

DarkFighter 2.0 Technology & Products
Sharper motion in any light

HIKVISION

2.0

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Sharper motion
in any light



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Why Is Low-light Imaging Important?

Security demands are evolving, particularly in challenging environments where light is less than ideal. The ability to capture clear images in low light is essential in places like intersections or parking lots, where it's important to clearly see various objects and movements at all times. Whether day or night, it's crucial to ensure that every detail is visible, vivid, and in color.

DarkFighter Technology Family: See Without Compromises

Since its introduction, Hikvision's DarkFighter technology family has been at the forefront of low-light imaging. Hikvision is leading the way with its DarkFighter, DarkFighterS, and DarkFighterX technologies. DarkFighter 2.0 builds on this legacy, offering advanced features and superior imagery that set a new standard in the security industry.

DarkFighter 2.0 AI-powered low-light imaging running on powerful processor

DarkFighter

DarkFighterS

DarkFighterX

1/1.8" Sensor
Adding sensor size by **180%**

1/1.8" Sensor
Adding sensor size by **180%**

Super Confocal F1.0 Lens
P-Iris

1/1.8" Sensor
Adding sensor size by **180%**

1/1.8" Sensor
Adding sensor size by **180%**

DarkFighter 2.0

Help Users Get the Max from Video

Capture detail, not noise

The **SharpMotion** feature guarantees sharp and colorful video of dynamic scenes with **minimized noise and blur** by combining AI and image signal processing (ISP).



Keep everything crisp & clear

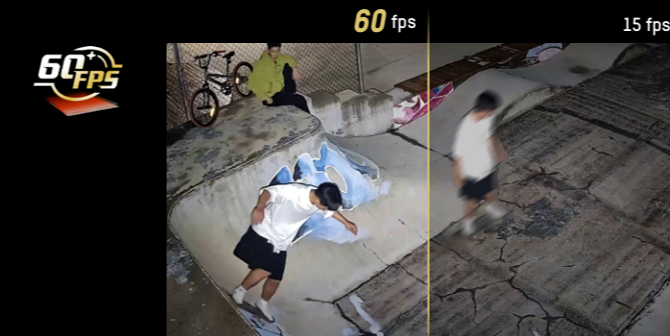
The **ShotN** feature* simultaneously capture **clear images** of objects moving at **different speeds**, such as a car and a person. This is accomplished by setting suitable shutter speeds according to object types.

* This feature will only function when Multi-Target-Type-Detection is activated.



Fluid motion, unmatched clarity

High Frame Rate enables clear capture of fast-moving objects, with a resolution of up to 4K at 60 fps.



Balance all the pixels

In the face of challenging light conditions, **Auto Wide Dynamic Range (AWDR)** automatically enhances dynamic range by blending multiple exposure data, preventing overexposure in bright areas and retaining detail in dark areas.



Make the Most of AI

For select cameras empowered by DarkFighter 2.0, AI is not just used to enhance image signals. It also means enhanced AI capabilities. The **dual AI functionality** enables the **simultaneous operation of two AI algorithms**. For example, perimeter protection and ANPR can operate simultaneously on one Gen-2 DeepinView camera at a parking lot, making it versatile for complex applications.

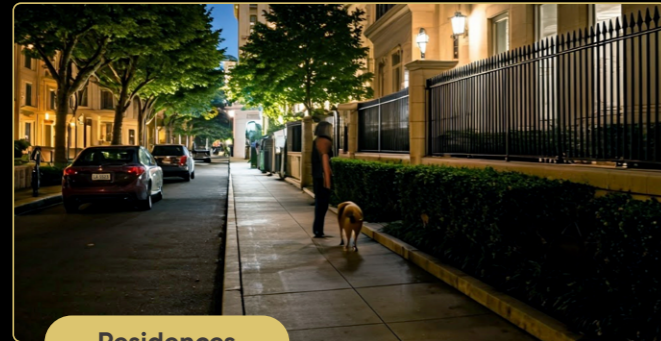


- ON** ANPR on to recognize passing vehicles
- ON** Perimeter Protection on to alert pedestrians in the traffic lanes

