

TURBO HD 3.0  
ANALOG SOLUTION

**HIKVISION**

***TURBO HD 3.0***



[www.hikvision.com](http://www.hikvision.com)

REV UP ANALOG WITH  
TURBO HD OVER COAX

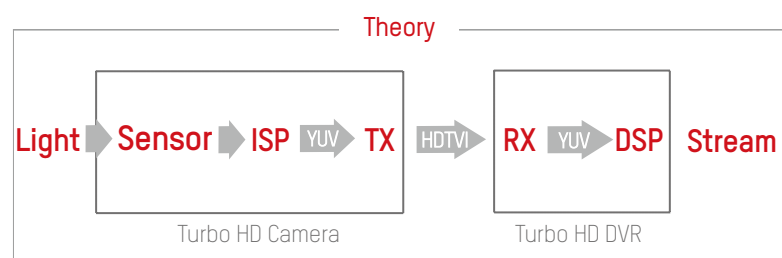


## The Trends and Market Requirements for HD Products

With the recent and rather substantial surge in the need for up-to-date surveillance systems, installers often find themselves scrambling to patch together old technology with new products. Naturally, compatibility challenges pop up everywhere. When you need to update or upgrade an existing video surveillance system, finding the right gear is one of the biggest difficulties. Not only that, but removing old components and cables to install new equipment often makes a project more complex than simply starting from scratch. You need surveillance products that are widely compatible, simple to install, and cost effective. Hikvision provides just that – in our Turbo HD 3.0 Analog Solution.

Specially designed for analog users who want a high-definition surveillance system, Hikvision's Turbo HD 3.0 Solution makes High Definition video possible without upgrading to IP cameras or even replacing existing cabling structure. Turbo HD 3.0 technology takes current equipment and powers it up to the next level.

### HDTVI TECHNOLOGY

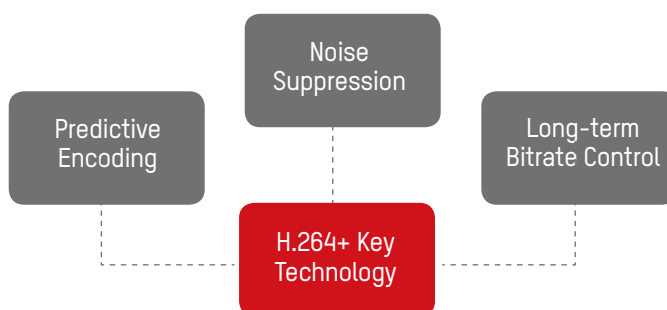
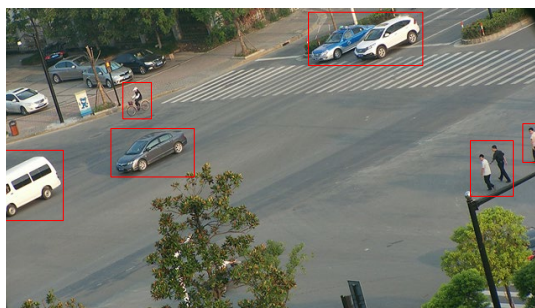


#### HIGHLIGHTS

- HDTVI (HD Transport Video Interface) standard
- Transmission media: SYV75-3/SYV75-5/UTP
- Farther transmission distance(1200/800m)
- Low-frequency signal, great anti-interference & image performance

## ■ H.264+: SAVE 50% Bitrate as Average

Maximizing the memory of security systems is critical. But Hikvision is solving that problem, with H.264+. The "+" on our "H.264+" means a step up in efficiency from the standard H.264 – bitrates are reduced by 50% on average while high transmission quality is maintained. That means more data becomes available, and it means more memory remains available in existing recording devices and computer systems.



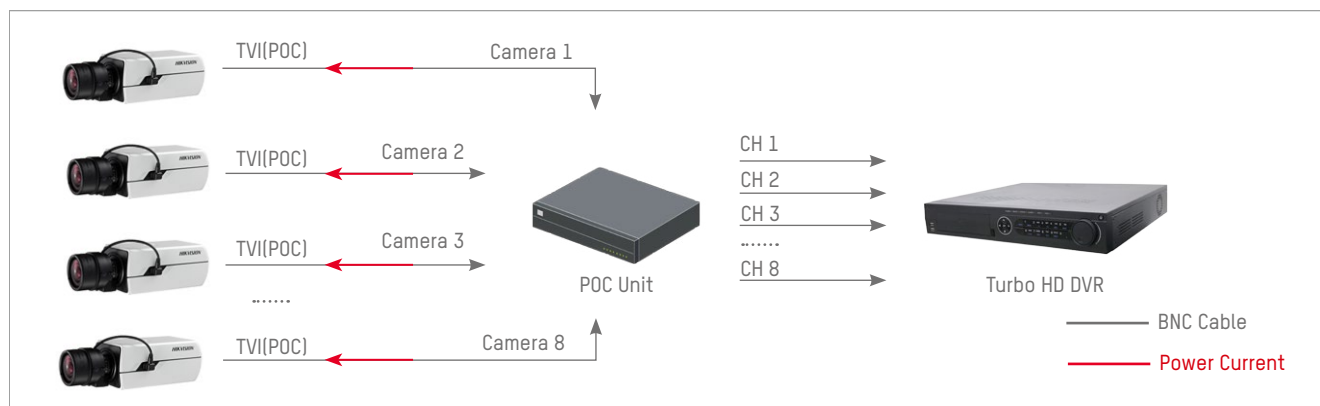
## ■ Longer Transmission Distance

As any successful business grows, so does its need for extended security. Once a complete system has been installed, it's not very long before it needs to expand. Using our technology, your customers can manage much larger projects, or extend existing ones, with high definition video while simultaneously increasing the transmission range. Users immediately find an increase in transmission distances – even up to 2625 feet (800m) – using existing coaxial cable. The full value of the user's investment comes through in HD 1080p resolution. That means upgrades in both quality and size at the same time.



