What Makes Our ColorVu Technology So Outstanding?

Hikvision's ColorVu technology helps users protect people and property by capturing high-quality, full-color video 24/7 with the same sharp rendering at night time as in daylight. Now, combine ColorVu ("+") with other Hikvision's advanced technology ("X") and amazing possibilities emerge. In other words, one plus one equals amazing!

That's how "ColorVu+X" works, delivering unmatched value to the security market with more product and solution options than ever. Cameras powered by these technologies render clear imaging with vivid details for video evidence, improved alarm accuracy for real security threats, and video search efficiency, taking your security above and beyond what was previously possible. Versatile products and solutions are introduced with optimized performance to tackle more common security concerns in residences, office buildings, parking lots and many more.

Cutting-Edge Hardware

3.6--9mm upgrade to 2.8--12mm, and F1.0 super large aperture for all focal length.

State-of-the-Art Image Processing

Pioneering ISP technology generates precise color to reveal clear, vivid images Up to 130 dB WDR

Super-High Reliability

Active alignment technology guarantees the focusing performance in the mass production of ultra-high-definition ColorVu-enabled products for superlative quality control.

ColorVu Technology

ColorVu + Panoramic

The whole scene in vivid color

Expanding the boundaries of brilliance with a full picture

ColorVu + Varifocal

Zoom in with vivid color

Changeable focal lengths for more scenarios

ColorVu + 4K

Capture richer, more colorful details

Crisp and clear imaging along with fluid preview and playback

ColorVu + Live Guard

Proactive protection, day and night

Visual and auditory warnings on-site with real-time notifications

ColorVu + Deep Learning

Smarter detection around the clock

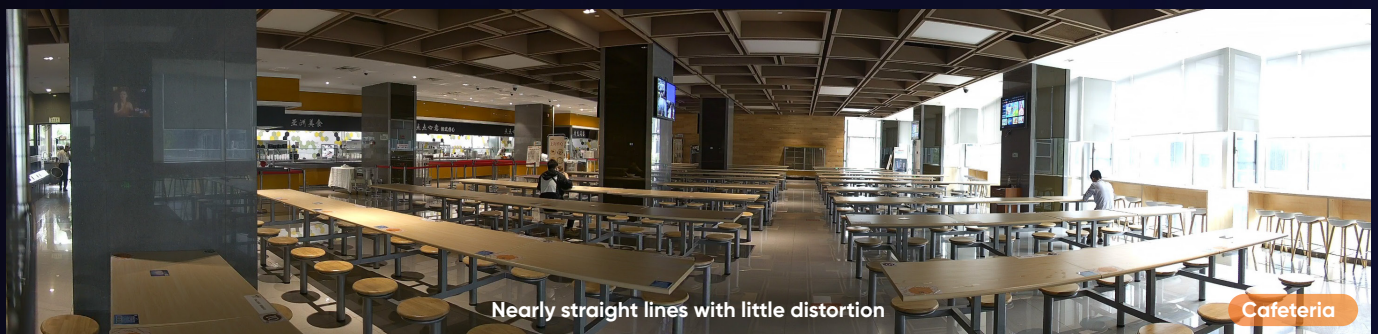Taking alarm accuracy and search efficiency to a whole new level

ColorVu + Panoramic
The whole scene in vivid color

Challenges   Large areas are extremely difficult to secure, often requiring multiple cameras to provide full coverage within a single view. With traditional cameras, monitoring these kinds of areas becomes even more difficult – if not impossible – at night or in low light conditions.

Solutions   To address all of these challenges, Hikvision has integrated ColorVu into its industry-leading panoramic cameras, which utilizes Hikvision's Image Fusion Technologies of pioneering pixel-level image registration technology and brightness and color processing to stitch together images from two side-by-side lenses for a seamless, 180-degree horizontal view.