Application Scenarios



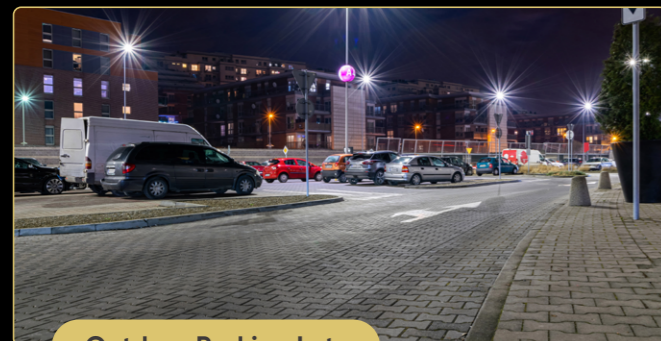
Industrial Parks



Residences



Urban Roads



Outdoor Parking Lots



Park Roads

Product Showcase

DeepinView Series

7-Line Multi-Intelligence (Varifocal Lens)



IDS-2CD7Ax762-XZHS(Y)

- 4/8 MP@60 fps, 2.8-12 mm motor lens
- 1/1.8" sensor, P-Iris, F1.0, smart hybrid light
- SharpMotion, ShotN, AWDR
- HEOP, AIOP, 8-in-1 intelligence, simultaneous dual AI
- G-Sensor, TPM 2.0, Power Meter
- 1/1 Audio I/O, 2/2 Alarm I/O, 1 CVBS Video Out, -Y: 1 RS-485, 12V DC Power Out
- IP67, IK10, EN50121-4, PVC FREE, NEMA 4X for -Y models



IDS-2CD7Ax662-IZHS(Y)(1T)/5G

- 4/8 MP@60 fps, or 12 MP@30 fps, 2.8-12 mm/8-32 mm motor lens
- 1/1.8" sensor, P-Iris
- SharpMotion, ShotN, AWDR
- HEOP, AIOP, 8-in-1 intelligence, simultaneous dual AI
- G-Sensor, TPM 2.0, Power Meter
- 1/1 Audio I/O, 2/2 Alarm I/O, 1 CVBS Video Out, -Y: 1 RS-485, 12V DC Power Out
- IP67, IK10, EN50121-4, PVC FREE, NEMA 4X for -Y models
- (1T): built-in 1 TB SSD (4 MP models only); /5G: Support 5G connection

7-Line ANPR



IDS-2CD7Ax762/P-IZHS(Y)

- 4/8 MP@60 fps, 2.8-12 mm motor lens
- 1/1.8" sensor, P-Iris, F1.0, smart hybrid light
- SharpMotion, AWDR
- ANPR / Perimeter Protection
- G-Sensor, TPM 2.0, Power Meter
- 1/1 Audio I/O, 2/2 Alarm I/O, 1 RS-485, 12V DC Power Out, 1 CVBS Video Out, -Y: 1 Wiegand
- IP67, IK10, EN50121-4, PVC FREE, NEMA 4X for -Y models



IDS-2CD7Ax662/P-IZHS(Y)(5G)

- 4/8 MP@60 fps, 2.8-12 mm/8-32 mm motor lens
- 1/1.8" sensor, P-Iris
- SharpMotion, AWDR
- ANPR/Perimeter Protection
- G-Sensor, TPM 2.0, Power Meter
- 2/2 Alarm I/O, 1 CVBS Video Out, -Y: 1/1 Audio I/O, 1 RS-485, 12V DC Power Out, 1 Wiegand
- IP67, IK10, EN50121-4, PVC FREE, NEMA 4X for -Y models
- 5G: Support 5G connection



IDS-2CD75x662-XZHS(Y)

