

# DS-2CD3B46G2T-IZHSY(C) 4 MP DarkFighter Varifocal Bullet Network Camera















Empowered by deep learning algorithms, Hikvision AcuSense technology brings human and vehicle targets classification alarms to front- and back-end devices. The system focuses on human and vehicle targets, vastly improving alarm efficiency and effectiveness.

Hikvision has been dedicated to develop products with security since established.

Hikvision always follows security by design principle and has adopted many methods of security technologies into our product development lifecycle, including terminal security, data security, application security, network security, and privacy protection.

In the meantime, the security technologies used by Hikvision are all in compliance with local applicable laws and safety regulations. These security measures could enhance product's cyber security defense capability and protect your devices as well as your data from malicious cyber attacks.

- High quality imaging with 4 MP resolution
- Excellent low-light performance with DarkFighter technology
- Focus on human and vehicle targets classification based on deep learning
- Efficient H.265+ compression technology
- Clear imaging against strong back light due to 140 dB WDR technology
- Motorized varifocal lens for easy installation
- Audio and alarminterface available
- Water and dust resistant (IP67) and vandal-resistant (IK10)
- -Y: Anti-Corrosion NEMA 4X: NEMA 250-2014



### Specification

Image Sensor         1/1.8" Progressive Scan CMOS           Max. Resolution         2688 x 1520           Day & Night         IR cut filter           Angle Adjustment         Panico* to 355*, illito* to 90", rotate: 0" to 360"           Shutter Time         1/3 s to 1/100,000 s           Lens         Various Java to 1/14" to 41.8", vertical FOV 59.3" to 23.6", diagonal FOV 141.3" to 48.1"           Focal Length & FOV         2.8 to 12 mm: horizontal FOV 142* to 15.2", vertical FOV 23.4" to 8.7", diagonal FOV 49.7" to 17.3"           Lens Type         Varifocal lens, motorized lens, 2.8 to 12 mm and 8 to 32 mm optional           Aperture         2.8 to 12 mm: F1.4; 8 to 32 mm: F1.7           Lens Mount         Integrated           Focus         Auto, semi-auto, Manual           Peth of Field         2.8 to 12 mm: 15.4; 8 to 32 mm: F1.7           Liris Type         P-iris           DORI         2.8 to 12 mm: D: 60 to 149 m, 0: 23.8 to 59.1 m, R: 12 to 29.8 m, 1: 6 to 14.9 m a to 32 mm: D: 150.3 to 400 m, 0: 59.7 to 158.7 m, R: 30.1 to 80 m, 1: 5 to 40 m           Illuminator         II           IR Wavelength         850 mm           Supplement Light Range         2.8 to 12 mm: up to 60 m; 8 to 32 mm: up to 80 m           Supplement Light Type         IR           HeCOP         Yes           Open Capability         NA     <	Camera		
Min. Illumination         Color: 0.0014 Lux @ (F1.4, AGC ON),8/W: 0 Lux with IR           Day & Night         IR cut filter           Angle Adjustment         Pan: 0° to 355°; tilt: 0° to 90°, rotate: 0° to 360°           Shutter Time         1/3 s to 1/100,000 s           Lens         2.8 to 12 mm: horizontal FOV 114° to 41.8°, vertical FOV 59.3° to 23.6°, diagonal FOV 41.3° to 48.1°           Focal Length & FOV         2.8 to 12 mm: horizontal FOV 42.5° to 15.2°, vertical FOV 23.4° to 8.7°, diagonal FOV 49.7° to 17.3°           Lens Type         Varifocal lens, motorized lens, 2.8 to 12 mm and 8 to 32 mm optional           Aperture         2.8 to 12 mm: F1.4; 8 to 32 mm: F1.7           Lens Mount         Integrated           Focus         Auto, Semi-auto, Manual           2.8 to 12 mm: 7.5 m to ∞           8 to 32 mm: 7.5 m to ∞           1ris Type         P-iris           DORI         2.8 to 12 mm: 0: 60 to 149 m, 0: 23.8 to 59.1 m, R: 12 to 29.8 m, I: 6 to 14.9 m           8 to 32 mm: D: 150.3 to 400 m, 0: 59.7 to 158.7 m, R: 30.1 to 80 m, I: 15 to 40 m           Illuminator           IR Wavelength         850 nm           Supplement Light Range         2.8 to 12 mm: up to 60 m; 8 to 32 mm: up to 80 m           Smart Supplement Light Type         IR           HEOP         Ves           Open Capability         NA	Image Sensor	1/1.8" Progressive Scan CMOS	