- Reduced equipment requirements (fewer cameras needed to cover large areas)
- Improved situational awareness without blind spots
- Every detail captured in full color – even in the dark

Dual lens, fusion imaging

Pixel-level image matching **1**

2 Brightness and color processing

180° panoramic view, seamless imaging

Left lens image   Right lens image

The seamless fusion of images in one shot

Nearly straight lines with little distortion   **Cafeteria**

Minor distortion near the edges of an image enables a similar natural view of human eyes

Urban Roadways

4K resolution with 180° field of view provides wider, clearer imaging with rich details, even at night

ColorVu + 4K
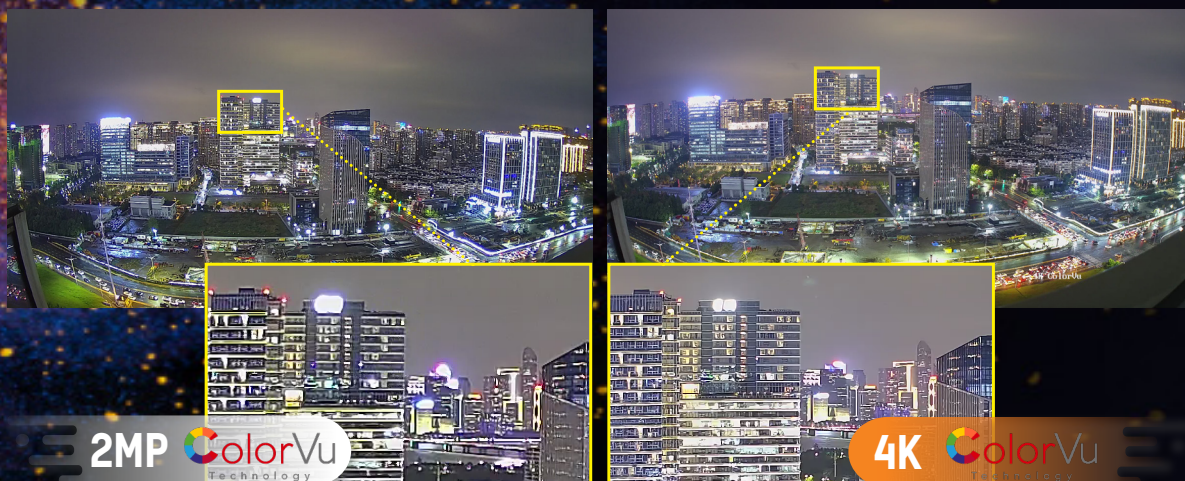## Capture richer, more colorful details

Challenges   Traditional cameras may lack the resolution needed to provide clear, full-color video or imaging in lower light conditions.

Solutions   Hikvision has overcome this challenge by integrating ColorVu technology into advanced 4K cameras, delivering clear and crisp imaging, fluid footage preview and playback, and enhanced color imaging in low light conditions and at night in outdoor areas.

The 4K resolution provides great details, especially suitable for open spaces and large scenes.

ColorVu + Varifocal
Zoom in with vivid color

Challenges   Historically, designing long focal length with large-aperture lenses has been very challenging because correcting the optical aberrations and distortion that arise from large apertures requires complex designs. Therefore, most typical varifocal lenses are relatively small-sized, and when focal length is increased, the aperture becomes smaller. But in this way the lens may not let enough light in, causing darker imaging when the environment is not bright enough.

Solutions   Hikvision's self-developed varifocal lenses with ColorVu technology provide fixed, large, F1.0 aperture in a compact form factor. The industry-leading design keeps the lens size just right for precise focus, reducing weight and consumer costs. ColorVu + Varifocal guarantees brightness and full color as the camera zooms in and out.

Hikvision's proprietary fixed
F1.0 large aperture varifocal lens

T   F1.0

W   F1.0

Brightness unaffected while zooming in or out

ColorVu + Deep Learning
Smarter detection around the clock

Challenges   Often, security systems are unable to differentiate between moving objects, such as falling leaves, heavy rain, and moving animals, versus real security threats, such as people breaching a site perimeter.

