alhua TECHNOLOGY

DH-PSDW5231S-B120

2MP Multi-Sensor Network Camera+PTZ Camera

· Panoramic: 1/2.7" 2Megapixel progressive scan CMOS
· PTZ: 1/2.7" 2Megapixel progressive scan CMOS
· H.265/H.264 dual-stream encoding
· 25fps@1920x1080
· Day/Night(ICR), 3DNR, AWB, AGC, BLC
. Max IR LEDs Length 15m
. Micro SD card slot, up to 256GB
. PoE

| 2Mp | H.265 | ICR D/N | IVS | 15m IR |

System Overview

The Dahua PSDW5231SP-B120 Multi-Sensor plus PTZ camera combines a 2MP camera and a high-speed PTZ camera . With its all-in-one design, the camera provides a 120° monitor and provides region of interest details at the same time. In addition, the PSDW5231SP-B120 offers the Intelligent Video System (IVS), a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection.

Functions

True Day/Night

A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens.

HEVC (H.265)

H.265 ITU-T VCEG is a new video coding standard. H.265 Following standard developed around the existing video coding standard H.264 , some retain the original technology , while some of the relevant technology to improve the new technology uses advanced technology to improve the relationship between the code stream , encoding quality , and the delay between algorithm complexity , optimize settings specific contents include : Improve compression efficiency , improve the robustness and error recovery capabilities, real-time to reduce the delay, reduce channel acquisition time and a random access delay , reduce complexity , etc

Smart H.265+

Deliver high quality video without straining the network, Smart H.265+ is the optimized implementation of H.265. The Smart H.265+ encoding technology includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing saving of up to 70% of bandwidth and storage when compared with standard H.265.

Intelligent Video analysis (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

Onvif PSIA

Technical Specification

Panoramic Camera

Image Sensor	1/2.7" 2Megapixel CMOS
Effective Pixels	1920(H)x1080(V)
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.03Lux/F2.2(Color,1/3s,30IRE) 0.2Lux/F2.2(Color,1/30s,30IRE) 0.03Lux/F2.2(B/W,1/3s,30IRE) 0.2Lux/F2.2(B/W,1/30s,30IRE)
IR Distance	Distance up to 15m(49ft)
IR On/Off Control	Auto/ Manual
IR LEDs	2

Panoramic Lens

Lens Type	Fixed			
Mount Type	Board-in			
Focal Length	2mm			
Aperture Type	Fixed			
Max. Aperture	F2.2			
Angle of View	H: 136˚, V:78˚			
DORI Distance	Detect	Observe	Recognize	Identify
	30m(98ft)	12m(39ft)	6m(20ft)	3m(10ft)

PTZ Camera

Image Sensor	1/2.7" 2Megapixel CMOS
Effective Pixels	1920(H)x1080(V)
RAM/ROM	1024MB/128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1~1/30000s
Minimum Illumination	0.02Lux/F1.8(Color,1/3s,30IRE) 0.1Lux/F1.8(Color,1/30s,30IRE) 0.02Lux/F1.8(B/W,1/3s,30IRE) 0.2Lux/F1.8(B/W,1/30s,30IRE)

PTZ Lens

Lens Type	Motorized				
Mount Type	Board-in				
Focal Length	2.7mm~13.5mm				
Aperture Type	Auto				
Max. Aperture	F1.8				
Angle of View	H: 105.9˚~33.3˚, V: 56˚~18.7˚				
Optical Zoom	5x				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	44m(144ft)	18m(59ft)	9m(30ft)	4.5m(15ft)
	T	133m (436ft)	53m (174ft)	26m (85ft)	13m (43ft)

PTZ

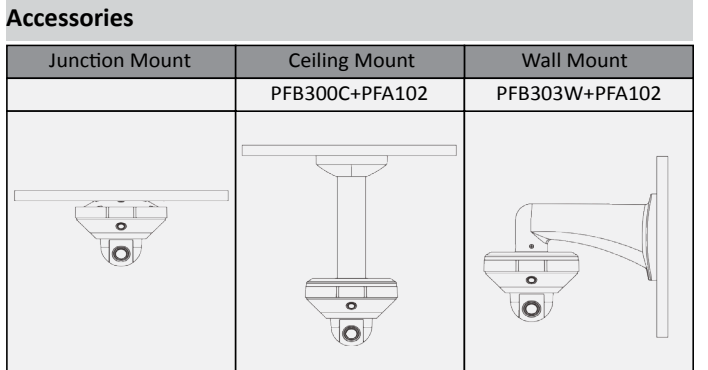|	
Pan/Tilt Range	Pan: 0° ~ 355° endless; Tilt: 0° ~ 80°
Manual Control Speed	Pan: 32° ~51° /s; Tilt: 22° ~40° /s
Presets Speed	Pan: 51° /s ; Tilt: 40° /s
Presets	80
Speed Setup	Human-oriented focal Length/ speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Protocol	DH-SD, Pelco-P/D (Auto recognition)

