



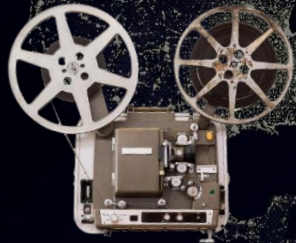
Tiandy

AK ANALOG KILLER ACTION

Tiandy Technologies Co., Ltd.



## Development of security



1957

The earliest  
surveillance



1980

CCTV era



1990

Analog-digital hybrid  
era



Now

Alot era



2010

IP era

## Analog market situation

1000000000

Analog cameras are sold every year

50 %

Global market proportion

3 Billion USD

The global annual sales volume is over 3 billion dollars





## Market analysis



Why does the analog camera still exist on the market?



Low price  
Easy to use



Some companies fear to  
break the rules



Others do not have  
ability to do it



## Why we can do



### 30 years

Tiandy dedicate into security industry for over 30 years

### 2500+

Employees around the world

### 80 areas

More than 80 countries and regions

### 500+

More than 500 smart cities around the world



## Why we can do



# 1000+

Engineers for the R&D  
department



# Leading

Technology in the industry



# CMMI 5 V2.0

19th in the world, 1st in the industry



## What users actually care?



### Picture Quality

Picture is crystal clear to see all the details.



### More Proof

We have built-in Mic, Audio and video recording.



### Best Price

Best price quality, people can use it for many years.



### Easy to Use

It must be easy to use for a user without any IP knowledge.

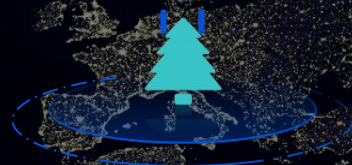


### Privacy

Information safety, avoiding leakage of video and recording.



## Five key advantages



Better performance



Full function



Cost-efficient



Easier installation



Higher security





Better performance

Tiandy



3DDNR



DNR



2DDNR

With our 3D noise reduction function, the output images are less noisy ,with more vivid colors.