- 4/8 MP@60 fps, or 12 MP@30 fps, 2.8-12 mm/8-32 mm motor lens, PTRZ
- 1/1.8" sensor, P-Iris, smart hybrid light
- SharpMotion, ShotN, AWDR
- HEOP, AIOP, 8-in-1 intelligence, simultaneous dual AI
- G-Sensor, TPM 2.0, Power Meter
- 1/1 Audio I/O, 1/1 Alarm I/O, Built-in 2 Mics & 1 Speaker, 1 RS-485, 12V DC Power Out, 1 CVBS Video Out
- IP67, IK10, EN50121-4, PVC FREE, NEMA 4X for -Y models



IDS-2CD71x662-IZ(HS)(Y)(1T)

- 4/8 MP@60 fps, or 12 MP@30 fps, 2.8-12 mm/8-32 mm motor lens
- 1/1.8" sensor, P-Iris
- SharpMotion, ShotN, AWDR
- HEOP, AIOP, 8-in-1 intelligence, simultaneous dual AI
- G-Sensor, TPM 2.0, Power Meter
- 1/1 Audio I/O, 2/2 Alarm I/O, Built-in 2 Mics & 1 Speaker, 1 RS-485, 12V DC Power Out, 1 CVBS Video Out
- IP67, IK10, EN50121-4, PVC FREE, NEMA 4X for -Y models
- (1T): built-in 1 TB SSD (4 MP models only)



IDS-2CD704662/EP-IHSY(R)

- 4/8 MP@60 fps, 3.8-16 mm/11-40 mm motor lens
- 1/1.8" sensor, P-Iris
- SharpMotion, AWDR
- ANPR/Perimeter Protection
- G-Sensor, TPM 2.0, Power Meter
- 1/1 Audio I/O, 2/2 Alarm I/O, 1 RS-485, 12V DC Power Out, 1 CVBS Video Out
- IP66, IK10, NEMA 4X, PVC FREE, EN50121-4 for -R models



IDS-2CD75x662/P-XZHS(Y)

- 4/8 MP@60 fps, 2.8-12 mm/8-32 mm motor lens, PTRZ
- 1/1.8" sensor, P-Iris, smart hybrid light
- SharpMotion, AWDR
- ANPR/Perimeter Protection
- G-Sensor, TPM 2.0, Power Meter
- 1/1 Audio I/O, 1/1 Alarm I/O, Built-in 2 Mics & 1 Speaker, 1 RS-485, 12V DC Power Out, 1 CVBS Video Out
- IP67, IK10, EN50121-4, PVC FREE, NEMA 4X for -Y models



IDS-2CD704662/E-IHSY(R)

- 4/8 MP@60 fps, or 12 MP@30 fps, 3.8-16 mm/11-40 mm motor lens
- 1/1.8" sensor, P-Iris
- SharpMotion, ShotN, AWDR
- HEOP, AIOP, 8-in-1 intelligence, simultaneous dual AI
- G-Sensor, TPM 2.0, Power Meter
- 2/2 Alarm I/O, 1 RS-485, 12V DC Power Out, 1 CVBS Video Out, without -R: 1/1 Audio I/O
- IP66, IK10, NEMA 4X, PVC FREE, EN50121-4 for -R models



IDS-2CD7A4662-IZHS(Y)(6-132mm)

- 4 MP@60 fps, 6-132 mm motor lens, 22x optical zoom
- 1/1.8" sensor, P-Iris
- SharpMotion, ShotN, AWDR
- 8-in-1 intelligence, support AIOP, HEOP
- G-Sensor, TPM 2.0, Power Meter, built-in gyroscope image stabilization
- 1/1 Audio I/O, 2/2 Alarm I/O, 1 CVBS Video Out, -Y: 1 RS-485, 12V DC Power Out
- IP67, IK10, PVC FREE, NEMA 4X for -Y models



IDS-2CD7A4662/P-IZHS(Y)(6-132 mm)

- 4 MP@60 fps, 6-132 mm motor lens, 22x optical zoom
- 1/1.8" sensor, P-Iris
- SharpMotion, AWDR
- ANPR / Perimeter Protection
- G-Sensor, TPM 2.0, Power Meter, built-in gyroscope image stabilization
- 1/1 Audio I/O, 2/2 Alarm I/O, 1 CVBS Video Out, -Y: 1 RS-485, 12V DC Power Out
- IP67, IK10, PVC FREE, NEMA 4X for -Y models

Notes:
 1. HEOP functionality will be available through future firmware updates.
 2. The 50 or 60 fps high frame rate is only supported in monitoring mode. When the smart VCA feature(s) is enabled, the cameras can support a maximum frame rate of 25 or 30 fps.