Intelligence

IVS	Tripwire, Intrusion

Video

Compression	H.265/H.264/H.264B/H.264H/MJPEG(sub stream)	
Smart Codec	Support H.265+/H.264+	
Streaming Capability	2 Streams	
Resolution	Panoramic Camera	1080P(1920x1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704×576/704x480)/ VGA(640×480)/CIF(352×288/352x240)
	PTZ Camera	1080P(1920x1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704×576/704x480)/ VGA(640×480)/CIF(352×288/352x240)
Frame Rate	Panoramic Camera	Main Stream: 1080P(1~25fps) Sub Stream: D1(1 ~ 25fps)
	PTZ Camera	Main Stream: 1080P(1~25fps) Sub Stream: D1(1~25fps)
Bit Rate Control	CBR/VBR	
Bit Rate	Panoramic Camera	H.265: (16Kbps~ 6144Kbps) H.264: (32Kbps~ 8192Kbps)
	PTZ Camera	H.265: 4Kbps~ 8192Kbps H.264: 8Kbps~ 7168Kbps
Day/Night	Auto(ICR) / Color / B/W	
BLC Mode	BLC / HLC / DWDR	
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D DNR	
Motion Detetion	Off / On (4 Zone, Rectangle)	
Region of Interest	Off / On (4 Zone)	
Electronic Image Stabilization(EIS)	N/A	
Smart IR	N/A	
Defog	N/A	

Digital Zoom	16x	
Flip	0°/90°/180°/270°	
Mirror	Support	
Privacy Masking	Panoramic Camera	Off / On (4 Area, Rectangle)
	PTZ Camera	Off / On (24 Area, Rectangle)

Audio

Compression	G.711a/G.711Mu/AAC/ G.726

Network

Ethernet	RJ-45 (100/1000Base-T)
Protocol	HTTP;HTTPs;TCP;ARP;RTSP;RTP;UDP;SMTP;FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP;NTP;Bonjour;802.1x;Multicast;ICMP;IGMP;SNMP
Interoperability	ONVIF Profile T, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users/20 Users
Edge Storage	NAS Local PC for instant recording Mirco SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
Smart Phone	IOS, Android

Certifications

Certifications	CE:EN 60950-1 UL:UL60950-1 FCC: FCC Part 15 Subpart B

Interface

Video Interface	N/A
Audio Interface	1/1 channel In/Out
RS485	1 Port
Alarm	3 channel In: 5mA 5VDC 2 channel Out: 300mA 12V

Electrical

Power Supply	DC12V(±30%), PoE(802.3af)(Class 0)
Power Consumption	DC12V:6.8W 11.8W(IR+PTZ+Zoom) PoE:7.2W 12.7W(IR+PTZ+Zoom)

Environmental

Operating Conditions	-10° C ~ +50° C (14° F ~ +122° F) / Less than 95% RH
Strorage Conditions	-10° C ~ +50° C (-14° F ~ +122° F) / Less than 95% RH
Ingress Protection	N/A
Vandal Resistance	N/A

Construction

Casing	Metal+Plastic
Dimensions	Φ172mm×123.4mm(Φ6.77"×4.86")
Net Weight	0.71kg(1.57lb)
Gross Weight	1.06kg(2.33lb)

Ordering Information

Type	Part Number	Description
Panoramic+ PTZ camera	DH-PSDW5231SP-B120	2MP Multi-Sensor Network Camera+PTZ Camera, PAL
	DH-PSDW5231SN-B120	2MP Multi-Sensor Network Camera+PTZ Camera,NTSC
	PSDW5231SP-B120	2MP Multi-Sensor Network Camera+PTZ Camera, PAL
	PSDW5231SN-B120	2MP Multi-Sensor Network Camera+PTZ Camera,NTSC
Accessories (optional)	PFA102	Mount Adapter
	PFB300C	Ceiling Mount
	PFB303W	Wall Mount

Accessories

Junction Mount	Ceiling Mount	Wall Mount
	PFB300C+PFA102	PFB303W+PFA102

Dimensions (mm/inch)