Better performance

Tiandy



30m

2 array lights, 30m LED night visible distance



IR  
Distance



20m

2 lights, 20m distance, poor image effect

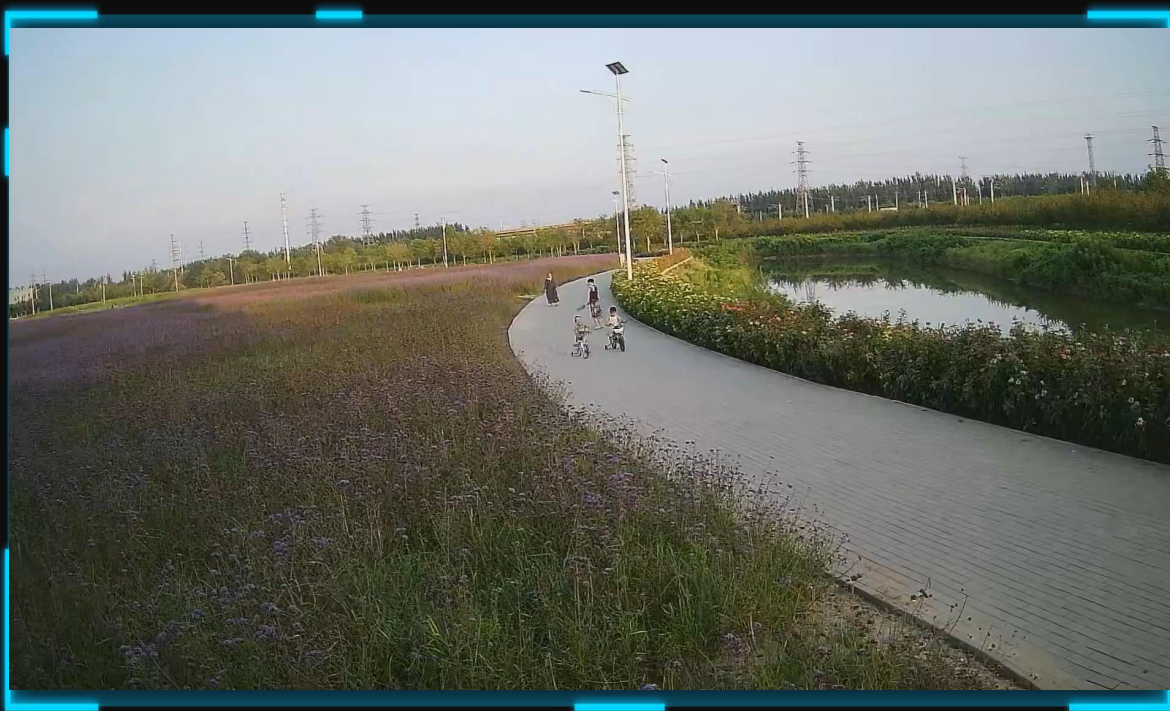
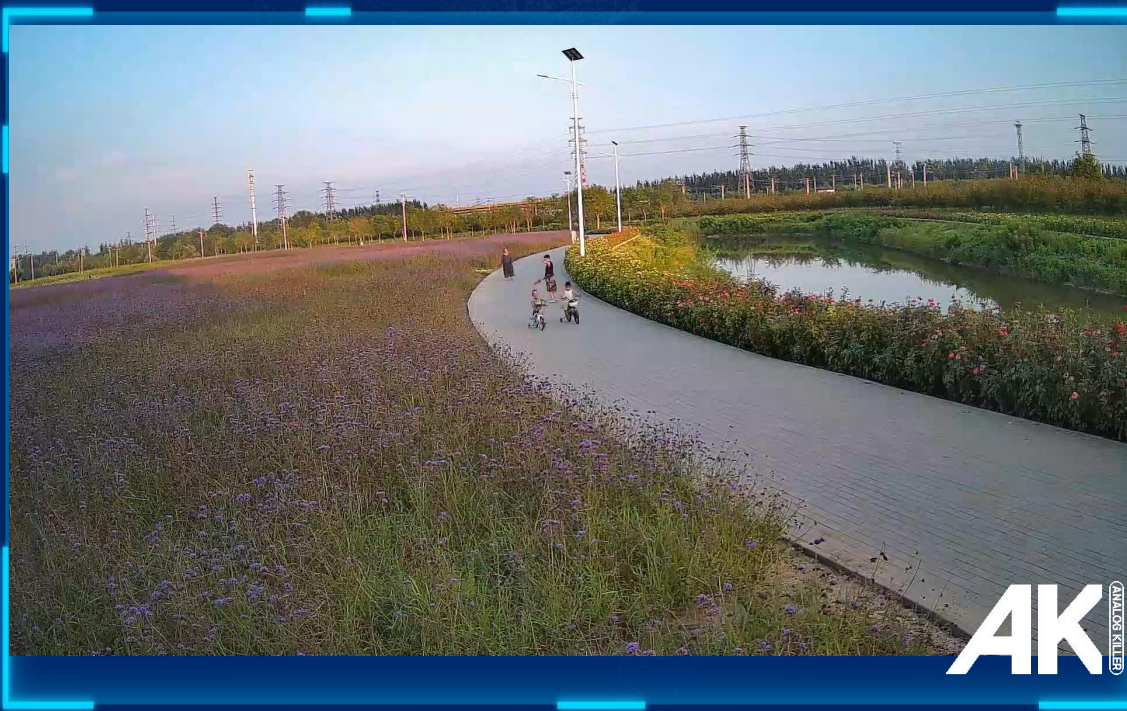




Better performance

Tiandy

Day



People and grass details are better rendered, The overall image quality is more sharp and clear.





Better performance

Tiandy

Night



Leaf details are clearly visible, The overall image quality is more clear.



Poor image quality, no details, The image looks foggy.