## ■ Easier Installation with POC

Once the equipment has been selected, the next hurdle is the hardware installation process. This is usually the toughest part, but now it's gotten significantly easier. You can leave that existing coax cable right where it is. Hikvision's Power-over-coax (POC) feature radically simplifies installation, as one coaxial cable carries both the video signal and the power supply. This translates to reduced installation time, which also translates to a reduction in both installation and material costs – which also means happy customers!



## ■ Up to 5MP

The Turbo HD Analog solution offers up to 5MP HDTVI Camera input and 4K UHD HDMI video output. The HD video output is not just based on the work of sensor, but the combination of the HD lens and Hikvision image signal processing (ISP). HD lenses with low distortion and large apertures enable better low-light performance, while Hikvision ISP provides videos with greater detail and vibrant color.



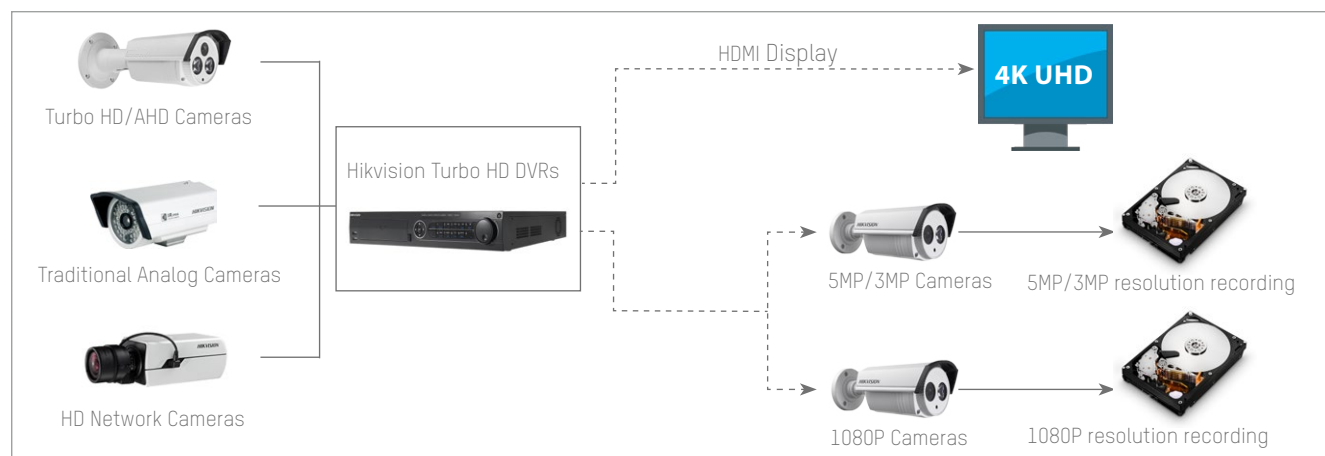
Conventional analog camera



Hikvision Turbo HD analog camera

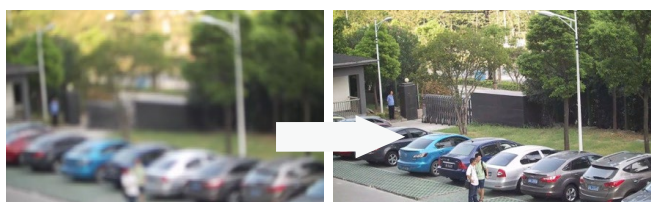
## ■ Tribrid System

The Hikvision Turbo HD DVR offers simultaneous connections to IP, analog, Turbo HD and third-party AHD cameras. Existing systems can be upgraded by simply replacing the current group of cameras and DVRs, and also by adding IP network cameras to cover new areas. Alternatively, users can keep existing SD cameras and only upgrade the necessary surveillance points to HD. The Turbo HD solution offers seamless compatibility with various third-party HDTVI compliant cameras and DVRs for superior flexibility.

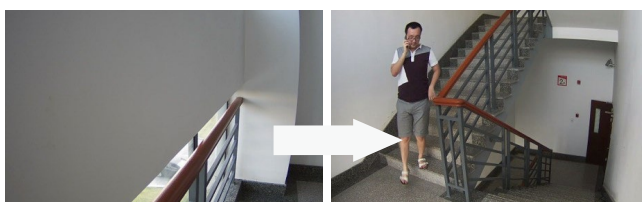


## ■ Smart Detection

The Turbo HD DVR is equipped with smart features such as face detection, defocus detection, and video analytics including traversing virtual plane, intrusion detection, and scene change detection.

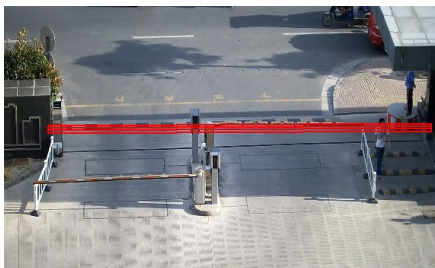


Defocus detection



Scene change detection





Traversing virtual plane



Intrusion detection



Face detection

## ■ Advanced Manufacturing Level

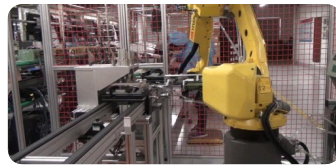
As a manufacturer, Hikvision seeks the highest level of control over product quality, and the manufacturing process greatly contributes to performance of the Turbo HD series. The products are processed in a cleanroom for precise component assembly of camera lenses. In addition, Hikvision uses automation software and rigorous testing to improve production efficiency and ensure consistency. As a result, Hikvision's integrated lens and other product offerings feature high stability and reliability.

The products also undergo environment, aging, and EMC testing — which means that Hikvision Turbo HD products can thrive in extreme temperatures or very specialized environments.



What is Real HD

Because of our advanced, industry-leading manufacturing technologies, the flexible Turbo HD 3.0 Solution offers seamless compatibility with various third-party HDTVI-compliant cameras and DVRs. Your customers don't have to replace each and every component in their setup. With everything you need from cameras to recording devices and more – and extensive compatibility with devices from other manufacturers, too – this easy and affordable solution will upgrade an existing analog CCTV system to high definition. Hikvision helps you solve surveillance installation and extension problems in any situation you encounter.