Solutions   Hikvision has integrated ColorVu into its AI-powered cameras with AcuSense. These reliably identify real security threats, such as human beings and vehicles, and send alerts to security teams in real time. Meanwhile, false alarms are minimized, which greatly reduces workloads and costs and increases efficiency. With ColorVu and AcuSense technologies together, users get intelligent, proactive security, with high-resolution, full-color video imaging.

Combining ColorVu technology and AcuSense technology allows users to receive human & vehicle alarms and to search human or vehicle events with vivid, colorful details, providing more reliable security.

ColorVu + Live Guard
Proactive protection, day and night

Challenges   While most security systems can detect intrusions and other security incidents, goods and properties can still be lost or damaged before teams can respond.

Solutions   Hikvision has solved these issues by integrating ColorVu technology and Live Guard sound and light alarms into selected camera models. While ColorVu technology captures detailed video footage of security incidents in high resolution and full color, Live Guard visual and auditory warnings let trespassers know they have been detected, deterring them from entering a site or building. Notifications can also be sent to homeowners, business owners, or security teams in real time, supporting faster, more effective responses.

Simple and seamless integration with NVR and Hik-Connect

• 10 embedded + 3 customized audios to select
• Customized audio recording and uploading via Hik-Connect
• Mute/unmute notifications and alerts of Live Guard on Hik-Connect
• Turn on/off visual and auditory warnings with a few taps via Hik-Connect

Remote Configuration

Hikvision NVR

Camera with ColorVu and Live Guard

When the camera is added to Hik-Connect, it can be easy to mute/unmute notifications and alerts of Live Guard.

Hik-Connect App

Network Connection

Varied Applications of Live Guard

Please leave the parcel at front door!
Private area! No parking!

Restricted area! Please keep away!

Welcome!

Mind the gap!

House   **Factory**   **Shop**   **Railway Station**

Network Cameras with ColorVu

DS-2CD2387G2P-LSU/SL
4K **1/1.8''** Panoramic Turret Network Camera

- 0.0005 lux @ F1.0
- 2 x 1/1.8'' CMOS sensor
- 4 mm dual lens
- Colorful imaging 24/7
- Human/vehicle classification
- Strobe light and audio alarm
- H.265+/H.265
- IP67
- 130 dB WDR
- Built-in microphone
- and speaker
- Alarm I/O 1/1, audio I/O 1/1

AcuSense Technology

DS-2CD2T87G2P-LSU/SL
4K **1/1.8''** Panoramic Bullet Network Camera

- 0.0005 lux @ F1.0
- 2 x 1/1.8'' CMOS sensor
- 4 mm dual lens
- Colorful imaging 24/7
- Human/vehicle classification
- Strobe light and audio alarm
- H.265+/H.265
- IP67
- 130 dB WDR
- Built-in microphone
- and speaker
- Alarm I/O 1/1, audio I/O 1/1

AcuSense Technology

DS-2CD2347G2P-LSU/SL
4 MP **1/2.5''** Panoramic Turret Network Camera

- 0.0005 lux @ F1.0
- 2 x 1/2.5'' CMOS sensor
- 2.8 mm dual lens
- Colorful imaging 24/7
- Human/vehicle classification
- Strobe light and audio alarm
- H.265+/H.265
- IP67
- 130 dB WDR
- Built-in microphone and speaker
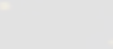- Alarm I/O 1/1, audio I/O 1/1

AcuSense Technology

DS-2CD2T47G2P-LSU/SL
4 MP **1/2.5''** Panoramic Bullet Network Camera

- 0.0005 lux @ F1.0
- 2 x 1/2.5'' CMOS sensor
- 2.8 mm dual lens
- Colorful imaging 24/7
- Human/vehicle classification
- Strobe light and audio alarm
- H.265+/H.265
- IP67
- 130 dB WDR
- Built-in microphone and speaker
- Alarm I/O 1/1, audio I/O 1/1