Some features or functions require specific settings to be available, please refer to the product specs.

8-Line Special Models



iDS-2CD8A48G2-XZHS(Y)

- 2-ch 4 MP@30 fps
- 15-45 mm DarkFighterX motor lens + 4 mm F1.0 fixed lens
- Dual 1/1.8" sensors, smart hybrid light
- P-Iris, 140 dB WDR
- SharpMotion, ShotN
- 6-in-1 intelligence on CH-1; Perimeter Protection on CH-2
- TPM 2.0
- 1/1 Audio I/O, 2/2 Alarm I/O, 1 CVBS Video Out, 1 RS-485, 12V DC Power Out
- IP67, IK10, PVC FREE, NEMA 4X for -Y models



iDS-2CD8A66G2-XZHS(Y)

- 4 MP@60 fps + 4 MP@30 fps/8 MP@24 fps + 4 MP@30 fps
- 8A46: 8-32 mm DarkFighter motor lens + 4 mm F1.0 fixed lens;
- 8A86: 10-50 mm DarkFighter motor lens + 4 mm F1.0 fixed lens;
- 8A46: Dual 1/1.8" sensors, 8A86: 1/1.2" sensor + 1/1.8" sensor
- P-Iris, smart hybrid light, 140 dB WDR
- SharpMotion, ShotN
- 6-in-1 intelligence on CH-1; Perimeter Protection on CH-2
- TPM 2.0
- 1/1 Audio I/O, 2/2 Alarm I/O, 1 CVBS Video Out, 1 RS-485, 12V DC Power Out
- IP67, IK10, PVC FREE, NEMA 4X for -Y models



iDS-2CD8Vxx660/X2-XZHS(Y)

- 4/8 MP@30 fps, 2 lenses, motorized PT adjustment
- Two 10-50 mm VF lenses
- Dual 1/1.8" sensors
- 150 dB WDR, smart hybrid light
- 5-in-1 intelligence
- SharpMotion
- TPM 2.0
- IP67, PVC FREE, NEMA 4X for -Y models



iDS-2CD8Vxx660/X4-XZHS(Y)

- 4/8 MP@30 fps, 4 lenses, motorized PT adjustment
- Two 10-50 mm VF lenses + two 4 mm F1.0 fixed lenses
- 1/1.2" sensor for iDS-2CD8V886G0/X4, 1/1.8" sensor for iDS-2CD8V4466G0/X4
- 140 dB WDR, smart hybrid light
- 5-in-1 intelligence
- SharpMotion, ShotN
- TPM 2.0
- IP67, PVC FREE, NEMA 4X for -Y models



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PTZ



DS-2SF8C448MXG1-EL(W)(Y)/14

- Panoramic: 4 MP@25/30 fps, 1/1.8" sensor, 4 mm
- PTZ: 4 MP@50/60 fps, 1/1.2" sensor, 48x optical zoom
- 30 m white light, 300 m IR, SharpMotion, AWDR
- 140 dB WDR, GIS
- Panoramic: Tilt: 7° to 17°
- PTZ: Pan: 360°, Tilt: -20° to 90°
- Smart events, face comparison, ANPR, multi-target-type detection, traffic violation
- Smart linkage, auto tracking 3.0
- IP67, IK10, TPM 2.0
- -W: Auto wiper, -Y: NEMA 4X anti-corrosion



