alhua TECHNOLOGY

DH-EPC230U-PTZ

2MP 30x Explosion-proof PTZ Network Camera

· 1/2.8" 2Megapixel STARVIS™ CMOS
· Powerful 30x optical zoom
· 316L stainless steel housing
· Starlight technology
· H.265/H.264 Triple-stream Encoding
· Max. 50/60fps@1080P
· Support IVS
· IP67

| H.265 | WDR | 0.005 Lux | ICR D/N | IP67 |

System Overview

Featuring with powerful optical zoom and explosion-proof design, the EPC series camera features a 1/2.8" Exmor R CMOS imager with a 30x optical zoom lens, provides an all in one solution for capturing long distance video surveillance for outdoor applications. The camera uses the H.265 video compression standard to improve encoding efficiency while preserving high-quality video. Due to the high quality image and great protection, EPC series can meet most of explosion-proof requirements of video surveillance applications.

Functions

Starlight Technology

Thanks to our experience and expertise in hardware and software development , the camera is equipped with the latest image processing algorithm, high performance hardware and high quality optical components, which make the camera have exellent low light performance. In most conditions, this camera can deliver clear, bright and low-noise color images.

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.

Wide Dynamic Range

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, true WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Environmental

With a temperature range of -40 °C to +60 °C (-40 °F to +140°F), the camera is designed for extreme temperature environments.

Protection

This camera suits even the harsh conditions for explosion-proof applications. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning. Subjected and certified to rigorous dust and immersion tests (IP67), the camera is the choice for installation in even the most unforgiving environments.
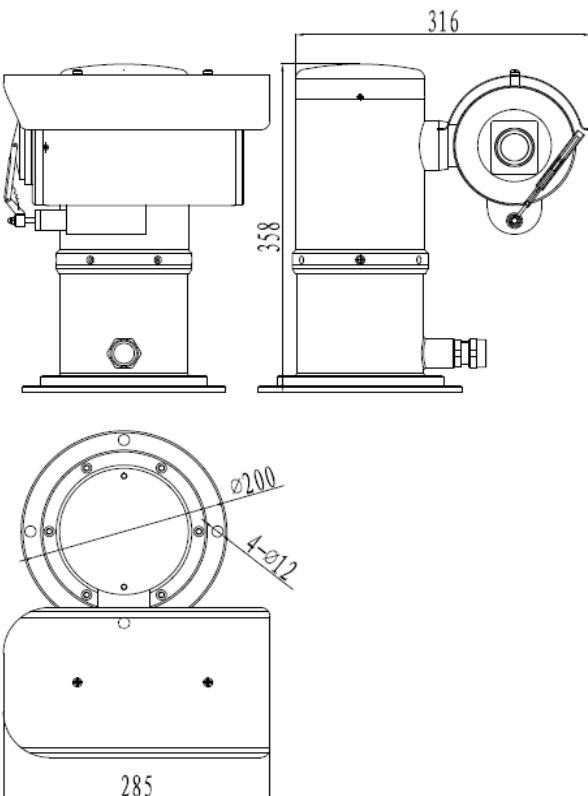
Interoperability

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~1/300,000s
Minimum Illumination	Color: 0.005Lux@F1.6; B/W:0.0005Lux@F1.6
S/N Ratio	More than 55dB
IR Distance	N/A
IR On/Off Control	N/A
IR LEDs	N/A

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)

PTZ

Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -90° ~ 90°
Manual Control Speed	Pan: 0.1° ~40° /s; Tilt: 0.1° ~40° /s
Preset Speed	Pan: 40° /s; Tilt: 40° /s
Presets	256
PTZ Mode	5 Scan, 8 Tour
Speed Setup	Human-oriented focal Length/speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/Scan/Tour if there is no command in the specified period
Protocol	DH-SD, Pelco-P/D (Auto recognition)

Intelligence

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

Video

Compression	H.265/H.264/MJPEG
Streaming Capability	3 Streams
Resolution	1080P(1920×1080)/1.3M(1280x960)/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°

Audio

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

Network

Ethernet	RJ-45 (10/100Base-T)
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

Interface

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

Dimensions (mm)

Electrical	
Power Supply	AC220V(AC100V ~ 240V)
Power Consumption	35W, 60W(Heater on)

Environmental	
Operating Conditions	-40°C ~ 60°C (-40°F ~ +140°F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	N/A

Construction	
Casing	316L Stainless Steel
Dimensions	Φ316mm×358mm×285mm
Net Weight	23.3kg(51.37lb)
Gross Weight	27.5kg(60.63lb)

Ordering Information

Type	Part Number	Description
2MP PTZ Camera	DH-EPC230U-PTZ	2MP 30x Explosion-proof PTZ Network Camera, WDR, PAL
	DH-EPC230UN-PTZ	2MP 30x Explosion-proof PTZ Network Camera, WDR, NTSC
Accessories	DH-ZAZ660B	Wall Mount
	DH-ZA-JXD4	Junction Box (φ227mmx84mm)
	DH-ZAJ300	Junction Box (φ376mmx175mm)
Accessories	DH-GE1500	Flexible Connecting Pipe

Optional :

DH-ZAZ660B
Wall Mount

DH-ZA-JXD4
Junction Box

DH-ZAJ300
Junction Box

DH-GE1500
Flexible Connecting Pipe