Full function

AK

ANALOG KILLER

## Standard configuration

Built-in mic, more convenient for audio communication for real time monitoring

## Analog product

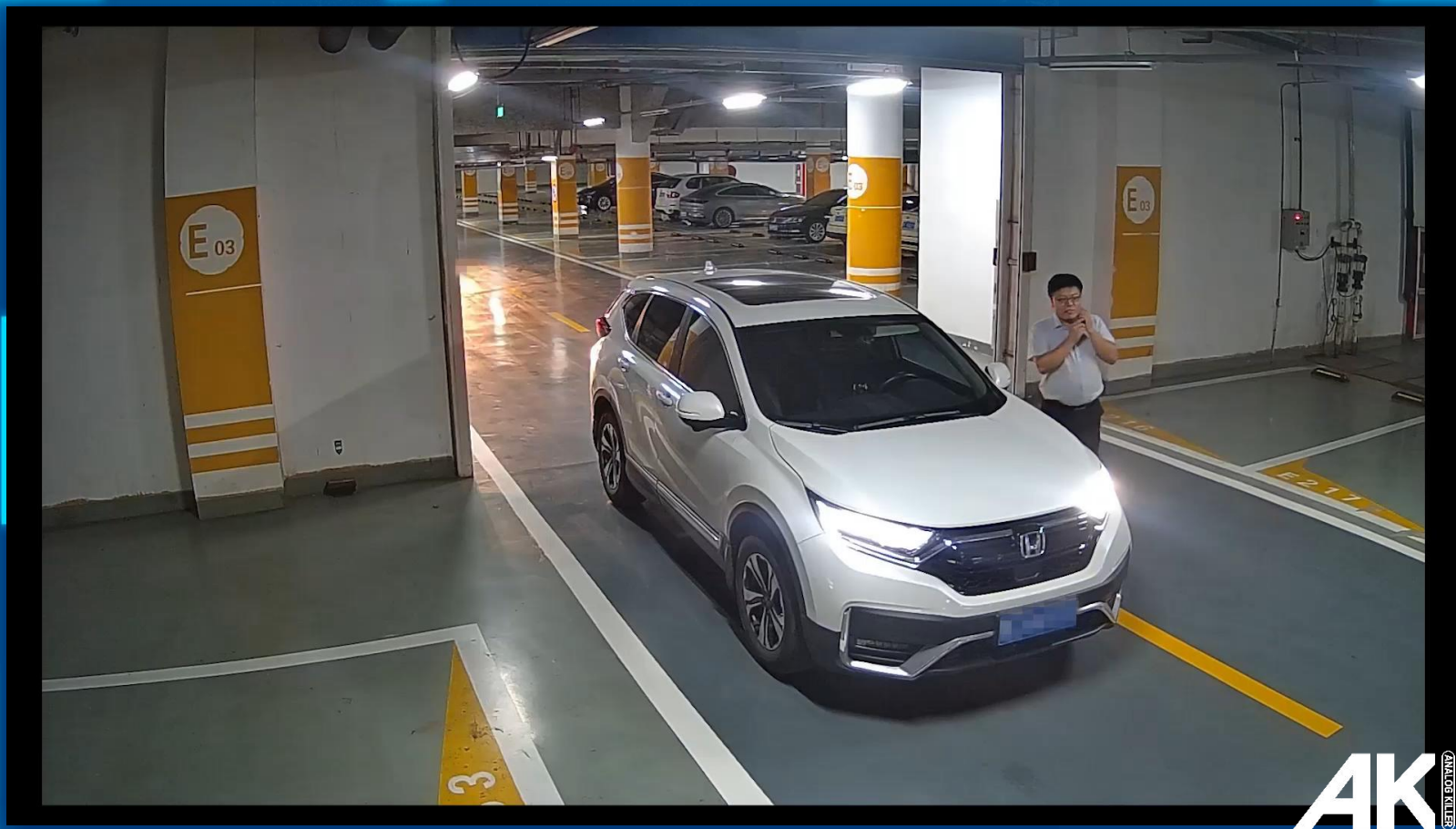
The entry-level products don't have mic, and if add the mic function, it will increase the flat-cost.