Auto  
Assembly



Guarantee of  
High Quality



Auto  
Testing

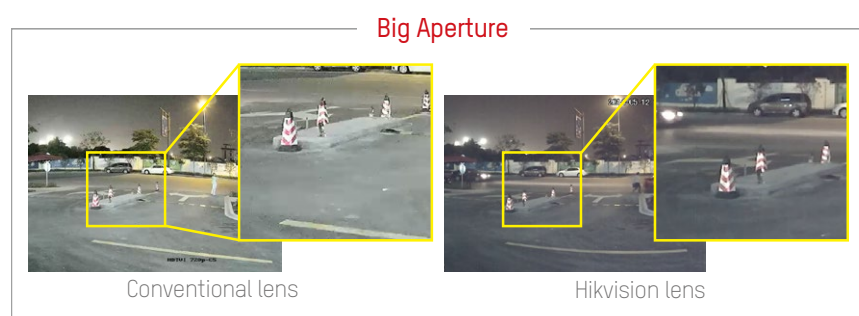


Auto  
Packaging

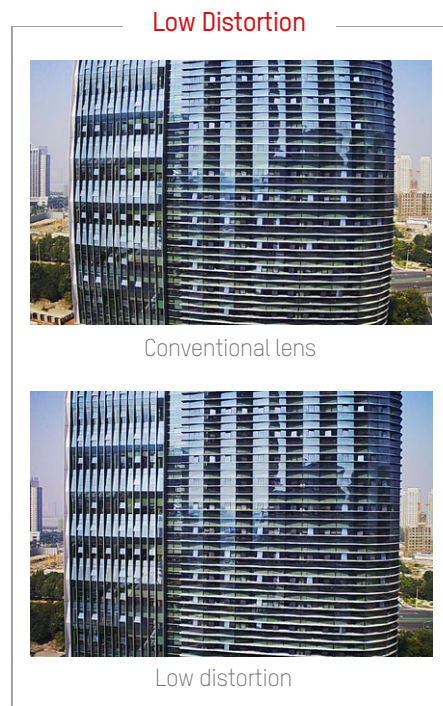
## ■ HD Lens



Hikvision has professional lens division in R&D department—from design to deployment.

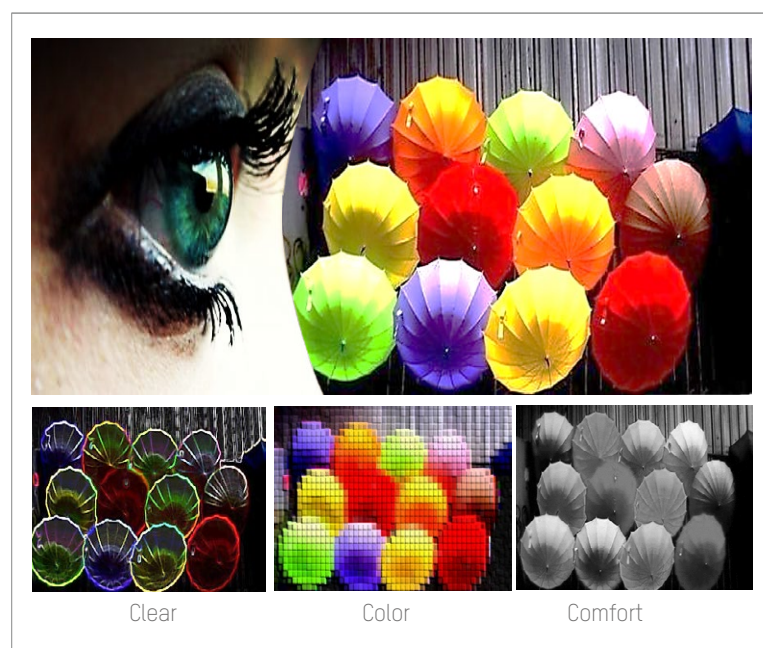


With big aperture, Hikvision Turbo HD cameras have better low light performance at night.



Hikvision Turbo HD cameras use HD lens with low distortion.

## ■ HD ISP



Hikvision's ISP provides videos with more details and real color.





## ■ Manufacturing

### Clean Room



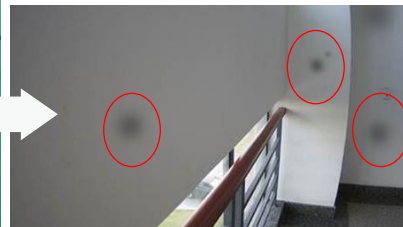
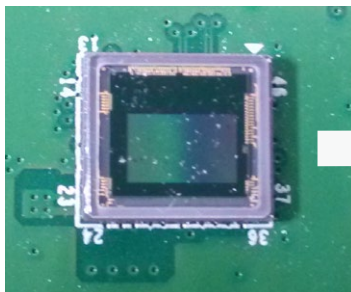
Clean assembly

### Automatic Assembly

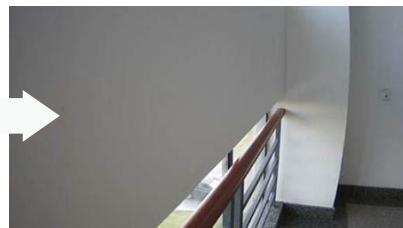
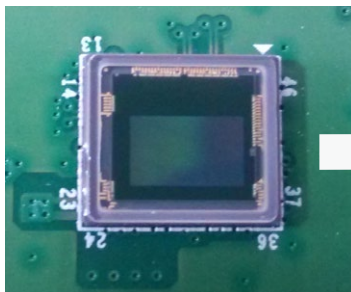


Automatic assembly ensures high efficiency and avoids problems such as defocus.

