithm development needed
- ✓ Effectively meets various niche
 Al applications



Large Model NVR AI Feature Comparison





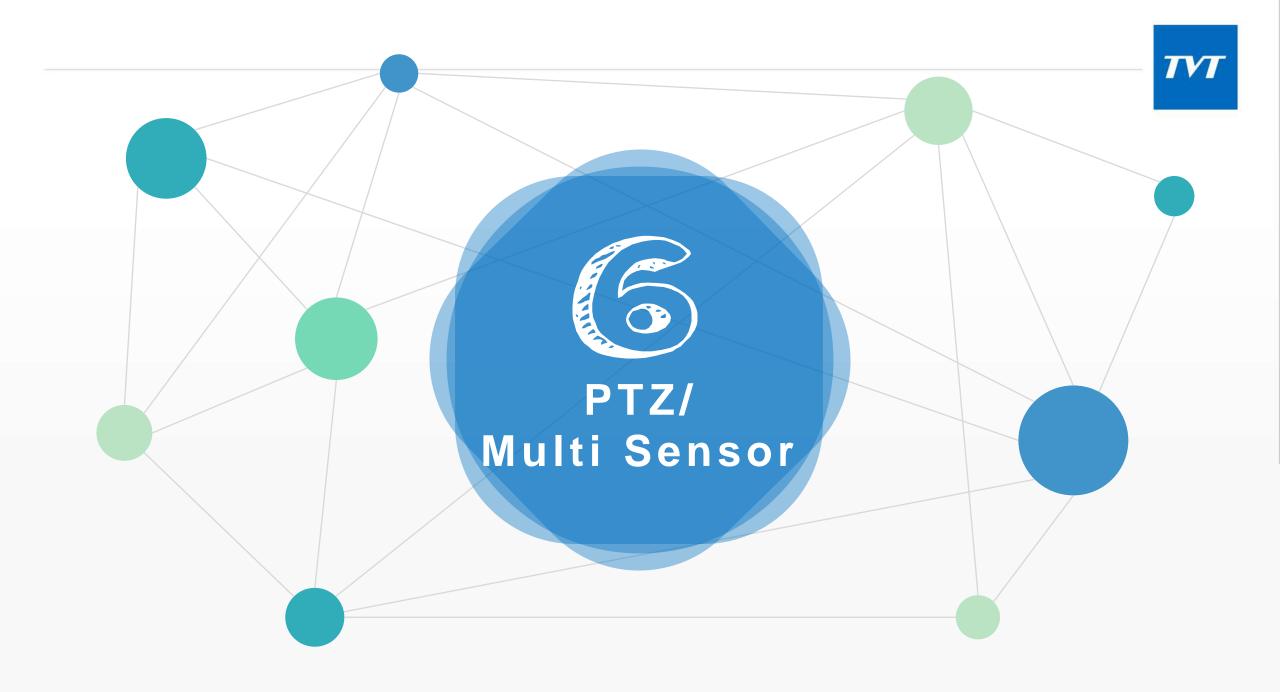
- ✓ AcuSearch;
- ✓ Universal Object Recognition;



- ✓ AcuSearch;
- ✓ Universal Object Recognition;
- ✓ Large models with self-learning
- ✓ Large Model Text Search



- ✓ AcuSearch;
- ✓ Universal Object Recognition;
- ✓ Large models with self-learning
- ✓ Large Model Text Search
- ✓ Large model algorithms training





8 inch high end PTZ (laser infrared)



Parameter Specifications



1/1.8 ", SONY 4th generation latest starlight sensor, cinema imaging quality



Minimum illumination 0.0005 lux@F1.2



800m intelligent suppliment light, video automatically matched zoomed laser



6 ~ 222mm lens, 37x optical zoom, 8x digital magnification



High RPM, horizontal 240°/ s vertical 180°/ s

Al Intelligent algorithm



1.5T computing power, deep learning engine, on-board large memory, 1 second to complete the local database fast information retrieval;



Support regional intrusion/entry/departure detection, sound anomaly, face detection/capture/comparison, license plate capture/recognition, tracking



Professional design, quality assurance



IP67 IK10 protection



6KV lightning protection, gas discharge



-40 °C ~ 65 °C wide temperature work, built-in heater and fan



7 in 2 out alarm interface, 1 in 1 out audio interface, RS485, support SD card, reset



Electric wiper, timing/manual water removal, fear no wind and rain

√ 4MP:

- ✓ Regular: TD-8843IM2N(PE/WP/37M/VL80)
- ✓ Enhanced: TD-8843IM2N(PE/WP/37M/VL81)

✓ 8MP:

√ 4K model: TD-8883IM2N(PE/WP/37M/VL80)

Enhancements

- Improved resolution to 2688x1520;
- Support 60tps display;
- And add license plate recognition and vehicle management algorithms

180 panoramic





180° panoramic stitched image



Starlight imaging, minimum illumination 0.008 lux@F2.0



Support face recognition, intrusion detection, crowd density, smart tracking etc



audio, alarm interface, built-in 4GB EMMC, SD card, reset, etc



IP67 & IK10, 6K V lightning protection, surge protection, etc

Application scenarios



Stadium



Natatorium



School playground



Office hall



Large mall



Cinema



√ 4×2MP: TD-6424M3(D/PE/AR2)

panoramic stitching

√ 4×4MP: TD-6444M3(D/PE/AR2)

360 panoramic





360° panoramic non-stitching camera



4ch 5M, each support motorized pan/tilt/zoom/roll, Each 2.8-8mm zoom



Support deep learning algorithm,ntrusion detection,perimeterprotection,etc



-30°C ~ 55°C wide temperature workcondition



IP67&IK10,6 KV lightning protection, transient suppression, etc



TD-6354E3N(D/PE/AR2) 4x5MP, 4-lens 360° non-splicing

Application scenarios













Community plazas



Playground





Tourist attractions





360° panoramic stitching camera



Starlight, minimum 0.008 lux@F2.0



Support deep learning algorithm, ntrusion detection, perimeter, tracking etc



-30°C ~ 55°C wide temperature work condition



Support VR reality linkage



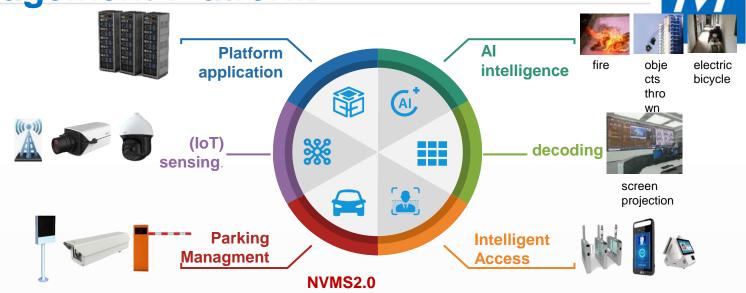
IP67 & IK10, 6 K V lightning protection, ,

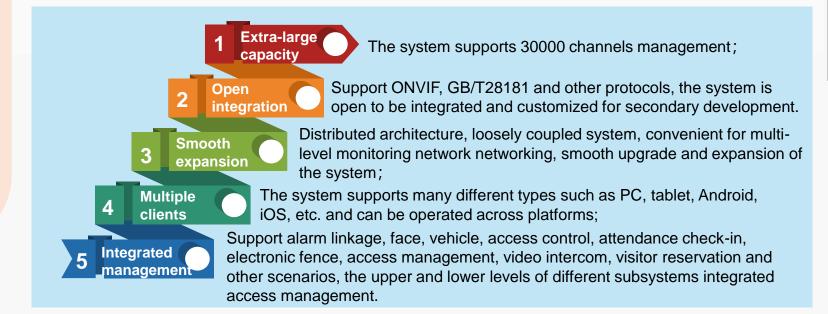


NVMS2.0 Integrated Management Platform

NVMS 2.0

TVT NVMS is a new generation of integrated security management platform, which is oriented to the customer's demand for multisystem integrated management and multiservice integration, and has powerful video surveillance management capability. It has multi-scenario intelligent applications such as real-time preview, playback, query, storage, alarm linkage, decoding on the wall, PTZ control, vehicle management, intelligent access, etc., which meets the customer's demand for multi-system integrated management and multi-service integration and has wide applicability.





