HIKVISION®

DS-2XV6A46G0-LIZH(R)SY(316L)
4 MP Gantry Crane Varifocal Anti-Corrosion Network Camera

DarkFighter

- High quality imaging with 4 MP resolution
- Supports low latency, camera decoding with a delay as low as 100 ms
- Expansive night view with up to 50 m white light distance and 100 m IR distance
- Excellent low-light performance via DarkFighter technology
- Clear imaging against strong back light due to 120 dB true WDR technology
- Easy installation with Power over Ethernet (PoE) technology and 9 to 36 VDC power input
- Supports Hikvision Embedded Open Platform (HEOP) with 8 TOPS computing power and importing third party applications
- A built-in wiper(-R) removes water and dust on the screen and ensures clear images when the camera is used in dusty or damp environments
- 316L stainless steel enclosure, protecting cameras to be used in corrosive environments, providing reliability and longevity compared to standard cameras
- Water and dust resistant (IP68)

▪ Specification

Camera	
Image Sensor	2.8 to 12 mm: 1/1.8" Progressive Scan CMOS, 8 to 32 mm: 1/1.8" Progressive Scan CMOS, 4.8 to 120 mm: 1/2.7" Progressive Scan CMOS
Max. Resolution	2688 × 1520
Shutter Time	1 s to 1/100,000 s
Min. Illumination	2.8 to 12 mm/8 to 32 mm: Color: 0.0005 Lux @ (F1.2, AGC ON), 0 Lux with light, B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR; 4.8 to 120mm: Color: 0.001 Lux @ (F1.2, AGC ON), 0 Lux with light, B/W: 0.005 Lux @ (F1.2, AGC ON), 0 Lux with IR
Day & Night	IR cut filter
Angle Adjustment	Pan: -15° to 15°,tilt: -120° to 45°
Lens	
Focus	Auto,Semi-auto,Manual
Focal Length & FOV	2.8 to 12 mm, horizontal FOV 99.6° to 39.8°, vertical FOV 52.3° to 22.4°, diagonal FOV 119.9° to 45.7° 8 to 12 mm, horizontal FOV 40.3° to 14.5°, vertical FOV 22.1° to 8.2°, diagonal FOV 46.9° to 16.5° 4.8 to 120 mm, horizontal FOV 53.3° to 2.6°, vertical FOV 30.6° to 1.5°, diagonal FOV 60.5° to 3°
Iris Type	Auto-iris
Aperture	2.8 to 12 mm: Max. F1.47, 8 to 32 mm: Max. F1.7, 4.8 to 120 mm: Max. F1.7
Illuminator	
Supplement Light Type	IR,White Light
Supplement Light Range	2.8 to 12 mm: IR: up to 50 m, White Light: up to 30 m 8 to 32 mm: IR: up to 80 m, White Light: up to 50 m 4.8 to 120 mm: IR: up to 100 m, White Light: up to 50 m
HEOP	
Open Resources	System memory: 150 MB Smart RAM: 1800 MB Flash: 3200 MB
Computing Power	8 TOPS
Deep Learning Structure	Caffe,PyTorch,TensorFlow
Programming Language	C,C++
Video	
Main Stream	50 Hz: 50 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 60 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Video Compression	Main stream: H.265/H.264/H.265+/H.264+ Sub-stream: H.265/H.264/MJPEG Third stream: H.265/H.264
Video Bit Rate	32 Kbps to 16 Mbps
H.264 Type	Baseline Profile,Main Profile,High Profile
H.265 Type	Main Profile

Bit Rate Control	CBR,VBR
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Region of Interest (ROI)	5 fixed regions for main stream
Target Cropping	Yes
Audio	
Environment Noise Filtering	Yes
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/48 kHz
Audio Compression	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/AAC-LC/MP3
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)
Audio Type	Mono sound
Network	
Security	Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.2, TLS 1.3, host authentication (MAC address)
Simultaneous Live View	Up to 20 channels
API	ONVIF, ISAPI, SDK, ISUP
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, WebSocket, WebSockets
User/Host	Up to 32 users 3 user levels: administrator, operator, and user
Network Storage	NAS (NFS, SMB/CIFS),Auto Network Replenishment (ANR), Together with high-end Hikvision memory card, memory card encryption and health detection are supported.
Client	iVMS-4200, Hik-Connect, Hik-Central
Web Browser	Plug-in required live view: IE 10, IE 11, Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+, Safari 11+, Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+
Image	
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, white balance, AGC, adjustable by client software or web browser
Wide Dynamic Range (WDR)	120 dB
Image Stabilization	EIS
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24 bit bmp format.
Day/Night Switch	Day,Night,Auto,Schedule,Alarm Trigger
Image Enhancement	BLC,HLC,3D DNR,Defog
Image Parameters Switch	Yes
SNR	≥ 52 dB
Privacy Mask	8 programmable polygon privacy masks
Interface	
Video Output	1 Vp-p Composite Output (75 Ω/CVBS) (Only for debugging)
Ethernet Interface	1 1000 M self-adaptive Ethernet port, 8-core M12 aviation plug
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 512 GB