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Angle Adjustment Shutter Time  1/3 s to 1/100,000 s  Lens  2.8 to 12 mm: horizontal FOV114* to 41.8*, vertical FOV 59.3* to 23.6*, diagonal FOV 141.3* to 48.1* 8 to 32 mm: horizontal FOV42.5* to 15.2*, vertical FOV 23.4* to 8.7*, diagonal FOV 49.7* to 17.3*  Lens Type Varifocal lens, motorized lens, 2.8 to 12 mm and 8 to 32 mm optional Aperture 2.8 to 12 mm: F1.4; 8 to 32 mm: F1.7  Lens Mount Integrated Focus Auto, Semi-auto, Manual Depth of Field 2.8 to 12 mm: 7.5 m to ∞ 8 to 32 mm: 7.5 m to ∞ 18 to 32 mm: 7.5 m to ∞ 18 to 32 mm: 7.5 m to ∞ 18 to 32 mm: D: 150.3 to 400 m, 0: 59.7 to 158.7 m, R: 30.1 to 80 m, I: 15 to 40 m  Illuminator  IR Wavelength Supplement Light Range 2.8 to 12 mm: up to 60 m, 8 to 32 mm: up to 80 m  Supplement Light Type  HECP  Open Resources NA Computing Power NA Computing Power NA Pope Capability NA Deep Learning Structure NA Programming Language NA  Video  Third Stream  50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)	Min. Illumination	Color: 0.0014 Lux @ (F1.4, AGC ON),B/W: 0 Lux with IR	
Shutter Time	Day & Night	IR cut filter	
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2.8 to 12 mm: horizontal FOV 114* to 41.8*, vertical FOV 59.3* to 23.6*, diagonal FOV 141.3* to 48.1*	Shutter Time	1/3 s to 1/100,000 s	
Focal Length & FOV	Lens		
St to 32 mm: horizontal FOV 42.5° to 15.2°, vertical FOV 23.4° to 8.7°, diagonal FOV 49.7° to 17.3°		_	
## 8 to 32 mm: horizontal FOV 42.5° to 15.2°, vertical FOV 23.4° to 8.7°, diagonal FOV 49.7° to 17.3°  Lens Type	Focal Length & FOV		
Lens Type         Varifocal lens, motorized lens, 2.8 to 12 mm and 8 to 32 mm optional           Aperture         2.8 to 12 mm: F1.4; 8 to 32 mm: F1.7           Lens Mount         Integrated           Focus         Auto,Semi-auto,Manual           Depth of Field         8 to 32 mm: 7.5 m to ∞           Iris Type         P-iris           DORI           2.8 to 12 mm: D: 60 to 149 m, O: 23.8 to 59.1 m, R: 12 to 29.8 m, I: 6 to 14.9 m 8 to 32 mm: D: 150.3 to 400 m, O: 59.7 to 158.7 m, R: 30.1 to 80 m, I: 15 to 40 m           Illuminator           IR Wavelength         850 nm           Supplement Light Range         2.8 to 12 mm: up to 60 m; 8 to 32 mm: up to 80 m           Supplement Light Type         IR           HEOP           Open Resources         NA           Computing Power         NA           Open Resources         NA           NA           Video           Ma           Video           Ma           Video           Ma           Video           Ma           Video			



Main stream: H.265/H.264/H.264+/H.265+,	
Sub-stream: H.265/H.264/MJPEG,	
Third stream: H.265/H.264,	
Fourth stream: H.265/H.264/MJPEG	
32 Kbps to 8 Mbps	
Baseline Profile, Main Profile, High Profile	
Main Profile	
CBR,VBR	
H.264 and H.265 encoding	
5 fixed regions for main stream and sub-stream	
Yes	
NA	
G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC	
Mono sound	
64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps	
(MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)	
8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz	
Yes	
TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP,	
IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SFTP, ARP, SNMP,	
WebSocket, WebSockets	
Up to 6 channels	
ONVIF (ProfileS, ProfileG, ProfileT),ISAPI,SDK,ISUP	
Up to 32 users	
3 user levels: administrator, operator, and user	
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)	
NAS (NFS, SMB/CIFS),Auto Network Replenishment (ANR),	
Together with high-end Hikvision memory card, memory card encryption and health	
detection are supported.	
iVMS-4200,Hik-Connect,Hik-Central	
Plug-in required live view: IE 10, IE 11,	
Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+,	
Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+	
Yes	
Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable	
Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by clients of tware or web browser	
by clientsoftware or web browser	