The same as high-end industry platform product overview



all-in-one



A708E Series 8 disc position A724E series 24 disk slots Platform all-in-one Platform all-in-one



Servers



A300 Series Microserver



A400 Series 2 disk slots Manage all-in-one Server



A500 Series 2 disk slots Management/forwarding/ gateway server



A700 Series 1 disc position ARM architecture microserver



A700 Series 2 disk slots **ARM Architecture** Management/forwarding/gateway server

Disk array



S316E 16 disk slots **Storage Array**



S324E 24 disk slots **Storage Array**



36 disk slots for S336E **Storage Array**



S348E 48 disk slots Storage Array



S724M1 24 disc position **Storage Array**

Decoding device



1100 Series 2/4-way **Hd Decoder**



A130 Series 8 to 24 channels **Decoding Matrix**



1200 Series 4 way 4K decoder

2024 2023

Lightweight Management Server A300







Maximum support for 256 channels or 64 devices to access, support for resource configuration, user rights, PTZ control, etc., support for IPC, NVR, access control panel, AI BOX and other device management

4K decoding

Decoding capability up to 24*1080P, support up to 4K Extreme HD quality display

It supports a variety of intelligent scenarios such as face attendance, face welcome, headcount, electronic map, parking management, temperature screening, industrial temperature measurement, decoding on the wall, face arming, map searching, track playback, blacklisting and stranger alerts.

"All in One" Management

A300 series server, factory pre-installed NVMS2.0 Standard software, supports rich platform management capabilities, can meet the small and medium-sized security integrated application.

Al characterization

Lightweight management ARM architecture microserver A70





Based on the "All In One" design concept, it integrates management, video preview, distribution and storage, alarm linkage, flexible decoding and Al capabilities, and has the characteristics of simple deployment, flexible upgrade, elastic expansion, stability and reliability



Hardware configuration upgrade



Device performance upgrades



Upgrade of intelligent features

- ✓ Dual gigabit network port, dual HDMI output
- ✓ New 64GB eMMC and 8GB mass memory, new support for 1 hard disk storage
- ✓ Support for local face/license plate database
- ✓ Added USB console debugging interface
- ✓ New ARM embedded architecture design
- ✓ Support 16MP access, 4K image quality display, up to 3840×2160@60fps
- ✓ Higher bandwidth performance,
 access/forwarding/storage: 512/128/256 Mbps
- ✓ Support 256-channel access or 64 device management
- ✓ NVMS2.0 software pre-installed, supports intelligent scene management
- ✓ More flexible API or SDK docking integration

High-end industry products (server)





A300 (256 channels)

"ALL IN ONE" lightweight integrated management



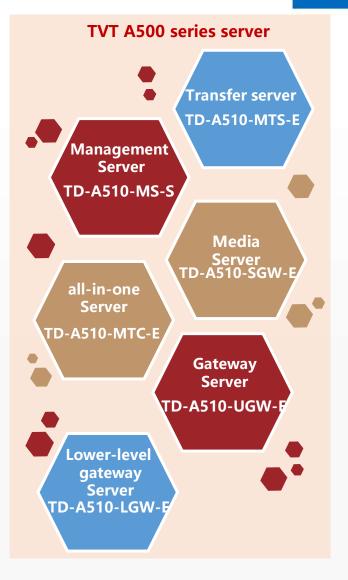
A400 (1024 channels)

"ALL IN ONE", for medium and large industry projects, to achieve integrated comprehensive application management.



A500 (expandable to 10,000 channels)

For large-scale industry project scenarios, distributed deployment, loose coupling, super large capacity, flexible application.



Embedded platform server A700 series







8GB DDR4 RAM, 64GB EMMC

12 x 1080P decoding capability

4K Maximum 4K@60fp display

bandwidth: 512/256Mbps

SATA3.0*1, single disk 10T

Gigabit network card *2, HDMI*2, local audio output *1, USB console*1

Face: 10,000 face library, License plate: 10,000 license plate library

software pre-installed before shipment



High performance ARM processor, embedded linux system

📄 8GB DDR4 RAM, 64GB EMMC

25*1080P decoding capability

цк Maximum 4K@60fp display

bandwidth: 512/256Mbps

SATA3.0*2, single disk 10T

Gigabit network card *2, HDMI*2, local audio output *1, 4 in 4 out alarm interface, USB console*1

Face: 20,000 face library, License plate: 10,000 licenses

software pre-installed before delivery



High performance ARM processor, embedded linux system

8GB DDR4 RAM, 64GB EMMC

25*1080P decoding capability

цк Maximum 4K@60fp display,

bandwidth: 640/256Mbps

SATA3.0*8, E-SATA*2,

Gigabit network card *2, HDMI*4, local audio output *1, 16 in 4 out alarm interface, RS485*1

