

# SPECIALTY CAMERAS

Solutions Catalog



VERSATILE CAMERA SOLUTIONS TO MEET  
THE MOST DEMANDING ENVIRONMENTS



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# Your Partner for Demanding Solutions

The best video security solutions start with great products. But even the best solutions need a team of talented and dedicated professionals, working side by side with their customers, to guarantee a solution that exceeds expectations. Our experienced team of security professionals will work tirelessly to meet every challenge.

## ARCHITECTS & ENGINEERS PARTNERS


We have a dedicated team of security industry professionals who focus solely on supporting and educating the A&E and consultant community about products and solutions. Covering the entirety of North America both in the US and Canada, this seasoned group works alongside our sales organization to offer the resources required by the A&E community, including BIM modules, A&E specifications, design tools, and design support. Additionally, the A&E team manages online A&E portal to provide quick access to the resources needed by our partners in the A&E community.

## ENTERPRISE SOLUTIONS

We are a global organization that supports the enterprise market with sophisticated products, consistent quality, a supportive dealer program and worldwide distribution. We have dedicated teams that work with architects, engineers and consultants to provide support throughout the sales process, from pre-design to installation, including technical and warranty items. This facilitates our partners' growth and meets the demand for excellent service from the global enterprise customer.







We brings real value to integrators as a trusted, reliable partner.

### **3RD PARTY INTEGRATION**

We are committed to providing our customers flexibility and freedom to choose best-in-class products that meet the critical demands of their individual applications. Interoperability with third party devices is a key factor in delivering comprehensive, partnered solutions. Our Application Program Interface (API) is common to all our products and allows seamless interoperability between our products and third party devices. Our API, with unwavering support from our development team, has resulted in over 200 successful technology partner integrations.

### **DEALER PARTNERS**

It's an exciting time to partner with us. As the world's leading video surveillance manufacturer, we take a team approach to winning business, working alongside our partners through the entire business cycle. You can rely on our extensive field support team, which is staffed by knowledgeable professionals. Their goal is to help our integrators fortify and grow their businesses.

Our efforts support our mutual success through product selection, sales, technical training, engineering, installation and post-sales support.

We invest heavily in R&D, hundreds of millions of dollars per year, to supply the market with reliable, secure and innovative technology with unmatched value. We believe that's the best game plan to provide dealers with a competitive advantage out in the field.

We go the extra mile to provide customers with all of the resources they need for a first-class security system. We provide additional resources for dealers, architects and engineers to promote business success through knowledge and valuable tools. We are committed to creating and protecting business value for its customers and partners.

# Demanding Solutions

## Start with Better Technology

In video security, very few installations are the same, so when talking about demanding applications it is important to understand that different applications demand different technologies, a dedicated approach to guaranteeing that our partners are well supported, and robust solutions that meet the demands of the customer, the application, and the environment.

When the demands of the application require leading technologies to guarantee that video information is available, and usable, in all lighting conditions, at all times of day, in the most demanding environments, Hikvision provides solutions that will meet those demands.

### SMART SOLUTIONS AND KEY TECHNOLOGIES

Smart Pro Series products represent the best technology that has to offer and feature a robust range of proprietary technologies to improve imaging performance, including megapixel cameras and DarkFighter ultra lowlight technology; the latest encoding algorithms, including Region of Interest encoding to reduce bandwidth and storage; or Smart Features that offer users the ability to program their systems for automated alerts, actions, recording and playback of exceptions in manned and unmanned systems.

#### 01. DARKFIGHTER™

DarkFighter technology utilizes a larger sensor size and unique “backside illuminated sensor” pixel structure to improve light usage. Exclusive Self-Adaptive Image Signal Processing mimics the way the human eye adjusts to low illumination. Auto Nonlinear Image Enhancement, Multi-Exposure, Smart Gain Control, and Self-Adaptive Detail Enhancement with Noise Reduction dynamically adjust key imaging factors to improve image quality. Improvements to hardware design reduce power and heat-generated noise. All of these technologies combine to produce cameras that offer industry-leading low-light technology that can produce clear color images down to 0.002 lux at 30 images per second.



#### 02. DEFOG TECHNOLOGY

Since surveillance cameras are often installed outside and are expected to stand the test of 24/7 operation, they are frequently exposed to atmospheric conditions that reduce performance. To meet these challenges, we developed a video defog technology for live video. The technology is based on atmospheric optics theory. When defogging, it distinguishes the depth of field and fog density of different areas and uses the filter process to get a correct and natural defogged image.