Audio	1 input (line in), max. input amplitude: 3.3 Vpp, input impedance: 1 KΩ, interface type: non-equilibrium 1 output (line out), max. output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium
Alarm	1 input, 1 output (max. 12 VDC, 30 mA)
RS-485	1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Event	
Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)
Smart Event	Scene change detection, audio exception detection, defocus detection, unattended baggage detection, object removal detection
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture
Deep Learning Function	
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)
Dynamic Area Protection	1. Supports person detection while the camera is in motion 2. Max. detectable targets: 64 3. For 2 MP/4 MP/8 MP resolutions, when target size ranges between 32 × 32/32 × 32/32 × 32 and 64 × 64/128 × 128/256 × 256, select High Mode 4. For 2 MP/4 MP/8 MP resolutions, when target size ≥64 × 64/128 × 128/256 × 256, select Low Mode
General	
Power	9 to 36 VDC, 2.65 A to 0.65 A, max. 24 W, two-core terminal block, reverse polarity protection, PoE: IEEE 802.3at, 42.5 V to 57 V, 0.56 A to 0.42 A, Class 4
Material	316L and anti-corrosion coating
Dimension	199.7 mm × 201.9 mm × 209.2 mm (7.9" × 8" × 8.2")
Package Dimension	340 mm × 298 mm × 290 mm (13.4" × 11.7" × 11.4")
Weight	Approx. 3000 g (6.61 lb.)
With Package Weight	Approx. 4000 g (8.82 lb.)
Storage Conditions	-40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)
Language	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
Wiper	-R: Yes
General Function	Anti-banding, heartbeat, mirror, flash log, password reset via email, pixel counter
Approval	
EMC	CE-EMC: EN 55032:2015+A1:2020, EN 50130-4:2011+A1:2014, EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021
Safety	CB: IEC 62368-1: 2014
Protection	IP68: IEC 60529:1989+AMD1:1999+AMD2:2013

Anti-Corrosion Protection	NEMA 4X (NEMA 250-2018)
Transport Certification	IATA Dangerous Goods Regulations, Dangerous Goods List, International Maritime Dangerous Goods Code, Railway Dangerous Goods List

▪ Typical Application

Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

This model has TOP-LEVEL SPECIFIC PROTECTION.

Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped for use in areas with moderate anti-corrosion demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain.
No specific protection	Hikvision products at this level are equipped for use in areas where no specific anti-corrosion protection is needed.