# Full function

Tiandy



Audio and video recording

Built-in mic  
5m low loss pickup



# Full function

Tiandy



## Motion detection

- 1 Motion detection supported on IPC
- 2 A picture will be captured when detected
- 3 You can get message by phone when triggered



## Cost-efficient



Supply chain

Saving costs from the source



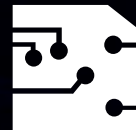
Production process

Production time control

COST

COST

COST



R & D design

Pursuing ultimate R & D design



## Cost-efficient

Tiandy



AK series to achieve  
extreme competitive  
price, fully automated  
production, quality  
assurance



## Cost-efficient

### No discount on quality



IP67

Prevent dust  
and waterproof



2 years  
warranty

Temperature  
-30°C ~ +60°C



6KV

Protect IPC from  
lightning



## Easier installation

### Power Over Ethernet



+



Only with one cable , it can function perfectly.

### Independent power supply



+



Generally, it require power cable and coaxial cable, occasionally even need audio cable for son out-put.





***PK***

but the wiring is very complex



## Plug and play





## Higher security

### User security management

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The user registration.  
Authority management.

USER

### Data security management

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Video encryption and decryption.  
Log-in encryption.

DATA



## Product layout

### Bullet



**TC-C321N**  
Spec: I3/E/Y/2.8mm (4mm)

- 2MP@30ps
- 2.8/4.0mm, fixed
- 30m IR range
- Bulit-in MIC
- 3D DNR
- IP67, POE

### Turret



**TC-C320N** Spec: I3/E/Y/2.8mm

- 2MP@30ps
- 2.8mm fixed
- 30m IR range
- Bulit-in MIC
- 3D DNR
- POE

### PSE NVR



**TC-R3104**  
Spec: I/B/P4/C/L/S

- 1 HDD 4ch
- Income 60Mbps
- Outgoing 40Mbps
- Recording resolution 5MP
- 1 HDMI, 2 USB

### PSE NVR



**TC-R3108**  
Spec: I/B/P8/C/L/S

- 1HDD 8ch
- Income 60Mbps
- Outgoing 40Mbps
- Recording resolution 6MP
- 1 HDMI, 2 USB



# AK NVR physical interface



## Power interface

DC 48V



## POE interface

4/8\*POE



## Network interface

Connect AK camera



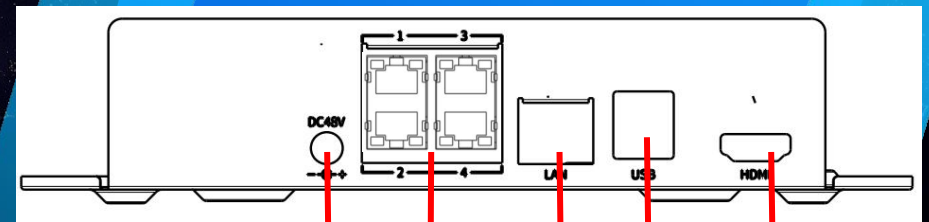
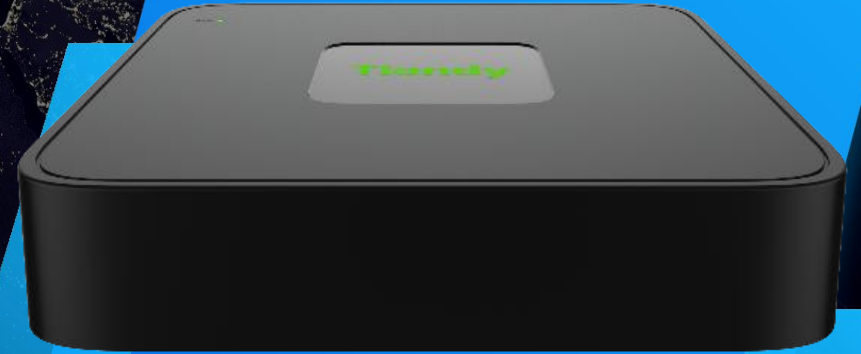
## USB port