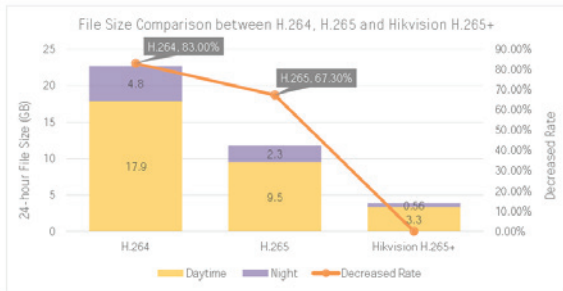
#### 03. REGION OF INTEREST (ROI) ENCODING

When security cameras are deployed, they are positioned to provide coverage over the most critical scenes. Within the field of view of the camera, some areas are of greater importance than others and some areas are really of no interest at all. This becomes more important as the resolution of cameras increase. Larger resolutions, even with improved encoding efficiencies, require more bandwidth and storage. Region of Interest (ROI) Encoding resolves this issue by providing the highest image quality on the areas of a scene of most interest, while reducing the quality level in uninteresting areas, to provide the highest quality/lowest bandwidth results.



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Time	Average Bitrate (kbps)		
	H.264	H.265	H.265+
09:00-21:00 (Daytime)	3,482	1,843	650
21:00-Next Day 09:00 (Night)	930	453	108
Theoretical File Size in 24 Hours (GB)	22.7	11.8	3.9



#### 04. H.265+ ENCODING

We continue to strive for enhancement of its products through application of the latest in technology. H.265+ Coding represents another Hikvision advancement in video compression. Through the combination of intelligent analysis technology with predictive encoding, noise suppression, and long-term bitrate control, We are meeting the demand for higher resolutions at reduced bandwidths.

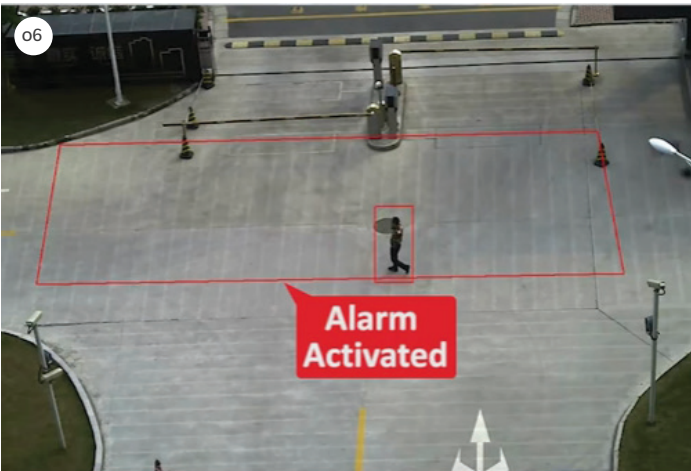
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#### 05. SMART FEATURES – SMART RECORDING/SMART SEARCH

Smart Recording and Smart Search is a powerful capability that improves any video security system by either only recording video according to programmed VCA or ROI settings, or by searching and playing back video based upon predefined parameters. Smart Technology combines different technologies across the line and is designed to improve overall system performance while lowering overall systems costs. Because Smart Features combine many of the technologies described above along with integration to NVR/DVR and VMS platforms, Smart Features are best employed in an end-to-end system.

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#### 06. SMART FEATURES – SMART SUITE VIDEO CONTENT ANALYSIS (VCA)

Video Content Analysis is designed to improve overall performance of a video surveillance system through algorithms designed to evaluate images for specific behaviors or activities. Simply put, VCA allows users to apply specific rules within a camera's field of view to provide alerts when certain unwanted events occur. These algorithms include line cross, intrusion, region entrance/exit detection and can be programmed to alert key security personnel, start automatic recording, or trigger PTZ cameras to track or zoom in on targets for better identification. All Smart Series cameras offer a VCA suite as standard.



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# Smart, Versatile Camera Solutions

Smart Pro Series cameras feature the industry-leading technologies discussed previously while offering a diverse range of styles to complement Specialty Camera Systems, to provide robust capabilities for any application, guaranteeing that our customers can find a camera solution to meet any site requirement without compromise.

## 01. SMART PRO BOX AND BULLET CAMERAS

Compact and versatile, Smart Pro Box and Bullet cameras provide a range of resolutions and lens choices, along with industry-leading low-light technology, encoding and Smart Features that are as versatile as they are powerful.

