

DS-2CD20166G3-IUY (Black) 16MP Acusense Powered by Darkfighter Fixed Bullet Network Camera



- UHD: Ultra High Definition delivers lifelike immersion
- Excellent low-light performance via Powered by DarkFighter
- Person and vehicle classification based on deep learning
- Clear imaging against strong back light due to 130 dB true WDR technology
- Water and dust resistant (IP67)
- Anti-corrosion design, providing reliability and longevity compared to standard (NEMA 4X)
- Tamper-free & eco-friendly packaging

▪ Specification

Model		DS-2CD20166G3-IUY (Black)
Camera	Image Sensor	1/1.8" Progressive Scan CMOS
	Max. Resolution	4608 × 3456
	Min. Illumination	Color: 0.0008 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR
	Shutter Time	1 s to 1/100,000 s
	Day & Night	IR cut filter
	Angle Adjustment	Pan: 0° to 360°, tilt: 0° to 90°, rotate: 0° to 360°
Lens	Lens Type	Fixed focal lens, 2.8, 4, and 6 mm optional
	Focal Length & FOV	2.8 mm, horizontal FOV 94.5°, vertical FOV 69.9°, diagonal FOV 123.2° 4 mm, horizontal FOV 73.3°, vertical FOV 54.7°, diagonal FOV 94° 6 mm, horizontal FOV 47.1°, vertical FOV 35°, diagonal FOV 60.5°
	Lens Mount	M16
	Iris Type	Fixed
	Aperture	F1.6
	Depth of Field	2.8 mm: 2.9 m to ∞ 4 mm: 3.5 m to ∞ 6 mm: 8.3 m to ∞
DORI	DORI	2.8 mm: D: 117 m, O: 46 m, R: 23 m, I: 11 m 4 mm: D: 148 m, O: 59 m, R: 29 m, I: 14 m 6 mm: D: 236 m, O: 93 m, R: 47 m, I: 23 m
Illuminator	Supplement Light Type	IR
	Supplement Light Range	Up to 40 m
	Smart Supplement Light	Yes
	IR Wavelength	850 nm
Video	Main Stream	50 Hz: 12.5 fps (4608 × 3456) 20 fps (4608 × 2592) 25 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)
		60 Hz: 15 fps (4608 × 3456) 20 fps (4608 × 2592) 30 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)
	Sub-Stream	50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360)
	Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) *Third stream is supported under certain settings.

	Video Compression	Main stream: H.265/H.264/H.264+/H.265+, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264, *Third stream is supported under certain settings.
	Video Bit Rate	32 Kbps to 24 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)	1 fixed region for main stream
Audio	Audio Type	-2U: Mono sound
	Audio Compression	-2U: G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC
	Audio Bit Rate	-2U: 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/16 Kbps to 64 Kbps (AAC-LC)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)
	Audio Sampling Rate	-2U: 8 kHz/16 kHz/32 kHz/48 kHz
	Environment Noise Filtering	-2U: Yes
Network	Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, WebSocket, WebSockets, SRTP, SFTP
	Simultaneous Live View	Up to 6 channels
	API	ONVIF (Profile S, Profile G, Profile T), ISAPI, SDK, ISUP
	User/Host	Up to 32 users 3 user levels: administrator, operator, and user
	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 1.1/1.2/1.3, host authentication (MAC address)
	Network Storage	NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)
	Client	iVMS-4200, Hik-Connect, Hik-Central
Image	Web Browser	Plug-in free live view: Chrome 80+, Firefox 80+, Edge 89+, Local service: Chrome 80+, Firefox 80+, Edge 89+
	Image Parameters Switch	Yes
	Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser
	Day/Night	Day, Night, Auto, Schedule

	Switch	
	Image Enhancement	BLC,HLC,3D DNR,Distortion Correction,Defog
	SNR	≥ 52 dB
	Wide Dynamic Range (WDR)	130 dB
	Privacy Mask	4 programmable polygon privacy masks
Interface	Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
	On-Board Storage	Built-in memory card slot,support microSD/microSDHC/microSDXC card, up to 512 GB
	Audio	-U: Built-in Single-microphone Other: No microphone
	Reset Key	Yes
Event	Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)),video tampering alarm,exception
	Linkage	Upload to FTP/NAS/memory card,notify surveillance center,trigger recording,trigger capture,send email
	Smart Event	Scene change detection
Deep Learning Function	Face Capture	Yes
	Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)
General	Power	12 VDC ± 25%, 0.8 A, max. 9.6 W,Ø5.5 mm coaxial power plug,reverse polarity protection, PoE: IEEE 802.3af, Class 3, max. 11.5 W
	Material	Front cover: metal, body: metal, bracket: metal
	Dimension	Ø74.4 mm × 176.3 mm (Ø2.93" × 6.94")
	Package Dimension	234 mm × 120 mm × 117 mm (9.2" × 4.7" × 4.6")
	Weight	Approx. 530 g (1.2 lb.)
	With Package Weight	Approx. 810 g (1.8 lb.)
	Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
	Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
	General Function	Heartbeat,mirror,flash log,password reset via email,pixel counter,anti-banding
	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
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+A11, CE-LVD: EN 62368-1:2014/A11:2017
	Environment	CE-RoHS: 2011/65/EU, WEEE: 2012/19/EU, Reach: Regulation (EC) No 1907/2006
	Protection	IP67: IEC 60529-2013
	Anti-Corrosion Protection	NEMA 4X (NEMA 250-2018)

▪ 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.

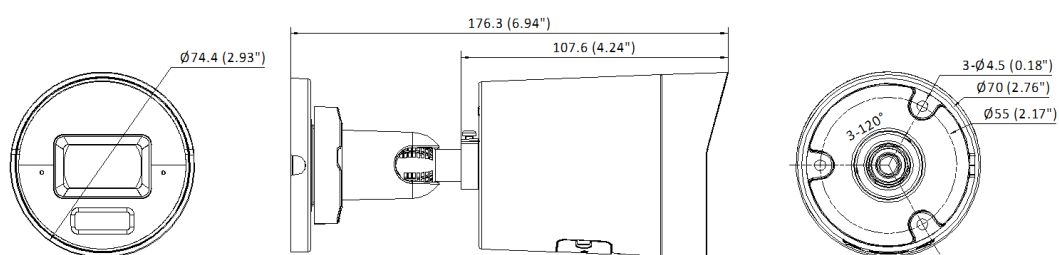
This model has MODERATE PROTECTION

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-2CD20166G3-IUY(2.8mm)/BLACK

▪ Dimension



Unit: mm (inch)

▪ Accessory

▪ Optional

DS-1275ZJ-SUS(Black) Vertical pole mount	DS-1280ZJ-XS-Y(Black) Junction box	DS-1276ZJ-SUS(Black) Corner mount

See Far, Go Further



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