Face: 30,000 face library, License plate: 10,000 license plate library

software pre-installed before delivery



High performance ARM processor, embedded linux system

8GB DDR4 RAM, 64GB EMMC

25*1080P decoding capability

up to 4K@60fp display

bandwidth: 768/256Mbps

SATA3.0*8, E-SATA*2

Gigabit network card *2, HDMI*4, local audio output *1, 16 in 8 out alarm interface, RS485*1, RS232*1, redundant dual power supply

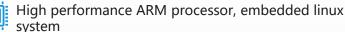
Face: 30,000 face library, License plate: 10,000 license plate library

software pre-installed before delivery

Decoding device







8GB DDR4 RAM, 16GB EMMC

32*1080P decoding capability

Support 1 way 8K/3 way 4K/4 way 1080P quality display, a variety of picture segmentation display mode

4 in 4 out alarm interface, 1 in 1 out audio interface, 1 in 1 out RCA interface

Support RTSP/RTP/SDK/ONVIF and other modes of stream fetching,

Support master/slave device cascade, up to 64 devices cascade

Gigabit network port *2, HDMI output *4, HDMI input *1, VGA*1 USB3.0*1, USB2.0*2, USB console*1

Support device search and discovery, network configuration, preview and decoding, remote operation and other management



High performance X86 processor, embedded linux system

TD-A130 (8/10/12/16/20/24

channel)

64*1080P decoding capability, can be extended to 192*1080P

The device supports up to 12 decoding board cards, each supporting 16*1080P decoding capability

The decoding matrix can be flexibly configured and supports up to 4K image display

A single decoding card supports audio 1 in 1 out, alarm interface 8 in 8 out, flexible expansion

Support RTSP/RTP/SDK/ONVIF and other modes of stream fetching

Support master and slave device cascades, up to 64 devices cascades

Single decoding card supports Gigabit network port *2, Single decoding card supports Gigabit network | HDMI input *1, HDMI output *2, VGA*1, BNC*1, RS485*1, USB3.0*1

> Support device search and discovery, network configuration, preview and decoding remote operation and other maintenance management

Decode display



Operations management





























Storage Matrix







8GB RAM, expandable up to 64GB

Dual gigabit network card with load balancing and Dr Switching

L Series: Full 160TB, hot swappable Series E: Full 256TB,, hot swap

800/800/96Mbps

RAID level 0/1/5/6/10

L Series: 600W single power supply Series E: 550W 1+1 redundant power supply

✓ High performance✓ WEB management interface,



L Series: Intel i3-4170 E Series: Intel Xeon Processor E3

8GB RAM, expandable up to 64GB

Dual gigabit network card with load balancing and Dr Switching

Full 384TB, hot swappable

800/800/96Mbps

RAID level 0/1/5/6/10

L Series: 600W single power supply Series E: 800W 1+1 redundant power supply

✓ High performance ✓ WEB management interface



S Series: Intel i3-6100

E Series: Intel 13-6100 E Series: Intel Xeon Processor E3

8GB RAM, expandable up to 64GB

Dual gigabit network card with load balancing and Dr Switching

Full 576TB,hot swappable

800/800/96Mbps

RAID level 0/1/5/6/10

1200W 1+1 redundant power supply

✓ High performance ✓ WEB management interface



S Series: Intel i3-6100 E Series: Intel Xeon Processor E3

8GB RAM, expandable up to 64GB

Dual gigabit network card with load balancing and Dr Switching

Full 768TB, hot swappable

300/800/96Mbps

RAID level 0/1/5/6/10

1200W 1+1 redundant power supply

✓ High performance ✓ WEB management interface

Keyboard





LCD screen, support bilingual display



Support mechanical keys, four dimensional rocker, shuttle control and other different operations, accurate and flexible, fast positioning



Support decoder playback control, decoding on the wall, keyboard prompt tone



Support PTZ mode, platform mode, serial port mode and other multi-mode switching



Support seamless integration with the NVMS platform



Support POE/DC12V power supply, power consumption \leq 5W



TD-K12







Android6.0 operating system, 10.1 inch (1280*800 resolution) capacitive touch screen support multiple languages.



4 D joystick, accurate and flexible, fast positioning



Decoding ability: 1 way 4K@30fps@H.265; 1 way 1080P@60fps @H.264; Route 4 720P@30fps @H.264



Support a maximum of 1024 devices to add



Support seamless integration with the same NVMS platform



Support RJ45*1, RS485*1, RS232*1, HDMI*1, USB2.0*1, 3.5mm audio



power consumption < 15W



Thermal Cameras



Thermal imaging principle: According to the radiation energy of the object, the thermal image of the target object is processed by the system, and displayed in gray level or false color. Commercial thermal imaging uses thermal infrared with wavelength 8-14µm.