### Comparison

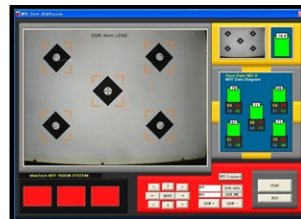
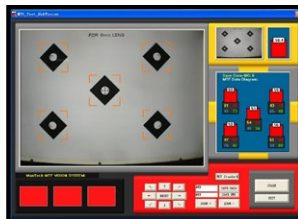


Dust on sensor



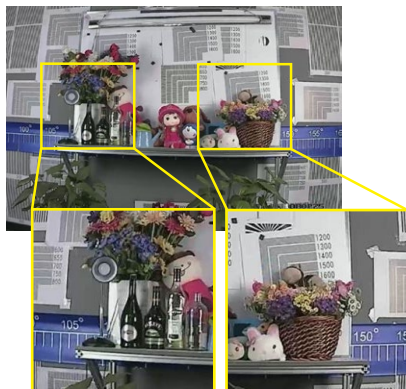
Clean sensor

### Automation Software

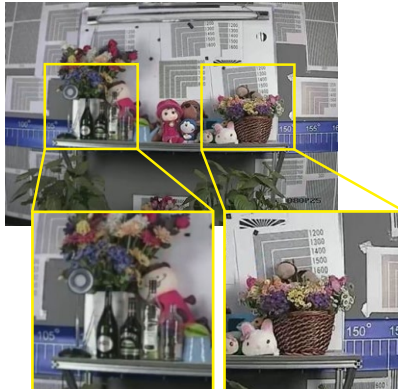


- Hikvision uses automation software and tests machines to improve production efficiency and ensure focus consistency.
- Five blocks must all turn green in the focus station.

### Clear & Defocus



Clear



Defocus

### Seamless Lens



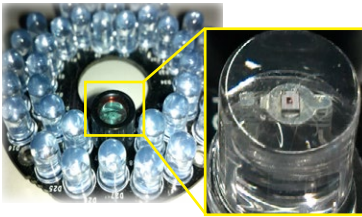
Hikvision's seamless design with an integrated lens



Other brands' design with a separated lens

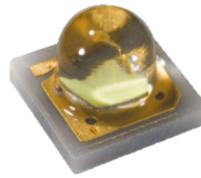
## ■ Reliability

### Components



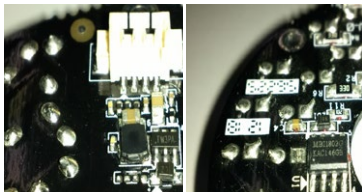
#### Photo Transistor

Hikvision's photo transistor is environmentally friendly and meets RoHS standards.



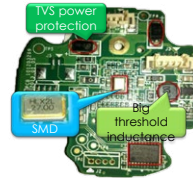
#### Infrared (IR) LED

Hikvision's IR LED has high reliability and a long lifetime (more than 100,000 hours).



#### Constant-Current Circuit

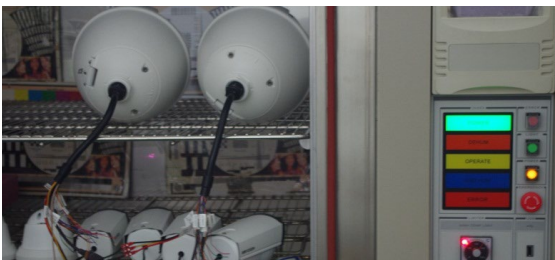
A constant-current circuit chip helps to maintain the IR LED's stability and operational life.



#### Components

SMD technology, high reliability.

### Environmental Testing



Extreme-temperature test cabinet



Aging room

#### Temperature

In an extreme-temperature simulation environment, test the devices' working conditions and determine whether there is any change.

#### Mechanical Environment

Test the devices' performance under vibration, shock, or dropping that may occur during transportation and daily use. Determine whether the IR-cut filter switch functions normally and whether defocus occurs.

#### Special Environment

Test the protection level of devices' enclosure and accessories under salt mist, water, violence, etc.

### EMC Test Item—Surge



Surge test device



Test device for electrostatic discharge anti-interference



#### Electrostatic discharge anti-interference

- Test a single device's or a system's electrostatic discharge anti-interference ability.
- Simulate the electric discharge of operators or objects to the device when in contact or close by.



## Turbo HD 720P PTZ



**DS-2AE5123TI-A**  
720P Analog IR PTZ

- 1.3MP CMOS image sensor, HDTV technology
- 720P video output
- 23X optical zoom, 16X digital zoom
- Up the coax function
- Privacy masking
- 3D DNR, BLC, ICR
- Up to 150m IR distance



**DS-2AE4123TI-D**  
720P Analog IR PTZ

- 1.3MP CMOS image sensor, HDTV technology
- 720P video output
- 23X Optical Zoom
- DWDR
- Up to 100m IR distance
- 3D intelligent positioning function
- Support Turbo HD and BNC output



**DS-2AE4123T-A(3)**  
720P Analog PTZ

- 1.3MP CMOS image sensor, HDTV technology
- 720P video output
- 23X optical zoom, 16X digital zoom
- Up the coax function
- 3D DNR, BLC, ICR



**DS-2AE4223T-A(3)**  
1080P Analog PTZ

- 2MP CMOS image sensor, HDTV technology
- 1080P video output
- 23X optical zoom, 16X digital zoom
- Up the coax function
- 3D DNR, BLC, ICR



**DS-2AE4223TI-D**  
1080P Analog IR PTZ

- 2MP CMOS image sensor, HDTV technology
- 1080P video output
- 23X Optical Zoom
- DWDR
- Up to 100m IR distance
- 3D intelligent positioning function
- Support Turbo HD and BNC output



**DS-2AE5223TI-A**  
1080P Analog IR PTZ

- 2MP CMOS image sensor, HDTV technology
- 1080P video output
- 23X optical zoom, 16X digital zoom
- Up the coax function
- Privacy Masking
- 3D DNR, BLC, ICR
- Up to 150m IR distance



**DS-2AE5230T-A(3)**  
1080P Analog PTZ

- 2MP CMOS image sensor, HDTVI technology
- 1080P video output
- 30X optical zoom, 16X digital zoom
- Up the coax function
- Privacy masking
- 3D DNR, BLC, ICR



**DS-2AE7230TI-A**  
1080P Analog IR PTZ

- 2MP CMOS image sensor, HDTVI technology
- 1080P video output
- 30X optical zoom, 16X digital zoom
- Up the coax function
- Privacy masking
- 3D DNR, BLC, ICR
- Up to 120m IR distance