AcuSense Technology

DS-2CD2087G2-L(U)
4K **1/1.2''** Bullet Network Camera

- 0.0005 lux @ F1.0
- 1/1.2'' CMOS sensor
- 2.8, 4 or 6 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67
- 130 dB WDR
- -U: built-in microphone

AcuSense Technology

DS-2CD2387G2-L(U)
4K **1/1.2''** Turret Network Camera

- 0.0005 lux @ F1.0
- 1/1.2'' CMOS sensor
- 2.8 or 4 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67
- 130 dB WDR
- -U: built-in microphone

AcuSense Technology

DS-2CD2T87G2-L
4K **1/1.2''** Bullet Network Camera

- 0.0005 lux @ F1.0
- 1/1.2'' CMOS sensor
- 2.8, 4 or 6 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67
- 130 dB WDR

AcuSense Technology

DS-2CD2387G2-LSU/SL
4K **1/1.2''** Turret Network Camera

- 0.0005 lux @ F1.0
- 1/1.2'' CMOS sensor
- 2.8 or 4 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- Strobe light and audio alarm
- H.265+/H.265
- IP67
- 130 dB WDR
- Built-in microphone and speaker
- Alarm I/O 1/1, audio I/O 1/1

AcuSense Technology

DS-2CD2T87G2-LSU/SL
4K **1/1.2''** Bullet Network Camera

- 0.0005 lux @ F1.0
- 1/1.2'' CMOS sensor
- 2.8, 4 or 6 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- Strobe light and audio alarm
- H.265+/H.265
- IP67
- 130 dB WDR
- Built-in microphone and speaker
- Alarm I/O 1/1, audio I/O 1/1

AcuSense Technology

DS-2CD2647G2T-LZS
4 MP **1/1.8''** Bullet Network Camera

- 0.0005 lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8 - 12 mm motorized vari focal lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67, IK10
- 130 dB WDR
- Alarm I/O 1/1, audio I/O 1/1

AcuSense Technology

DS-2CD2747G2T-LZS
4 MP **1/1.8''** Dome Network Camera

- 0.0005 lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8 - 12 mm motorized vari focal lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67, IK10
- 130 dB WDR
- Alarm I/O 1/1, audio I/O 1/1

AcuSense Technology

DS-2CD2047G2-L(U)
4 MP **1/1.8''** Bullet Network Camera

- 0.0005lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8, 4 or 6 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67
- 130 dB WDR
- -U: built-in microphone

AcuSense Technology

Network Cameras with ColorVu

DS-2CD2147G2-L(SU)
4 MP **1/1.8''** Dome Network Camera

- 0.0005 lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8 or 4 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67, IK10
- 130 dB WDR
- -SU: built-in microphone,
- alarm I/O 1/1, audio I/O 1/1

DS-2CD2347G2-L(U)
4 MP **1/1.8''** Turret Network Camera

- 0.0005 lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8 or 4 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67
- 130 dB WDR
- -U: built-in microphone

DS-2CD2547G2-LS
4 MP **1/1.8''** Mini Dome Network Camera

- 0.0005 lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8 or 4 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67, IK08
- 130 dB WDR
- Built-in microphone, alarm I/O 1/1,
- audio I/O 1/1

DS-2CD2T47G2-L
4 MP **1/1.8''** Bullet Network Camera

- 0.0005 lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8, 4 or 6 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- H.265+/H.265
- IP67
- 130 dB WDR

DS-2CD2047G2-LU/SL
4 MP **1/1.8''** Bullet Network Camera

- 0.0005 lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8, 4 or 6 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- Strobe light and audio alarm
- H.265+/H.265
- IP67
- 130 dB WDR
- Built-in microphone and speaker