2 \* USB2.0



## HDMI output

1 \* HDMI



Power  
interface

POE interface

2 \* USB2.0

1 \* HDMI

1 \* Network  
interface



## Environmental suitability

### Surging prevention

Protect NVR from been destroyed by high level voltage



Surge: 6KV

TVS diode

Anti static and surge



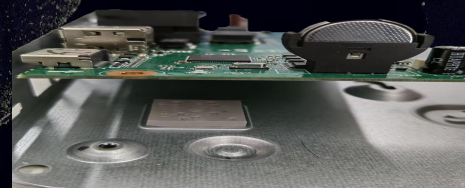
### Volt & Wide temp

Suitable for power unstable cities, and places with different temperature environment



Volt: DC48V

Temp:  $-10^{\circ}\text{C}$  ~  $+55^{\circ}\text{C}$



The base is designed with steel plate

Anti throw and anti deformation

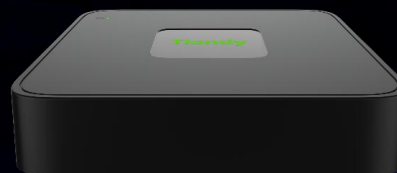
### Dissipation

Allow 6T capacity HDD storage and smooth operation for user



Radiator on chip


Metal heat conduction, Disperse the heat without noise





# Parameter comparison

**Tiandy**

	 <b>Tiandy</b>	 <b>Dahua</b>	 <b>Tiandy</b>	 <b>Dahua</b>
	<b>TC-C321N</b>	<b>DH-HAC-B1A21</b>	<b>TC-C320N</b>	<b>DH-HAC-T1A21</b>
<b>Sensor</b>	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
<b>Lens</b>	F2.2	F2.0	F2.2	F2.0
<b>IR range</b>	30m	20m	30m	20m
<b>MIC</b>	YES	N/A	YES	N/A
<b>3D DNR</b>	YES	N/A	YES	N/A
<b>Motion detection</b>	YES	N/A	YES	N/A
<b>P2P</b>	N/A	N/A	N/A	N/A
<b>Language</b>	English	N/A	English	N/A
<b>ONVIF</b>	YES	N/A	YES	N/A
<b>Protection</b>	IP67	IP67	N/A	N/A
<b>Material</b>	Metal&Plastic	Plastic	Metal&Plastic	Plastic
<b>Power</b>	POE 3.5W	DC12V 2.7W	POE 3.5W	DC12V 2.7W

# Parameter comparison

Tiandy



	Tiandy	Dahua	Tiandy	Dahua
	TC-R3104	DH-XVR4B04-V2	TC-R3108	DH-XVR4B08-V2
Channel	4	4	8	8
Video input	4-ch:5MP	4-ch:1080P	8-ch:6MP	8-ch:1080P
Video output	HDMI, 1920×1080	HDMI, 1920×1080 VGA, 1920×1080	HDMI, 3840x2160	HDMI, 1920×1080 VGA, 1920×1080
Screen split	1/3/4	1/4	1/3/4/5/6/7/8/9	1/4/8/9
POE	YES	N/A	YES	N/A
Audio I/O	N/A	YES	N/A	YES
USB	2 USB 2.0	2 USB 2.0	2 USB 2.0	2 USB 2.0
Power	DC48V, 1A	DC12V, 1.5A	DC48V, 1.35A	DC12V, 1.5A
Operating conditions	-10° C~55° C	-10° C~45° C	-10° C~55° C	-10° C~45° C





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