### Turbo HD 3MP WDR EXIR Cameras

NEW



**DS-2CE16F7T-IT**  
**DS-2CE56F7T-ITM**  
Outdoor EXIR Bullet/Eyeball

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night
- True WDR, Smart IR
- Up to 20m IR distance
- IP66 weatherproof

NEW



**DS-2CE56F7T-VPIT**  
Outdoor Vandalproof EXIR  
Dome

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night
- True WDR, Smart IR
- Up to 20m IR distance
- Vandalproof & IP66 weatherproof

NEW



**DS-2CE16F7T-IT1/3/5**  
Outdoor EXIR Bullet

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night
- True WDR, Smart IR
- 20/40/80m IR distance
- IP66 weatherproof

NEW



**DS-2CE56F7T-IT1/3**  
Outdoor EXIR Eyeball

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night
- True WDR, Smart IR
- 20/40m IR distance
- IP66 weatherproof

**NEW**


**DS-2CE16F7T-(A)IT3Z**  
Outdoor EXIR Motorized  
Vari-focal Bullet

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night
- True WDR, Smart IR
- 2.8-12mm motorized Lens
- 40m IR distance
- IP66 weatherproof
- Dual voltage: 12 VDC/ 24 VAC (-A model only)

**NEW**


**DS-2CE56F7T-IT3Z**  
Outdoor EXIR Motorized  
Vari-focal Eyeball

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night
- True WDR, Smart IR
- 2.8-12mm motorized Lens
- 40m IR distance
- IP66 weatherproof

**NEW**


**DS-2CE56F7T-(A)ITZ**  
Indoor EXIR Motorized  
Vari-focal Dome

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night
- True WDR, Smart IR
- 2.8-12mm motorized Lens
- 30m IR distance
- Dual voltage: 12 VDC/ 24 VAC (-A model only)

**NEW**


**DS-2CE56F7T-(A)VPIT3Z**  
Outdoor EXIR Motorized  
Vari-focal Dome

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night
- True WDR, Smart IR
- 2.8-12mm motorized Lens
- 40m IR distance
- Vandalproof & IP66 weatherproof
- Dual voltage: 12 VDC/ 24 VAC (-A model only)

## Turbo HD 3MP EXIR Cameras

**NEW**


**DS-2CE16F1T-IT**  
Outdoor EXIR Bullet

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night & Smart IR
- Up to 20m IR distance
- IP66 weatherproof

**NEW**


**DS-2CE56F1T-ITM**  
Outdoor EXIR Eyeball

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night & Smart IR
- Up to 20m IR distance
- IP66 weatherproof



NEW



**DS-2CE16F1T-IT1/3/5**  
Outdoor EXIR Bullet

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night & Smart IR
- 20/40/80m IR distance
- IP66 weatherproof

NEW



**DS-2CE56F1T-IT1/3**  
Outdoor EXIR Eyeball

- 3.0 MP high-performance CMOS
- Turbo HD output, up to 3MP(1920\*1536) resolution
- True Day/Night & Smart IR
- 20/40m IR distance
- IP66 weatherproof

### Turbo HD 1080P WDR EXIR Cameras

NEW



**DS-2CE16D7T-IT**  
**DS-2CE56D7T-ITM**  
Outdoor EXIR Bullet/Eyeball

- 2.0 MP high-performance CMOS
- Turbo HD output, up to HD1080p resolution
- True Day/Night
- True WDR, Smart IR
- Up to 20m IR distance
- IP66 weatherproof

NEW



**DS-2CE56D7T-VPIT**  
Outdoor Vandalproof EXIR  
Dome

- 2.0 MP high-performance CMOS
- Turbo HD output, up to HD1080p resolution
- True Day/Night
- True WDR, Smart IR
- Up to 20m IR distance
- Vandalproof & IP66 weatherproof

NEW



**DS-2CE16D7T-IT1/3/5**  
Outdoor EXIR Bullet

- 2.0 MP high-performance CMOS
- Turbo HD output, up to HD1080p resolution
- True Day/Night
- True WDR, Smart IR
- 20/40/80m IR distance
- IP66 weatherproof

NEW



**DS-2CE56D7T-IT1/3**  
Outdoor EXIR Eyeball

- 2.0 MP high-performance CMOS
- Turbo HD output, up to HD1080p resolution
- True Day/Night
- True WDR, Smart IR
- 20/40m IR distance
- IP66 weatherproof

**NEW**


**DS-2CE16D7T-(A)IT3Z**  
Outdoor EXIR Motorized  
Vari-focal Bullet

- 2.0 MP high-performance CMOS
- Turbo HD output, up to HD1080p resolution
- True Day/Night
- True WDR, Smart IR
- 2.8-12mm motorized Lens
- 40m IR distance
- IP66 weatherproof
- Dual voltage: 12 VDC/ 24 VAC (-A model only)

**NEW**


**DS-2CE56D7T-IT3Z**  
Outdoor EXIR Motorized  
Vari-focal Eyeball

- 2.0 MP high-performance CMOS
- Turbo HD output, up to HD1080p resolution
- True Day/Night
- True WDR, Smart IR
- 2.8-12mm motorized Lens
- 40m IR distance
- IP66 weatherproof

**NEW**


**DS-2CE56D7T-(A)ITZ**  
Indoor EXIR Motorized  
Vari-focal Dome

- 2.0 MP high-performance CMOS
- Turbo HD output, up to HD1080p resolution
- True Day/Night
- True WDR, Smart IR
- 2.8-12mm motorized Lens
- 30m IR distance
- Dual voltage: 12 VDC/ 24 VAC (-A model only)

**NEW**


**DS-2CE56D7T-(A)VPIT3Z**  
Outdoor EXIR Motorized  
Vari-focal Dome

- 2.0 MP high-performance CMOS
- Turbo HD output, up to HD1080p resolution
- True Day/Night
- True WDR, Smart IR
- 2.8-12mm motorized Lens
- 40m IR distance
- Vandalproof & IP66 weatherproof
- Dual voltage: 12 VDC/ 24 VAC (-A model only)