SNR	≥ 52 dB
Privacy Mask	4 programmable polygon privacy masks
Interface	
Alarm	3 inputs, 3 outputs (max. 24 VDC/24 VAC, 1 A)
	1 input (line in), two-core terminal block, max. input amplitude: 3.3 Vpp, input
Audio	impedance: 4.7 K $\Omega$ , interface type: non-equilibrium,
Addio	1 output (line out), two-core terminal block, max. output amplitude: 3.3 Vpp, output
	impedance: $100\Omega$ , interface type: non-equilibrium
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
Reset Key	Yes
RS-485	1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Power Output	12 VDC, max. 100 mA
Event	
	Motion detection (support alarm triggering by specified target types (human and
Basic Event	vehicle)),video tampering alarm,exception
	scene change detection, audio exception detection, unattended baggage
Smart Event	detection,object removal detection
	Upload to FTP/NAS/memory card,notify surveillance center, send email, trigger alarm
Linkage	output,trigger recording,trigger capture,audible warning
Deep Learning Function	
Face Capture	Yes
People Counting	NA
	Line crossing, intrusion, region entrance, region exiting
Perimeter Protection	Support alarm triggered by specified target types (human and vehicle)
General	
	12 VDC ± 25%, 1.08 A, max. 13 W,two-core terminal block,
Power	24 VAC ± 20%, 0.9 A, max. 13 W,
	PoE: IEEE 802.3at, Class 4, max. 15 W
Material	Aluminum alloy body
Dimension	Ø105 mm × 340.7 mm (Ø4.1" × 13.4")
Package Dimension	385 mm × 190 mm × 180 mm (15.2" × 7.5" × 7.1")
Weight	Approx. 1455 g (2.9 lb.)
With Package Weight	Approx. 2256 g (4.9 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)
General Function	Heartbeat, anti-banding, mirror, flash log, password reset via email, pixel counter
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
Heater	Yes



Approval	
EMC	FCC: 47 CFR Part 15, Subpart B,
	CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN
	50130-4:2011 +A1: 2014,
	RCM: AS/NZS CISPR 32: 2015,
	IC: ICES-003: Issue 7,
	KC: KN32: 2015, KN35: 2015
Safety	UL: UL 62368-1,
	CB: IEC 62368-1:2014+A11,
	CE-LVD: EN 62368-1:2014/A11:2017,
	BIS: IS 13252 (Part 1): 2010/IEC 60950-1: 2005,
	LOA: IEC/EN 60950-1
Environment	CE-RoHS: 2011/65/EU,
	WEEE: 2012/19/EU,
	Reach: Regulation (EC) No 1907/2006
Protection	IP67:IEC 60529-2013,IK10:IEC 62262:2002
Anti-Corrosion Protection	-Y: 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.

With -Y model: MODERATE PROTECTION Without -Y model: NO SPECIFIC PROTECTION.

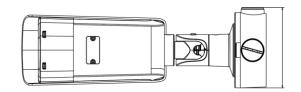
Level	Description
	Hikvision products at this level are equipped for use in
Top-level protection	areas where professional anti-corrosion protection is a
Top-rever protection	must. Typical application scenarios include coastlines,
	docks, chemical plants, and more.
	Hikvision products at this level are equipped for use in
	areas with moderate anti-corrosion demands. Typical
Moderate protection	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
no specific protection	areas where no specific anti-corrosion protection is needed.

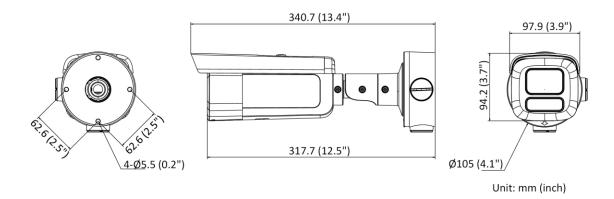
#### Available Model

DS-2CD3B46G2T-IZHSY(2.8-12mm)(C) DS-2CD3B46G2T-IZHSY(8-32mm)(C)

#### Dimension







- Accessory
- Included



Optional



## See Far, Go Further



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