# \*HILTCON security



- · Four 2MP 1/2.8" CMOS image sensor, low illuminance, high image definition
- · Outputs max. 8MP (4096 × 1800) @30 fps
- · H.265 codec, high compression rate, ultra-low bit rate
- · Built-in IR LED, max. IR distance: 30 m
- · ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- · DWDR, 3D NR, HLC, BLC, digital watermarking
- · Intelligent functions: Crowd distribution map, Vehicle Density situation
- · Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection
- · Alarm: 2 in, 2 out; audio: 1 in, 1 out; 485; BNC; supports max. 256 G SD card
- · 12V DC/24V AC/PoE power supply; easy for installation
- · Supports object tracking
- · IP67, IK10 protection

# **THV232HDS**

4×2MP Multi-Sensor Panoramic Network IR Bullet Camera













# **Functions**

# **Panoramic Splicing**

With advanced splicing algorithm, Panoramic Splicing technology deletes overlapped area and splices multiple images to be a complete panorama. The ÿeld of view of the spliced image can be up to 360°, which largely improves surveillance efÿciency and user experience. Generally, after splicing, the ÿeld of view of four-sensor camera can be 180°, and the ÿeld of view of eight-sensor camera can be 360°.

## **Crowd Density**

With deep learning algorithm, Crowd Density technology can detect the crowd density on the image, and display it on heat map; it can detect people quantity and density in selected area and set threshold. When the number or density is larger or smaller than the threshold, it triggers linkage.

# **Vehicle Density**

With deep learning algorithm, Vehicle Density technology analyses the vehicle situation in the image, such as vehicle number in selected area. You can set threshold, and when the number is larger or smaller than the threshold, it triggers linkage.

#### **IVS**

With advanced video algorithm, IVS technology supports intelligent functions, such as tripwire and intrusion.

## Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

### Protection (IP67, IK10, wide voltage)

IP67:The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

IK10:The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J).

Wide voltage: The camera allows  $\pm 30\%$  input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

# **Technical Specification**

Camera	
Image Sensor	1/2.8"4 × 2Megapixel progressive CMOS
Max. Resolution	4096 (H) × 1800 (V)
ROM	4 GB
RAM	2 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100,000 s
Min. Illumination	0.002 Lux @F1.6
S/N Ratio	>56dB
Illumination Distance	30 m (98.42 ft) (IR LED)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	8 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°-355° Tilt: 0°-90° Rotation:0°-360°



3ecuilly	
Lens	
Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm
Max. Aperture	F1.6
Field of View	Horizontal: 180°; Vertical: 90°
Iris Type	Fixed
Close Focus Distance	0.6 m (2.0 ft)
DORI Distance	Detect Observe Recognize Identify
DOKI DISIGNEE	38.6 m 15.4 m 7.7m 3.9 m
Professional, intelligent	7,7,7
Vehicle Density	Vahiala danaihu parking upper limit, vahiala congestion glarm
·	Vehicle density; parking upper limit; vehicle congestion alarm
Crowd Distribution Map	Crowd map, global people counting; people counting in area
General Intelligence	
IVS	Tripwire; intrusion
Video	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream: $4096 \times 1800 \ (1-25/30 \ \text{fps})$ Sub stream: $1024 \times 452 \ (1-25/30 \ \text{fps})$ Third stream: $1920 \times 832 \ (1-25/30 \ \text{fps})$
Stream Capability	3 streams
Resolution	4096 × 1800; 3840 × 1680; 2880 × 1264; 1024 × 452; 1920 × 832; 1280 × 560
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 9 kbps-17664 kbps H.265: 9 kbps-17664 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	DWDR
Scene Self-adaptation	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Defog	Yes
Privacy Masking	4 areas
Audio	
Audio Compression	G.711A; G.711Mu; G.726; AAC; G.723
Alarm Event	
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire;
That I Live	intrusion; scene changing; audio detection; intensity change; voltage detection; external alarm; safety exception; crowd distribution map;
	vehicle congestion; parking upper limit
Network	-Simula addition, pariting appearants
Network	RJ-45 (10/100/1000 Base-T)
SDK and API	Yes
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast;
International list	ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec
User/Host	20 (Total bandwidth: 80 M)
Storage	Dahua Cloud (only supported by Dahua vesion); FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE9 and later Chrome: 50 and later Firefox: 48 and later

# **→ HILTCON** security

Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS; Android
Certification	
Certifications	CE-LVD: EN62368-1
	CE-EMC: Electromagnetic Compatibility Directive FCC: 47 CFR FCC Part 15, Subpart B
	UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07
Port	
RS-485	1 (baud rate range: 1200 bps-115200 bps)
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	2 channels in: 5mA 3V-5V DC
Alarm Output	2 channels out: 1,000mA 30V DC/500mA 50V DC
Power	
Power Supply	12V DC/24V AC/PoE+ (802.3at)
Power Consumption	<16.2W
Environmental	
Operating Conditions	-40°C to +60°C/Less than 95% RH
Storage Conditions	-40°C to +60°C (-40°F to +140°F)
Protection Grade	IP67; IK10
Construction	
Casing	Metal + plastic
Dimensions	297 mm × 169mm ×120mm (11.69" × 6.65"× 4.72") (L × W × H)
Net Weight	2.86 kg (6.31 lb)
Gross Weight	3.35 kg (7.39 lb)

# **Dimension**