### Turbo HD 1080P WDR Cameras



**DS-2CE16D5T-IR**  
**DS-2CE56D5T-IRM**  
Outdoor IR Bullet/Eyeball

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- Up to 20m IR distance
- IP66 weatherproof



**DS-2CE16D5T-IT1/3/5**  
Outdoor EXIR Bullet

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- Up to 20/40/80m IR distance with EXIR
- IP66 weatherproof



**DS-2CE56D5T-IT1/3**  
Outdoor EXIR Eyeball

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- Up to 20/40m IR distance with EXIR
- IP66 weatherproof



**DS-2CE16D5T-(A)VFIT3**  
**DS-2CE56D5T-VFIT3**  
Outdoor Vari-focal EXIR  
Bullet/Eyeball

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- 2.8 – 12mm vari-focal lens
- Up to 40/50m IR distance with EXIR
- IP66 weatherproof



**DS-2CE56D5T-(A)VFIIR**  
Indoor Vari-focal IR Dome

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- 2.8 – 12mm vari-focal lens
- Up to 30m IR distance
- Dual voltage: 12 VDC/ 24 VAC (-A model only)



**DS-2CE56D5T-(A)VPIR3**  
Outdoor Vandalproof IR Dome

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- 2.8 – 12mm vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof & Vandal Proof
- Dual voltage: 12 VDC/ 24 VAC (-A model only)



**DS-2CE16D5T-AIR3ZH**  
Outdoor Motorized lens  
Vari-focal Bullet

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- 2.8 – 12mm Motorized vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof
- Built-in Heater



**DS-2CE56D5T-IR3Z**  
Outdoor Motorized lens  
Vari-focal Eyeball

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- 2.8 – 12mm Motorized vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof





**DS-2CE56D5T-AIRZ**  
Indoor Motorized lens  
Vari-focal Dome

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- 2.8 – 12mm Motorized vari-focal lens
- Up to 30m IR distance



**DS-2CE56D5T-AVPIR3Z(H)**  
Outdoor Motorized lens  
Vari-focal Dome

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- 2.8 – 12mm Motorized vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof & Vandal Proof
- Built-in Heater (DS-2CE56D5T-AVPIR3ZH)



**DS-2CE16D9T-AIRAZH**  
5-50mm Motorized lens  
Vari-focal Camera

- 2.0 MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- True WDR, 3D DNR, Smart IR
- OSD menu
- 5 – 50mm Motorized vari-focal auto focus lens
- Up to 120m IR distance
- IP66 weatherproof
- Built-in Heater



**DS-2CE16D1T-(A)IR3Z**  
Outdoor Motorized lens  
Vari-focal Bullet

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- 2.8 – 12mm Motorized vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof
- Dual voltage: 12 VDC/ 24 VAC (-A model only)



**DS-2CE56D1T-IR3Z**  
Outdoor Motorized lens  
Vari-focal Eyeball

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- 2.8 – 12mm Motorized vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof



**DS-2CE56D1T-(A)IRZ**  
Indoor Motorized lens  
Vari-focal Dome

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- 2.8 – 12mm Motorized vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof



**DS-2CE56D1T-IRMM**  
**DS-2CE56D1T-IRP**  
**DS-2CE56D1T-VPIR**  
 Indoor IR Dome/Eyeball

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- Up to 20m IR distance
- Vandal Proof (DS-2CE56D1T-VPIR)



**DS-2CE16D1T-IR(P)**  
**DS-2CE56D1T-IR(M)**  
 Outdoor IR Bullet/Eyeball

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- Up to 20m IR distance
- IP66 weatherproof



**DS-2CE16D1T-IT1/3/5**  
 Outdoor EXIR Bullet

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- Up to 20/40/80m IR distance with EXIR
- IP66 weatherproof



**DS-2CE56D1T-IT1/3**  
 Outdoor EXIR Eyeball Outdoor  
 EXIR Eyeball

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- Up to 20/40m IR distance with EXIR
- IP66 weatherproof



**DS-2CE56D1T-(A)VPIR3Z**  
 Outdoor Motorized lens  
 Vari-focal Dome

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- 2.8 – 12mm Motorized vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof & Vandal Proof
- Dual voltage: 12 VDC/ 24 VAC (-A model only)



**DS-2CE16D1T-(A)VFIR3**  
**DS-2CE56D1T-VFIR3**  
 Outdoor Vari-focal Bullet/  
 Eyeball

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- 2.8 – 12mm vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof



**DS-2CE56D1T-(A)V FIR**  
Indoor Vari-focal IR Dome

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- 2.8 – 12mm vari-focal lens
- Up to 30m IR distance
- Dual voltage: 12 VDC/ 24 VAC (-A model only)



**DS-2CE56D1T-(A)VPIR3**  
Outdoor Vandalproof IR Dome

- 2.0MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- OSD menu controlled via UTC
- 2.8 – 12mm vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof & Vandal Proof
- Dual voltage: 12 VDC/ 24 VAC (-A model only)



**DS-2CE56D0T-IRMM**  
**DS-2CE56D0T-IRP**  
Indoor IR Dome/Eyeball

- 2.0 MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- Up to 20m IR distance



**DS-2CE16D0T-IR(P)**  
**DS-2CE56D0T-IR(M)**  
Outdoor IR Bullet/Eyeball

- 2.0 MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- Up to 20m IR distance



**DS-2CE16D0T-IT1/3/5**  
Outdoor EXIR Bullet

- 2.0 MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- Up to 20/40/80m IR distance with EXIR
- IP66 weatherproof



**DS-2CE56D0T-IT1/3**  
Outdoor EXIR Eyeball

- 2.0 MP high-performance CMOS
- Turbo HD output, up to 1080P resolution
- True Day/Night
- DNR, Smart IR
- Up to 20/40m IR distance with EXIR
- IP66 weatherproof



## Turbo HD 720P Low Light Cameras



**DS-2CE56C5T-IT1/3**  
Outdoor EXIR Eyeball

- 1.3MP high-performance CMOS
- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- 3D DNR, Smart IR
- Up to 20/40m IR distance with EXIR
- IP66 weatherproof



