

DH-EPC230U

2MP 30x Explosion-proof IR Network Camera



- · 1/2.8" 2Megapixel STARVIS™ CMOS
- · Powerful 30x optical zoom
- · 304 stainless steel housing
- · Starlight technology
- H.265 Encoding
- · Max. 50/60fps@1080P
- · Support IVS
- · IR distance up to 100m
- IP68, ATEX and IECEx Certifacation











System Overview

Featuring powerful optical zoom, 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, and True WDR for applications with direct sunlight or glare.

Functions

Starlight Technology

For challenging low-light applications, Dahua's 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.

Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -40 °C to +60 °C (-40 °F to +140°F) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP68 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection

The camera allows for $\pm 25\%$ input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

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Technical Specification						Backlight Compensation	BLC / HLC / WDR (120dB)
Camera					White Balance	Auto, ATW, Indoor, Outdoor, Manual	
Image Sensor 1/		1/2.8" STARVIS™ CMOS			Gain Control	Auto / Manual	
Effective Pixels		1920(H) x 1080(V), 2 Megapixels				Noise Reduction	Ultra DNR (2D/3D)
RAM/ROM		512M/128M				Motion Detection	Support
Scanning System		Progressive				Region of Interest	Support
Electronic Shutter Speed		1/1s~1/30,000s				Electronic Image Stabilization	Support
Minimum Illumination		Color: 0.005Lux@F1.6; B/W: 0.0005Lux@F1.6; 0Lux@F1.6 (IR on)				(EIS) Defog	Support
S/N Ratio		More than 55dB				Digital Zoom	16x
IR Distance		Distance up to 100m (328ft)				Flip	180°
IR On/Off Control	IR On/Off Control		Auto/Manual			Privacy Masking	Up to 24 areas
IR LEDs	IR LEDs		6			Audio	
Lens					Compression	G.711a/G.711Mu/AAC/G.722/G.726/MPEG2-L2	
Focal Length	Focal Length 4.		4.5mm~135mm			Network	0.7.110, 0.7.11110, 0.7.12, 0.7.20, 1.11.202 EE
Max. Aperture	Max. Aperture F		F1.6 ~ F4.4			Ethernet	PL 45 (10Page T/100Page TV)
Angle of View	Angle of View		H: 67.8° ~ 2.4°			Ethernet	RJ-45 (10Base-T/100Base-TX)
Optical Zoom		30x				Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS,PPPOE,DDNS,FTP, IP Filter,QoS,Bonjour,802.1x
Focus Control		Auto/Manual				Interoperability	ONVIF Profile S&G, API
Close Focus Distance		100mm~ 1000mm				Streaming Method	Unicast / Multicast
DORI Distance						Max. User Access	20 users
*Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the				Edge Storage	NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 256GB		
Detect	Detect, Observe, Recognize					Web Viewer	IE, Chrome, Firefox, Safari
1862m(6109ft)	Observe		Recognize 372m(1220ft)	Identify 186m(610ft)		Management Software	Smart PSS, DSS, DMSS
Intelligence	744m(2441ft)		372111(122011)	18011(01011)		Smart Phone	IOS, Android
-		N/A				Certifications	
Auto Tracking IVS		N/A Tripwire, Intrusion, Abandoned/Missing, Face Detection, Heat Map				Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4- 2014 ATEX: EN 60079-0/EN 60079-1/EN 60079-31
Video							IECEx: IEC 60079-0/IEC 60079-1/IEC 60079-31
Compression		H.265+/H.265/H.264+/H.264				Explosion-proof Marking	ATEX: II 2 G Ex db IIC T6 Gb, II 2 D Ex tb IIIC T80°C DI IECEx : Ex db IIC T6 Gb, Ex tb IIIC T80°C Db
Streaming Capability		3 Streams				Interface	
Resolution		1080P(1920×1080)/1.3M(1280×960)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)				Video Interface	1 port(BNC, 1.0V[p-p], 75Ω)
Frame Rate		Main stream: 1080P/1.3M/720P(1~50/60fps)				RS485	1
		Sub stream1: D1/CIF(1 ~ 25/30fps)				Audio I/O	1/1
		Sub stream2: 1080P/1.3M/720P/D1/CIF (1~25/30fps)				Alarm I/O	2/1
Bit Rate Control		CBR/VBR				Electrical	
Bit Rate		H.265/H.264: 448K ~ 8192Kbps				Power Supply	AC220V(AC100V ~ 240V), Hi-PoE
						Power Consumption	10W, 25W (IR on)

10W, 25W (IR on)

Auto(ICR) / Color / B/W

Day/Night

Power Consumption

Environmental

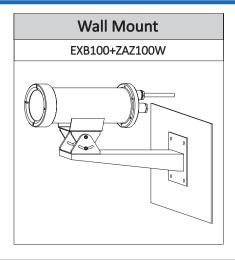
Operating Conditions	-40°C ~ 60°C (-40°F ~ +140°F) / Less than 95% RH
Ingress Protection	IP68
Vandal Resistance	N/A

Construction

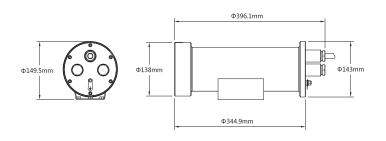
Ordering Information

Casing	304 Stainless Steel
Dimensions	Ф396.1mm×149.5mm×143mm
Net Weight	8.7kg(19.18lb)
Gross Weight	10.4kg(22.93lb)

Ordering information						
Туре	Part Number	Description				
2MP	DH-EPC230U	2MP 30x Explosion-proof IR Network Camera, WDR, PAL				
Camera	DH-EPC230UN	2MP 30x Explosion-proof IR Network Camera, WDR, NTSC				
	DH-ZAZ100W	Mount Adapter				
	DH-EXB100	Wall Mount				



Dimensions (mm)



Accessories

Optional:

Accessory



CZ300

ZANXG

ZAE02

DH-ZAZ100W Mount Adapter



DH-EXB100 Wall Mount



Junction Box (ATEX/IECEx)

Flexible Tube (ATEX/IECEx)

Connector (ATEX/IECEx)

Junction Box (ATEX/IECEx)



ZANXG Flexible Tube (ATEX/IECEx)



ZAEX02 Connector (ATEX/IECEx)