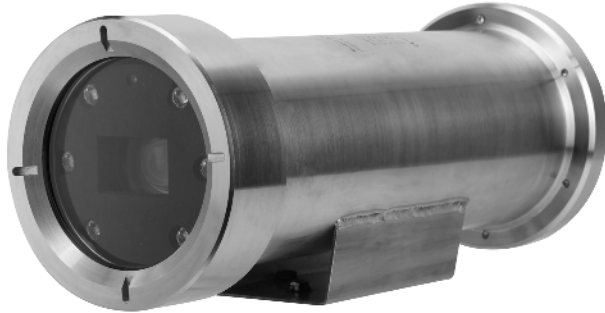# DH-EPC230U

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

| H.265 | WDR | 0.005Lux | ICR D/N | IP68 |

System Overview

All-environment series can be used for CCTV applications range from simple monitoring applications to fully controllable digital video monitoring systems. The excellent pan and tilt functionality makes the guard tour capability a reliable surveillance aid to operator that need to monitor a vast area. The series adopts top-notch DSP and advanced image sensor, which can offer a high-performance and safe imaging solution. It offers rich appearance, IP68 rated for water/dust ingress and professional certifications, which enable this series can meet most of special requirements of video surveillance applications such as high ground surveillance, explosive and corrosive environment surveillance for chemical industry, refineries and oil & gas industry, etc.

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.

High Efficiency Video Coding (H.265)
The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, or substantially improved video quality at the same bit rate, as compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and difference-coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

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 ±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) and PSIA (Physical Security Interoperability Alliance) specifications, ensuring interoperability between network video products regardless of manufacturer.

ONVIF **PSIA**

Technical Specification

Camera

Image Sensor	1/2.8" STARVIS™ CMOS
Effective Pixels	1920(H) x 1080(V), 2 Megapixels
RAM/ROM	512M/128M
Scanning System	Progressive
Electronic Shutter Speed	1/1s~1/30,000s
Minimum Illumination	Color: 0.005Lux@F1.6; 0Lux@F1.6 (IR on)
S/N Ratio	More than 55dB
IR Distance	Distance up to 100m (328ft)
IR On/Off Control	Auto/Manual
IR LEDs	6

Lens

Focal Length	4.5mm~135mm
Max. Aperture	F1.6 ~ F4.4
Angle of View	H: 67.8° ~ 2.4°
Optical Zoom	30x
Focus Control	Auto/Manual
Close Focus Distance	100mm~ 1000mm

DORI Distance

*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 criteria for Detect, Observe, Recognize and Identify respectively.

Detect	Observe	Recognize	Identify
1862m(6109ft)	744m(2441ft)	372m(1220ft)	186m(610ft)

Intelligence

Auto Tracking	N/A
IVS	Tripwire, Intrusion,Abandoned/Missing, Face Detection

Video

Compression	H.265/H.264/MJEPG
Streaming Capability	3 Streams
Resolution	1080P(1920×1080)/1.3M(1280×960)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)
Frame Rate	Main stream: 1080P(1 ~ 50/60fps), 1.3M/720P(1 ~ 25/30fps)
	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream2: 1080P/1.3M/720P(1 ~ 25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.265/H.264: 448K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps

Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / WDR (120dB)
White Balance	Auto,ATW,Indoor,Outdoor,Manual
Gain Control	Auto / Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detetion	Support
Region of Interest	Support
Electronic Image Stabilization (EIS)	Support
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

Audio

Compression	G.711a/G.711Mu/AAC/G.722/G.726/MPEG2-L2

Network

Ethernet	RJ-45 (10Base-T/100Base-TX)
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
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	20 users
Edge Storage	NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS
Smart Phone	IOS, Android

Certifications

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4- 2014 ATEX: CNEX 16 ATEX 0007 X Issue 0 IECEx : IECEx CNEX 16.0006X

Interface

Video Interface	1
Audio Interface	1/1
RS485	1
Alarm I/O	2/2

Electrical

Power Supply	AC220V(AC100V ~ 240V)
Power Consumption	10W,25W (IR on)

Environmental

Operating Conditions	-40°C ~ 60°C (-40°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP68
Vandal Resistance	N/A

Construction

Casing	304 Stainless Steel
Dimensions	Φ396.1mm×149.5mm×143mm
Net Weight	8.7kg(19.18lb)
Gross Weight	10.4kg(22.93lb)

Ordering Information

Type	Part Number	Description
2MP Camera	DH-EPC230U	2MP 30x Explosion-proof IR Network Camera, WDR, PAL
	DH-EPC230UN	2MP 30x Explosion-proof IR Network Camera, WDR, NTSC
Accessory	DH-ZAZ100W	Mount Adapter
	DH-EXB100	Wall Mount
	DH-ZA-JXD4	Junction Box (φ227mmx84mm)
	DH-ZAJ300	Junction Box (φ376mmx175mm)
	DH-GE1500	Flexible Tube

Accessories

Optional :

DH-ZAZ100W
Mount Adapter

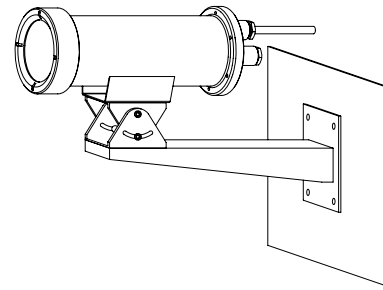DH-EXB100
Wall Mount

DH-ZA-JXD4
Junction Box

DH-ZAJ300
Junction Box

DH-GE1500
Flexible Tube

Wall Mount

EXB100+ZAZ100W

Dimensions (mm)

Φ396.1mm
Φ149.5mm
Φ138mm
Φ143mm
Φ344.9mm

alhua
TECHNOLOGY