Bullet thermal series

√Thermal imaging: 384×288



Turret thermal series

√Visible light: 5MP;

√Thermal imaging: 256× 192/384 × 288/640 ×512



Dual spectrum high speed dome series

✓Visible light: 32X 4MP;

√Thermal imaging: 384 x 288



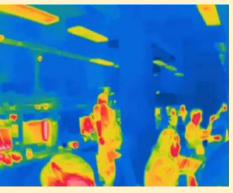
Dual spectrum Positioning PTZ

√Visible light: 50X 4MP;

✓Thermal imaging: 640 x 320

TVT thermal products are standardized with iron red, rainbow, lava, white heat, black heat five display modes











Iron Red Rainbow Lava White heat

Black heat

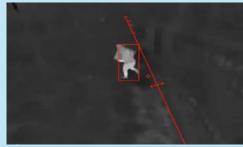
Thermal VS Optical Camera



Thermal Image







Not affected by obstacles



Can't show target

Temperature information



Temperature display



No temperature information

Long-distance



Long monitoring distance



Limited monitoring distance

Thermal Image Surveillance Advantages

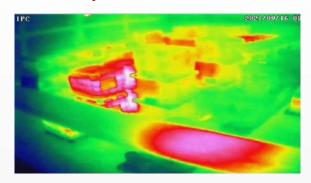
- Not affected by light: No need for any lighting conditions, relying on the object's own radiation of infrared thermal energy can be clear imaging, breaking through the human visual barriers, all-weather use, no light pollution, good concealment, strong target identification capabilities.
- ✓ Better anti-interference capability: With stronger penetration, not afraid of smoke, dust and other environmental factors, as well as rain, snow, fog, haze and other inclement weather, thermal imaging monitoring in complex conditions imaging effect is almost unaffected.
- Temperature field can be observed: It can accurately display the temperature distribution and change of the object, and the temperature change is sensitive, which can be applied to human body temperature measurement, industrial temperature measurement, environmental monitoring and other scenes.
- ✓ Longer monitoring distance: General infrared lamp products are only about a hundred meters effective monitoring distance, while the telephoto thermal imager can observe more than a few thousand meters of people or vehicles, to achieve ultra-vision monitoring.

Scenarios of Thermal Camera





Oil production



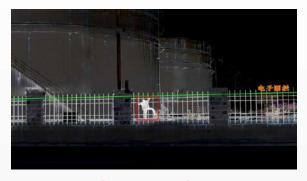
Factory fire protection



Desert (harsh environment)



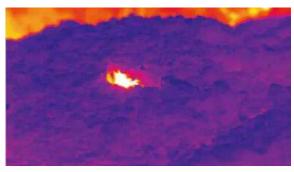
Smoke and fire



Perimeter defense



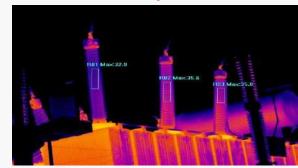
Harbor



Forest fire prevention



Chemical production

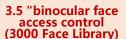


Power utilities

Smart access control products







Access

Control Products



3.5 "binocular face 7 "binocular face access control (10,000 Face Library)



8 "binocular face access control **(40000 Face Library)**



4.3 "/7" video intercom (indoor unit) (10,000 face library)



Multi-button video intercom (Outdoor unit)



Smart visual doorbell (Wired /WIFI/ swipe card)



Indoor doorbell

Face-specific camera, dramatically reducing the impact of backlighting on the face



Support remote video preview, video intercom, remote control



Based on deep learning algorithms, 99.7% accuracy in ID recognition



Support tamper alarm, support Wi-Fi, support disconnected operation



Support face detection, capture, comparison, abnormal alarm, support photo, video anti-fake, support live body detection, eliminate non-real face deception

Access Control are widely used in various scenarios



TVT smart access control series products(New)

Video intercom



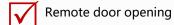




Cloud APP message push







Video intercom indoor unit

Real-time video intercom

Remote mobile Internet

Scenarios:

- ✓ Master's home: Face recognition/password/access card/key and other multi-mode door opening.
- ✓ Visitor arrival: Call by room number, visual intercom, intelligent capture.
- ✓ No one home: Initiating visual intercom request to mobile APP via cloud platform.



SECURE THE WORLD WITH YOU! Thank you