DS-2CD2347G2-LSU/SL
4 MP **1/1.8''** Turret Network Camera

- 0.0005 lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8 or 4 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- Strobe light and audio alarm
- H.265+/H.265
- IP67
- 130 dB WDR
- Built-in microphone and speaker
- Alarm I/O 1/1, audio I/O 1/1

DS-2CD2T47G2-LSU/SL
4 MP **1/1.8''** Bullet Network Camera

- 0.0005 lux @ F1.0
- 1/1.8'' CMOS sensor
- 2.8, 4 or 6 mm fixed lens
- Colorful imaging 24/7
- Human/vehicle classification
- Strobe light and audio alarm
- H.265+/H.265
- IP67
- 130 dB WDR
- Built-in microphone and speaker
- Alarm I/O 1/1, audio I/O 1/1

Recommended NVRs

DS-7716NI-M4(/16P)
16-Channel NVR with 4 HDDs

- Up to 14 TB capacity for each HDD
- Decoding formats: supporting H.265/H.265+/H.264/H.264+
- Bandwidth: 256 Mbps incoming, 256 Mbps outgoing
- 32-ch 1080p decoding
- 2 HDMI, 1 VGA and 1 CVBS, HDMI1 support 8K output
- eSATA by default
- Optional 16 PoE ports, with /16P model
- 1.5U chassis

DS-7608NI-M2(/8P)
8-Channel NVR with 2 HDDs

- Up to 14 TB capacity for each HDD
- Decoding formats: supporting H.265/H.265+/H.264/H.264+
- Bandwidth: 128 Mbps incoming, 256 Mbps outgoing
- 32-ch 1080p decoding
- 1 HDMI, 1 VGA and 1 CVBS output, HDMI1 support 8K output
- Optional 8 PoE ports, with /8P model
- 1U chassis

DS-7716NXI-I4/S(/16P)(C)
16-Channel NVR with 4 HDDs

- Up to 10 TB capacity for each HDD
- Decoding formats: supporting H.265/H.265+/H.264/H.264+/MPEG4
- Bandwidth: 160 Mbps incoming, 256 Mbps outgoing
- 16-ch 1080p decoding
- 2 HDMI, 1 VGA and 1 CVBS output
- eSATA by default
- Optional 16 PoE ports, with /16P model
- 1.5U chassis
- Human/vehicle classification

DS-7608NXI-I2/S(/8P)(C)
8-Channel NVR with 2 HDDs

AcuSense
Technology

- Up to 10 TB capacity for each HDD
- Decoding formats: supporting H.265/H.265+/H.264/H.264+/MPEG4
- Bandwidth: 80 Mbps incoming, 256 Mbps outgoing
- 16-ch 1080p decoding
- 1 HDMI, 1 VGA and 1 CVBS output
- Optional 8 PoE ports, with /8P model
- 1U chassis
- Human/vehicle classification

DS-7732NXI-I4/(16P)/S (C)
16-Channel NVR with 4 HDDs

- Up to 10 TB capacity for each HDD
- Decoding formats: supporting H.265/H.265+/H.264/H.264+/MPEG4
- Bandwidth: 160 Mbps incoming, 256 Mbps outgoing
- 16-ch 1080p decoding
- 2 HDMI, 1 VGA and 1 CVBS output
- eSATA by default
- Optional 16 PoE ports, with /16P model
- 1.5U chassis
- Human/vehicle classification

DS-7764NI-M4
8-Channel NVR with 2 HDDs

- Up to 14 TB capacity for each HDD
- Decoding formats: supporting H.265/H.265+/H.264/H.264+
- Bandwidth: 400 Mbps incoming, 400Mbps outgoing
- 32-ch 1080p decoding
- 2 HDMI, 1 VGA and 1 CVBS, HDMI1 support 8K output
- eSATA by default
- IP Video input: 64-ch Up to 32 MP resolution
- Support multiple VCA (Video Content Analytics) events:VCA detection, heat map, ANPR, people counting, POS