

SD5A225GB-HNR

2MP 25x Starlight IR WizSense Network PTZ Camera



Functions

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, this camera provides an all-in-one solution for capturing long distance video surveillance for outdoor applications. Together with infrared illumination and Starlight Technology, the camera is the perfect solution for dark, lowlight applications. The series combines a day/night mechanical IR cut filter for the highest image quality in variable lighting conditions during the day

Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

Auto-tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

Face Detection

Supports 6 attributes and 8 expressions: Gender, age, glasses, mask, beard and expressions (anger, sadness, disgust, fear, surprise, calm, happiness, and confusion). It also supports face cutout settings: Face, and single inch photo. Three snapshot methods are also featured: Real-time snapshot, priority snapshot, and quality priority.

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.

Starlight Technology

For challenging low-light applications, Starlight Ultra-low Light Technology offers best-in-class light Sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

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.

Camera				
Image Sensor	1/2.8" CMOS			
Max. Resolution	1920 (H) × 1080 (V)			
Effective Pixels	2MP			
ROM	4GB			
RAM	1GB			
Electronic Shutter Speed	1/3–1/30,000 s			
Scanning System	Progressive			
Min. Illumination	Color: 0.005Lux@F1.6			
	B/W: 0.0005Lux@F1.6			
	0Lux (IR Light On)			
Illumination Distance	150 m (492.13 ft)			
Illuminator On/Off Control	Zoom Prio/Manual/SmartIR			
Illuminator Number	4 (IR)			
Lens				
Focal Length	4.8 mm–120 mm			
Max. Aperture	F1.6-F3.5			
Field of View	H: 58.5°–2.8°; V: 33.2°–1.5°; D: 67.5°–3.2°			
Optical Zoom	25x			
Focus Control	Auto/Semi-Auto/Manual			
Close Focus Distance	0.1 m–1.5 m (0.33 ft–4.92 ft)			
Iris Control	Auto; Manual			
DORI Distance	Detect	Observe	Recognize	Identify
	1614m (5292ft)	646m (2119ft)	323m (1060ft)	161m (528ft)
PTZ				
Pan/Tilt Range	Pan: 0° to 360° Endless;; Tilt–15° to +90°, Auto Flip 180°			
Manual Control Speed	Pan: 0.1°/s–300°/s; Tilt: 0.1°/s–200°/s			
Preset Speed	Pan: 400°/s; Tilt: 300°/s			
Presets	300			
Tour	8 (Up to 32 Presets Per Tour)			
Pattern Number	5			
Scanning Number	5			
Power-off Memory	Yes			
Idle Motion	Preset; Pattern; Tour; Scan			
Protocol	DH-SD			
	Pelco-P/D (Auto Recognition)			
Intelligence				
IVS (Perimeter Protection)	Tripwire; Intrusion; Climbing Fences; Loitering Detection; Abandoned/Missing Object; Fast Moving; Parking Detection; People Gathering; Vehicle/Human Alarm Classification			
Auto Tracking	Yes			

Intelligence	
Face Detection	Supports Face Detection, Face Bounding Box, Capturing Snapshots, Uploading Face Snapshots, Enhancing Face Images, And Selecting a Preferred Image Among a Group of Snapshots. Attribute Extraction Is Also Supported, Where 6 Attributes And 8 Expressions Can Be Detected. The Attributes Are Gender, Age, Glasses, Mask, Mustache And Expressions. The Expressions Are Angry, Sad, Hate, Cared, Surprised, Calm, Happy And Confused. Face Cutout Is Also Offered, Where You Can Cutout One Face At a Time And Customize The Size to Be a One-Inch Photo. The Supported Methods For Capturing Snapshots Are Real-Time Capturing, Quality First, And Selecting a Preferred Image Aamong a Group of Snapshots.
Quick Pick	With AI NVR, Quickly Pick Up the Human/Vehicle Targets That Users are Interested In From SMD Events.
SMD	Yes
Video	
Compression	Smart H.265+; H.265; Smart H.264+; H.264; H.264B; H.264H; MJPEG (Sub Stream 1)
Streaming Capability	3 Streams
Resolution	1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576); CIF (352 × 288)
Frame Rate	Main Stream: 1080p/1.3 M/720p (1–25/30 fps)
	Sub Stream 1: D1/CIF (1–25/30 fps)
	Sub Stream 2: 1080p/1.3M/720p (1–25/30 fps)
Bit Rate Control	CBR; VBR
Bit Rate	H.264: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	120dB
HLC	Support
White Balance	Auto/Indoor/Outdoor/Tracking/Manual/Sodium Lamp/Natural Light/Street Lamp
Gain Control	Auto/Manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Electronic (EIS)
Defog	Electronic
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 Areas, and Up to 8 Areas In the Same View
S/N Ratio	≥55 dB
Audio	
Compression	G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723
Network	
Ethernet	1 RJ-45 Port 10/100Base-T
Protocol	HTTP; HTTPS; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; QoS; FTP; UPnP; ICMP; SNMP; SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTCP; RTP; PPPoE; RTMP; TCP
Interoperability	ONVIF Profile S&G&T; CGI
Streaming Method	Unicast/Multicast
User/Host	20 (Total Bandwidth: 64 M)
Edge Storage	FTP; Micro SD Card (256G); NAS

Network	
Browser	IE7 and Newer Versions
	Chrome 42 and Older Versions
	Firefox 52 and Older Versions
	Safari
Management Software	Smart PSS; DSS; DMSS; Easy4ip; IVSS
Smart Phone	IOS/Android
Port	
Audio I/O	1/1
Alarm I/O	2/1
Two-Way Audio	Yes
Alarm Linkage	Capture; Preset; Tour; Pattern; Recording; Triggering On-Off Value Output; Audio; Sending Email
Alarm Event	Motion/Tampering Detection; Audio Detection; Network Disconnection Detection; IP Conflict Detection; Memory Card State Detection; Memory Space Detection; Power Exception Detection
Power	
Power Supply	24 VDC, 2.5 A (± 25%)
	PoE+ (802.3at)
Power Consumption	Basic: 13 W
	Max.: 22 W (Illuminator + PTZ Working)
Environment	
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Operating Humidity	≤95%RH
Ingress Protection	IP67; IK10; TVS 6000V Lightning Proof; Surge Protection; Voltage Transient Protection
Structure	
Dimensions	Φ190 mm × 332 mm (Φ7.48" × 13.07")
Net Weight	4.7 kg (10.36 lb)
Gross Weight	8 kg (17.64 lb)

Dimensions (mm[inch])