**DS-2CE16C5T-(A)VFI3**  
**DS-2CE56C5T-VFI3**  
Outdoor Vari-focal Bullet/  
Eyeball

- 1.3MP high-performance CMOS
- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- 3D DNR, Smart IR
- 2.8 – 12mm vari-focal lens
- Up to 40/50m IR distance
- IP66 weatherproof



**DS-2CE56C5T-(A)VFI3**  
Indoor Vari-focal IR Dome

- 1.3MP high-performance CMOS
- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- 3D DNR, Smart IR
- 2.8 – 12mm vari-focal lens
- Up to 30m IR distance
- Dual voltage: 12 VDC / 24 VAC (-A model only)



**DS-2CE56C5T-(A)VPIR3**  
Outdoor Vandalproof IR Dome

- 1.3MP high-performance CMOS
- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- 3D DNR, Smart IR
- 2.8 – 12mm vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof & Vandal Proof
- Dual voltage: 12 VDC / 24 VAC (-A model only)



**DS-2CE16C5T-IT1/3/5**  
Outdoor EXIR Bullet

- 1.3MP high-performance CMOS
- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- 3D DNR, Smart IR
- Up to 20/40/80m IR distance with EXIR
- IP66 weatherproof

## Turbo HD 720P Cameras



**DS-2CE56C2T-IRP**  
Indoor IR Eyeball

- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- DNR, Smart IR
- Up to 20m IR distance



**DS-2CE16C2T-IR(P)**  
**DS-2CE56C2T-IR(M)**  
 Outdoor IR Bullet/Eyeball

- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- DNR, Smart IR
- Up to 20m IR distance
- IP66 weatherproof



**DS-2CE16C2T-IT1/3/5**  
 Outdoor EXIR Bullet

- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- DNR, Smart IR
- Up to 20/40/80m IR distance with EXIR
- IP66 weatherproof



**DS-2CE56C2T-IT1/3**  
 Outdoor EXIR Eyeball

- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- DNR, Smart IR
- Up to 20/40m IR distance with EXIR
- IP66 weatherproof



**DS-2CE16C2T-VFIR3**  
**DS-2CE56C2T-VFIR3**  
 Outdoor Vari-focal  
 Bullet/Eyeball

- Turbo HD output, up to 720P resolution
- Excellent low-light performance
- True Day/Night
- DNR, Smart IR
- 2.8 – 12mm vari-focal lens
- Up to 40m IR distance
- IP66 weatherproof



**DS-2CE56C0T-IRMM**  
**DS-2CE56C0T-IRP**  
 Indoor IR Dome/Eyeball

- 1.0 MP high-performance CMOS
- Turbo HD output, up to 720P resolution
- True Day/Night
- DNR, Smart IR
- Up to 20m IR distance



**DS-2CE16C0T-IR(P)**  
**DS-2CE56C0T-IR(M)**  
 Outdoor IR Bullet/Eyeball

- 1.0 MP high-performance CMOS
- Turbo HD output, up to 720P resolution
- True Day/Night
- DNR, Smart IR
- Up to 20m IR distance
- IP66 weatherproof



**DS-2CE16C0T-IT1/3/5**  
Outdoor EXIR Bullet

- 1.0 MP high-performance CMOS
- Turbo HD output, up to 720P resolution
- True Day/Night
- DNR, Smart IR
- Up to 20/40/80m IR distance with EXIR
- IP66 weatherproof



**DS-2CE56C0T-IT1/3**  
Outdoor EXIR Eyeball

- 1.0 MP high-performance CMOS
- Turbo HD output, up to 720P resolution
- True Day/Night
- DNR, Smart IR
- Up to 20/40m IR distance with EXIR
- IP66 weatherproof

## Turbo HD DVRs



**DS-7104/08/16HGHI-F1**  
720P Mini 1U Turbo HD  
DVR  
**TURBO HD 3.0**

- 4/8/16-ch HD TVI/AHD/analog cameras video&audio input
- HD-TVI/AHD/analog hybrid
- HD-TVI and analog cameras self-adaptive access
- Up to full channel@720P resolution real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- 1SATA, 2 USB2.0



**DS-7104/08/16HQHI-F1/N**  
1080P Mini 1U Turbo HD DVR  
**TURBO HD 3.0**

- 4/8/16-ch HD TVI/analog/AHD cameras video&audio input
- HD-TVI/AHD/analog hybrid
- H.264+ video compression
- Full channel@720P resolution real-time and 1080P non real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- 1 SATA, 2 USB 2.0



**DS-7104HQHI-SH**  
Full 1080P Mini 1U Turbo HD  
DVR

- 4-ch HD TVI/analog cameras video&audio input
- HD-TVI/analog camera hybrid
- HD-TVI and analog cameras self-adaptive access
- Full channel@1080P resolution real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- 1SATA, 2 USB2.0



**DS-7104/08HGHI-SH**  
1080P Mini 1U Turbo HD DVR

- 4/8/16-ch HD TVI/analog cameras video&audio input
- HD-TVI/analog/IP camera hybrid
- HD-TVI and analog cameras self-adaptive access
- Full channel@720P resolution real-time and 1080P no-real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- 1SATA, 2 USB2.0



**DS-7204/08/16HGHI-F1**  
**DS-7208/16HGHI-F2**  
 720P 1U Turbo HD DVR

**TURBO HD 3.0**

- 4/8/16-ch HD TVI/AHD/analog cameras video&audio input
- HD-TVI/analog/AHD/IP camera quadruple hybrid
- HD-TVI and analog cameras self-adaptive access
- Up to full channel@720P resolution real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- Front panel and alarm I/O optional
- 1SATA(DS-7204/08/16HGHI-F1)/2 SATA(DS-7208/16HGHI-F2), 2 USB2.0