▪ Available Model

DS-2XV6A46G0-LIZHRSY(316L)(2.8-12)O-STD

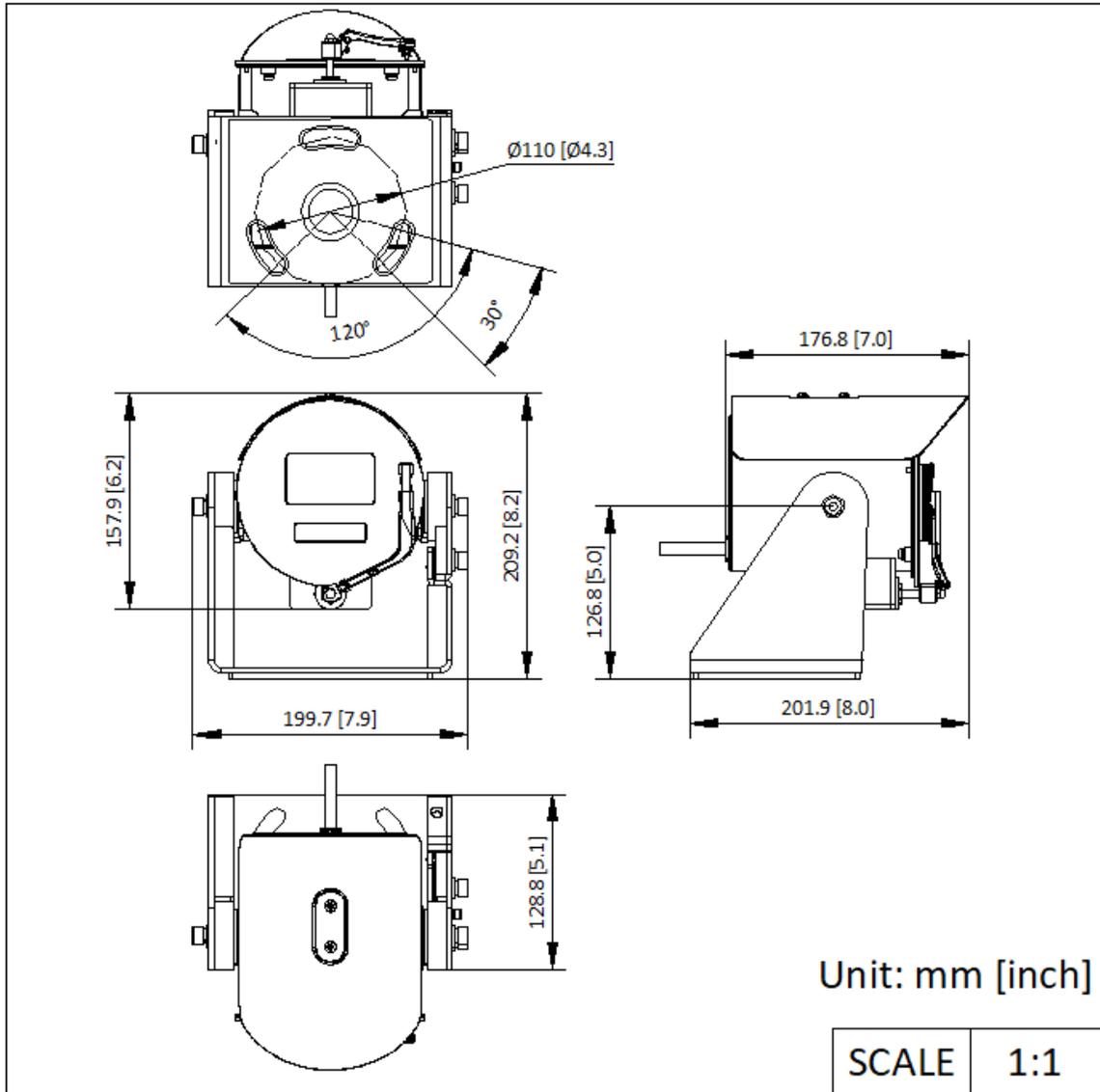DS-2XV6A46G0-LIZHRSY(316L)(4.8-120)O-STD
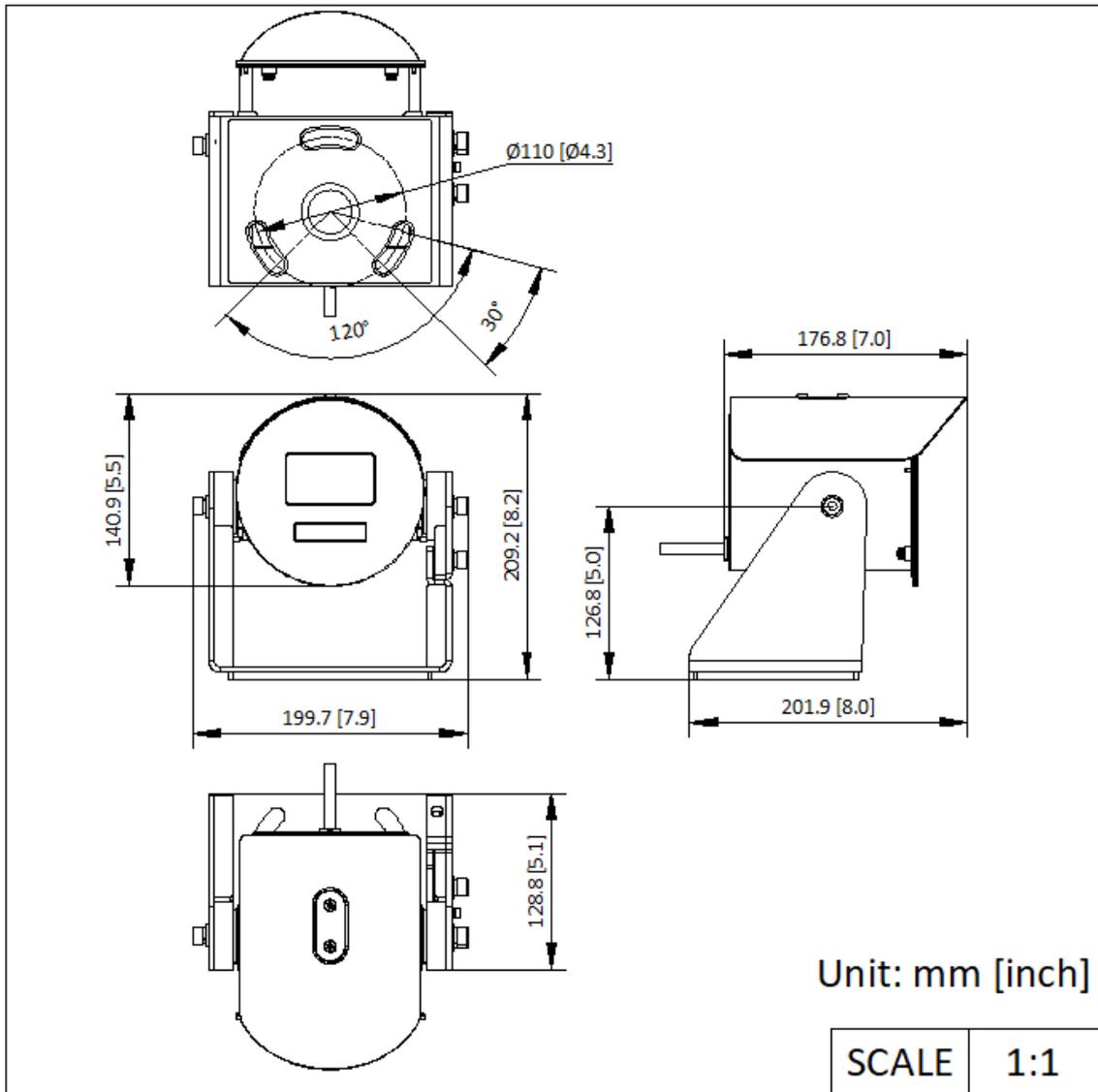
DS-2XV6A46G0-LIZHRSY(316L)(8-32mm)O-STD

