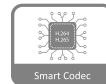


SV144DX

5MP IR Vari Focal Dome AI Network Camera



Functions

SMD 4.0

Smart Motion Detection technology works with intelligent algorithms to classify targets that trigger motion detection alarms. It filters out objects that are not targets, such as small and large animals, to avoid triggering false alarms. With an AI NVR, Quick Pick technology becomes available, allowing you to easily search for and pick out human and vehicle targets from SMD event videos, prioritizing the highest matches.

AI SSA

AI Scene Self-adaptation (AI SSA) adopts deep learning algorithms to detect environmental conditions, such as rain, fog, backlight, low light and flicker, to adjust the parameters of the image to suit the conditions, ensuring that clear images are always produced.

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.

Perimeter Protection

With deep learning algorithm, Perimeter Protection technology can recognize human and vehicle accurately. In

restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion) are largely reduced.

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 work normally 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 $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Cyber Security

Network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from comprising the device.

Accessories



SV821AX



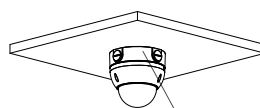
SV825AX



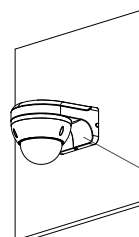
SV829AX



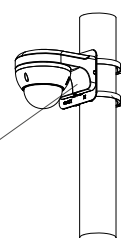
SV827AX



SV821AX



SV825AX



SV829AX

Technical specification

Camera:

Image Sensor: 1/2.7" CMOS
 Max. Resolution: 2960 (H) × 1668 (V)
 ROM: 128 MB
 RAM: 512 MB
 Scanning System: Progressive
 Electronic Shutter Speed: Auto/Manual 1/3 s–1/100,000 s
 Min. Illumination:
 - 0.005 lux@F1.5 (Color, 30 IRE)
 - 0.0005 lux@F1.5 (B/W, 30 IRE)
 - 0 lux (Illuminator on)
 S/N Ratio: >56 dB
 Illumination Distance: Up to 40 m (131.23 ft)
 Illuminator On/Off Control: Auto/Manual
 Illuminator Number: 3 (IR LED)
 Pan/Tilt/Rotation Range:
 - Pan: 0°–355°
 - Tilt: 0°–80°
 - Rotation: 0°–355°

Lens:

Lens Type: Motorized vari-focal
 Lens Mount: Ø 14
 Focal Length: 2.7 mm–13.5 mm
 Max. Aperture: F1.5
 Field of View:
 - Horizontal: 114°–32°
 - Vertical: 58°–17°
 - Diagonal: 138°–36°
 Iris Control: Fixed
 Close Focus Distance: 0.8 m (2.62 ft)
 - DORI Distance:
 Lens, W: Detect 64.0 m (209.97 ft)
 Observe 25.6 m (83.98 ft)
 Recognize 12.8 m (41.99 ft)
 Identify 6.4 m (21.00 ft)
 Lens, T: Detect 210.0 m (688.98 ft)
 Observe 84.0 m (275.59 ft)
 Recognize 42.0 m (137.80 ft)
 Identify 21.0 m (68.90 ft)

Intelligence:

IVS (Perimeter Protection): Tripwire, intrusion (support the classification and accurate detection of vehicle and human)
 AI SSA: Yes
 Quick Pick: With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events
 Smart Search: Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos

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+
 AI Coding:
 - AI H.265
 - AI H.264
 Video Frame Rate:
 - Main stream: 2880 × 1620 @ (1–20) fps /
 2960 × 1668 @ (1–20) fps /
 2688 × 1520 @ (1–25/30) fps
 - Sub stream 1: 704 × 576 @ (1–25) fps /
 704 × 480 @ (1–30) fps
 - Sub stream 2: 1920 × 1080 @ (1–25/30) fps
 * The values above are the max. frame rates of each stream;
 for multiple streams, the values will be subjected to the total
 encoding capacity
 Stream Capability: 3 streams
 Resolution: 5M (2880 × 1620/2960 × 1668);
 4M (2688 × 1520); 3.6M (2560 × 1440); 3M (2048 × 1536);
 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960);
 720p (1280 × 720); D1 (704 × 576/704 × 480);
 CIF (352 × 288/352 × 240); VGA (640 × 480)
 Bit Rate Control: CBR/VBR
 Video Bit Rate:
 - H.264: 3 kbps–8192 kbps
 - H.265: 3 kbps–8192 kbps
 Day/Night: Auto (ICR)/Color/B/W
 BLC: Yes
 HLC: Yes
 WDR: 120 dB
 Scene Self-adaptation (SSA): Yes
 White Balance: Auto; natural; street lamp; outdoor; manual;
 regional custom
 Gain Control: Auto
 Noise Reduction: 3D NR
 Motion Detection: OFF/ON (4 areas, rectangular)
 Image Stabilization: Electronic Image Stabilization (EIS)
 Region of Interest (RoI): Yes (4 areas)
 Defog: Yes
 AFSA: Yes
 Image Rotation: 0°/90°/180°/270° (support 90°/270° with
 2688 × 1520 resolution and lower)
 Mirror: Yes
 Privacy Masking: 4 areas

Audio:

Built-in MIC: Yes
 Audio Compression: G.711a; G.711Mu; PCM; G.726; G.723

Alarm Event:

ZS: No SD card; SD card full; SD card error; service life warning (only supported by Dahua card); network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; defocus detection; SMD; safety exception

Network:

Network Port: RJ-45 (10/100 Base-T)
 SDK and API: Yes
 Network Protocol: IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; P2P
 Cyber Security: Video encryption; Firmware encryption; Configuration encryption; Digest; WSSE; Account lockout; Security logs; IP/MAC filtering; Generation and importing of X.509 certification; syslog; HTTPS; 802.1x; Trusted boot; Trusted execution; Trusted upgrade
 Interoperability: ONVIF (Profile S/Profile G/Profile T); CGI
 User/Host: 20 (Total bandwidth: 64 M)
 Storage: FTP; SFTP; Micro SD card (support max. 256 G); NAS
 Browser:
 - IE: IE11
 - Chrome
 - Firefox
 Management Software: Daitem Capture
 SmartPSS Lite; DSS; DMSS
 Mobile Client: iOS; Android

Certification:

CE-LVD: EN62368-1;
 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU;
 FCC: 47 CFR FCC Part 15, Subpart B;
 UL/CUL: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14

Power:

Power Supply: 12 VDC/PoE (802.3af)
 Power Consumption:
 - Basic: 4 W (12 VDC); 4.9 W (PoE)
 - Max. (WDR + IR intensity + Intelligence): 9.2 W (12 VDC); 10.5 W (PoE)

Environment:

Operating Temperature: -30 °C to +60 °C (-22 °F to 140 °F)
 /Less than 95% RH
 Storage Temperature: -40 °C to +60 °C (-40 °F to 140 °F)
 Protection: IP67; IK10

Structure:

Casing: Metal
 Product Dimensions: 94 mm × Ø 122 mm
 Net Weight: 713 g (1.57 lb)
 Gross Weight: 986 g (2.17lb)

Dimensions