**DS-7204/08/16HQHI-F1/N**  
 1080P 1U Turbo HD DVR

**TURBO HD 3.0**

- 4/8/16-ch HD TVI/analog/AHD cameras video&audio input
- HD-TVI/analog/AHD/IP camera hybrid
- H.264+ video compression
- Full channel@720P resolution real-time and 1080P non real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- Front panel and alarm I/O optional
- 1 SATA, 2 USB 2.0



**DS-7208/16HQHI-F2/N**  
 1080P 1U Turbo HD DVR

**TURBO HD 3.0**

- 8/16-ch HD TVI/analog/AHD cameras video&audio input
- HD-TVI/analog/AHD/IP camera hybrid
- H.264+ video compression
- Full channel@720P resolution real-time and 1080P non real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- Front panel and alarm I/O optional
- 2 SATA, 2 USB 2.0



**DS-7204/08HUHI-F1/N**  
 3MP 1U Turbo HD DVR

**TURBO HD 3.0**

- 4/8-ch video & 1-ch audio input
- HDTVI/analog/AHD/IP camera quadruple hybrid
- 15fps recording at 3MP
- Full channel recording at 1080P resolution
- HDMI output at up to 1920×1080P resolution(DS-7204HUHI-F1/N), support CVBS output
- 4K UHD output (DS-7208HUHI-F1/N)
- Long transmission distance over coax cable
- Front panel and alarm I/O optional
- 1 SATA, 2 USB 3.0



**DS-7204/08/16HUHI-F2/N**  
 3MP 1U Turbo HD DVR

**TURBO HD 3.0**

- 4/8/16-ch video & 1-ch audio input
- HDTVI/analog/AHD/IP camera quadruple hybrid
- 15fps recording at 3MP
- Full channel recording at 1080P resolution
- HDMI output at up to 1920×1080P resolution(DS-7204HUHI-F2/N), support CVBS output
- 4K UHD output (DS-7208/16HUHI-F2/N)
- Long transmission distance over coax cable
- Front panel and alarm I/O optional
- 2 SATA, 2 USB 3.0



**DS-7204/08/16HGHI-SH**  
 1080P 1U Turbo HD DVR

- 4/8/16-ch HD TVI/analog cameras video&audio input
- HD-TVI/analog/IP camera triple hybrid
- HD-TVI and analog cameras self-adaptive access
- Full channel@720P resolution real-time and 1080P no-real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- Front panel and alarm I/O optional
- 2 SATA(DS-7216HGHI-SH)/1 SATA(7204/08HGHI-SH), 2 USB2.0





**DS-7204/08/16HQHI-SH**  
Full 1080P 1U Turbo HD  
DVR

- 4/8/16-ch HD TVI/analog cameras video&audio input
- HD-TVI/analog/IP camera triple hybrid
- HD-TVI and analog cameras self-adaptive access
- Full channel@1080P resolution real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- Front panel and alarm I/O optional
- 2 SATA(DS-7208/16HQHI-SH)/1 SATA(7204HQHI-SH), 2 USB2.0



**DS-7304/08/16HQHI-F4/N**  
1080P 1.5U Turbo HD DVR  
**TURBO HD 3.0**

- 4/8/16-ch video & 4-ch audio input
- HDTV/analog/AHD/IP camera quadruple hybrid
- Full channel recording at 1080P resolution
- HDMI output at up to 1920×1080P resolution(DS-7304/08HQHI-F4/N), support CVBS output
- 4K UHD output (DS-7316HQHI-F4/N)
- Long transmission distance over coax cable
- 4 SATA, 1 eSATA, 3 USB2.0, gigabit NIC



**DS-7304/08/16HQHI-SH**  
Full 1080P 1.5U Turbo  
HD DVR

- 4/8/16-ch HD TVI/analog cameras video&audio input
- HD-TVI/analog/IP camera triple hybrid
- HD-TVI and analog cameras self-adaptive access
- Full channel@1080P resolution real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- Gigabit network interfaces
- 4 SATA, 1 eSATA, 3 USB2.0



**DS-7304/08/16/24/32HGHI-SH**  
1080P 1.5U Turbo HD DVR

- 4/8/16/24/32-ch HD TVI/analog cameras video&audio input
- HD-TVI/analog/IP camera triple hybrid
- HD-TVI and analog cameras self-adaptive access
- Full channel@720P resolution real-time and 1080P no-real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- Gigabit network interfaces
- 4 SATA, 1 eSATA, 3 USB2.0



**DS-8104/08/16HQHI-F8/N**  
1080P 2U Turbo HD DVR  
**TURBO HD 3.0**

- 4/8/16-ch video & audio input
- HDTV/analog/AHD/IP camera quadruple hybrid
- Full channel recording at 1080P resolution
- HDMI output at up to 1920×1080P resolution(DS-8104/08HQHI-F8/N), support CVBS output
- 4K UHD output (DS-8116HQHI-F8/N)
- Long transmission distance over coax cable
- 8 SATA, 1 eSATA, 3 USB2.0, gigabit NIC



**DS-8104/08/16/24/32  
HGHI-SH**  
1080P 2U Turbo HD DVR

- 4/8/16/24/32-ch HD TVI/analog cameras video&audio input
- HD-TVI/analog/IP camera triple hybrid
- HD-TVI and analog cameras self-adaptive access
- Full channel@720P resolution real-time and 1080P no-real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- Dual Gigabit network interfaces
- 8 SATA, 1 eSATA, 3 USB2.0



**DS-8104/08/16HQHI-SH**  
Full 1080P 2U Turbo HD DVR

- 4/8/16-ch HD TVI/analog cameras video&audio input
- HD-TVI/analog/IP camera triple hybrid
- HD-TVI and analog cameras self-adaptive access
- Full channel@1080P resolution real-time recording
- HDMI and VGA output at up to 1920×1080P resolution
- Long transmission distance over coax cable
- Dual gigabit network interfaces
- 8 SATA, 1 eSATA, 3 USB2.0

## ACCESSORIES



**DS-1H18**  
Video Balun



**DS-1H33**  
HDTVI to HDMI Converter



**X41T**  
Camera Tester



**DS-1H31**  
Distributer



## TURBO HD 3.0 ANALOG SOLUTION

*TURBO HD 3.0*

Distributed by



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