DS-2XV6A46G0-LIZHSY(316L)(8-32mm)

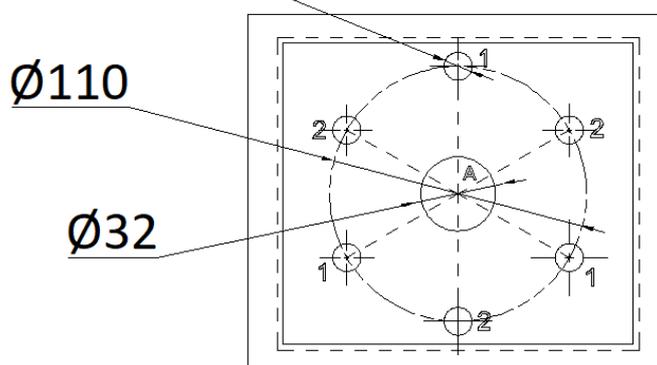DS-2XV6A46G0-LIZHSY(316L)(4.8-120)O-STD

DS-2XV6A46G0-LIZHSY(316L)(2.8-12mm)O-STD

▪ Dimension

Ø110 [Ø4.3]

120°

30°

157.9 [6.2]

209.2 [8.2]

199.7 [7.9]

176.8 [7.0]

126.8 [5.0]

201.9 [8.0]

128.8 [5.1]

Unit: mm [inch]

SCALE	1:1

Ø110 [Ø4.3]

176.8 [7.0]

120°   30°

140.9 [5.5]   209.2 [8.2]   126.8 [5.0]

199.7 [7.9]   201.9 [8.0]

128.8 [5.1]

Unit: mm [inch]

SCALE	1:1

6-Ø12 EQS

Ø110

Ø32

Hole position description:
Hole A: Threading hole, opening as required.
Hole 1 and hole 2: two groups of equipment installation holes.
It is recommended to open all the holes and select the hole position for installation as required.

See Far, Go Further

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