DS-2SF8C848MXG1-EL(W)(Y)/26

- Panoramic: 180°, 6 MP@25/30 fps, 1/1.8" sensor, 2.8 mm
- PTZ: 8 MP@50/60 fps, 1/1.2" sensor, 48x optical zoom
- 30 m white light, 300 m IR, SharpMotion, AWDR
- 140 dB WDR, GIS
- Panoramic: Tilt: 12° to 24°
- PTZ: Pan: 360°, Tilt: -20° to 90°
- Smart events, face comparison, ANPR, multi-target-type detection, traffic violation
- Smart linkage, auto tracking 3.0
- IP67, IK10, TPM 2.0
- -W: Auto wiper, -Y: NEMA 4X anti-corrosion



DS-2SF7C442MXG1-EL(W)(Y)/14

- Panoramic: 4 MP@25/30 fps, 1/1.8" sensor, 4 mm
- PTZ: 4 MP@50/60 fps, 1/1.8" sensor, 42x optical zoom
- 30 m white light, 300 m IR, SharpMotion, AWDR
- 140 dB WDR, GIS
- Panoramic: Tilt: 7° to 17°
- PTZ: Pan: 360°, Tilt: -20° to 90°
- Smart events, face comparison, ANPR, multi-target-type detection, traffic violation
- Smart linkage, auto tracking 3.0
- IP67, IK10, TPM 2.0
- -W: Auto wiper, -Y: NEMA 4X anti-corrosion



DS-2SF7C842MXG1-EL(W)(Y)/26

- Panoramic: 180°, 6 MP@25/30 fps, 1/1.8" sensor, 2.8 mm
- PTZ: 8 MP@50/60 fps, 1/1.8" sensor, 42x optical zoom
- 30 m white light, 300 m IR, SharpMotion, AWDR
- 140 dB WDR, GIS
- Panoramic: Tilt: 12° to 24°
- PTZ: Pan: 360°, Tilt: -20° to 90°
- Smart events, face comparison, ANPR, multi-target-type detection, traffic violation
- Smart linkage, auto tracking 3.0
- IP67, IK10, TPM 2.0
- -W: Auto wiper, -Y: NEMA 4X anti-corrosion



DS-2DF7A425IXG-EL(Y)

- 4 MP@50/60 fps, 1/1.8" sensor, 25x optical zoom
- 300 m IR, SharpMotion, AWDR
- 140 dB WDR, GIS
- Pan: 360°, Tilt: -20° to 90°, smart pan-tilt correction
- Smart events, face capture, ANPR, multi-target-type detection
- Auto tracking 2.0
- IP67, IK10, TPM 2.0
- -Y: NEMA 4X anti-corrosion



DS-2DF7A836IXG-EL(Y)

- 8 MP@50/60 fps, 1/1.8" sensor, 36x optical zoom
- 300 m IR, SharpMotion, AWDR
- 140 dB WDR, GIS
- Pan: 360°, Tilt: -20° to 90°, smart pan-tilt correction
- Smart events, face capture, ANPR, multi-target-type detection
- Auto tracking 2.0
- IP67, IK10, TPM 2.0
- -Y: NEMA 4X anti-corrosion



DS-2DF8C442IXG1-EL(W)(Y)

- 4 MP@50/60 fps, 1/1.8" sensor, 42x optical zoom
- 400 m IR, SharpMotion, AWDR
- 140 dB WDR, GIS
- Pan: 360°, Tilt: -20° to 90°, smart pan-tilt correction
- Smart events, face capture, ANPR, multi-target-type detection
- Auto tracking 3.0
- IP67, IK10, TPM 2.0
- -W: Auto wiper, -Y: NEMA 4X anti-corrosion



DS-2DF8C842IXG1-EL(W)(Y)

- 8 MP@50/60 fps, 1/1.2" sensor, 42x optical zoom
- 400 m IR, SharpMotion, AWDR
- 140 dB WDR, GIS
- Pan: 360°, Tilt: -20° to 90°, Smart pan-tilt correction
- Smart events, face capture, ANPR, multi-target-type detection
- Auto tracking 3.0
- IP67, IK10, TPM 2.0
- -W: Auto wiper, -Y: NEMA 4X anti-corrosion

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Some features or functions require specific settings to be available, please refer to the product specs.