## 02. SPECIAL PURPOSE CAMERAS

Whether your requirement is people counting, heat mapping or improved coverage using multiple imagers stitched into a single stream of video, we have a solution that will improve any video system's performance while providing the potential to improve business performance combined with improved security.

## 03. FISHEYE AND PANORAMA CAMERAS

Providing unique solutions for challenging locations that require the best wide-angle coverage or zero blind spot imaging, from a single camera with a single sensor, Hikvision can offer fisheye lens cameras with high pixel-counts to improve depth of field while preserving details, or panoramic cameras with built-in audio, short-range IR and a versatile wall mount option to guarantee 100% coverage.



## 04. PAN/TILT/ZOOM DOME CAMERAS

PTZs offer denser pixel counts (up to 4K), Defog and DarkFighter technology, IR capabilities up to 1,600 feet (500 meters), region of interest encoding, the latest encoding algorithms to improve latency and storage, and Smart Features to allow the camera to perform reliably in unattended applications.



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**SMART RECORDING AND PLAYBACK**

We can further improve performance with Smart Search, Smart Playback that includes Event Playback, and Event Back Up. All these easily integrates with third party platforms.



**NETWORK VIDEO RECORDING PRODUCTS**

Super NVRs offer flexible and powerful solutions to improve performance and balance requirements between channels, resolutions, and RAID configurations to provide days to years of storage, depending upon individual needs, including centralized management.



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# Upright PTZ Camera Systems

DarkFighter Upright Network PTZ Smart Pro Series camera systems are a traditional PTZ camera design for perimeter, parking lot, traffic or any application wanting to present a deterrent to potential criminals or promote public safety. These traditional pan/tilt designs allow users to look above the horizon and feature an integrated wiper, and optional, integrated long-range IR illumination. These cameras incorporate Hikvision's DarkFighter technology, which starts with a 1/1.9-inch 2 MP CMOS sensor to produce clear color images down to 0.002 lux and 0.0002 lux when in night mode. These camera additionally feature 120 dB True WDR, Smart Detection, Electronic Image Stabilization, Region of Interest encoding, Defog, 3D Intelligent Positioning and PTZ Suite analytics to provide high performance in the most demanding environments.

## Key Features

- Improved Pan/Tilt range
- 2 MP DarkFighter
- True Day/Night, Ultra-Lowlight Imaging
- True WDR, Defog and 3D DNR
- 3D Intelligent Positioning
- Wiper

## Applications

- "Look-up" and Deterrent Applications
- Perimeters
- Parking Areas
- Highways
- Airports





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# Thermal Imaging Camera Systems

Thermal imaging cameras are unique in video security applications in that they employ a sensor technology that produces consistent, stable images in any lighting condition, even total darkness, by detecting the thermal radiation (heat) and emissivity of everyday objects. This technology is particularly useful in detecting people and vehicles and is the leading solution, in combination with analytics, for perimeter protection.

We are proud to introduce several options in thermal imaging camera technology that will change the way thermal cameras are used. Models feature bullet and dual sensors designs in fixed and PTZ configurations. Standard features include embedded analytics, temperature measurement and fire detection.

## Key Features

- Fixed and PTZ Models
- Bi-Spectrum (Thermal with Visible) Imaging
- 384x288 and 640x512 Resolution Models
- Temperature Exception Alarming, Standard
- Advanced Fire Detection

## Applications

- Perimeters
- Dual-use Applications
- Zero-light
- Critical Infrastructure
- Port/Airport

All thermal camera systems employ vanadium oxide (VOx) sensors and offer multiple lens choices in all models. cutting-edge video content analysis (VCA) algorithms, standard on all thermal models, provide automatic alerts, trigger recording, or provide vital scene details, including scene temperature information. Line cross, intrusion, region entrance/exit provide alerts in standard perimeter applications. The powerful thermography capability provides an alternative use for these cameras by allowing users to monitor critical equipment and receive temperature information, both on screen or by alarm, or schedule maintenance by detecting changes in temperature that could indicate a looming failure.





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# PanoVu Multi-Imager Cameras

The PanoVu Multi-Imager camera systems presents a unique surveillance tool for large open areas, traffic circles or intersections, and any application looking to surveil a large public or private area with the least impact on infrastructure. These camera systems provide 180- or 360-degree stitched panoramic images from the system's cameras. Models are available with integrated PTZ camera with 3D positioning capabilities, allowing users to zoom into areas from the panoramic image with the PTZ, providing the ability to get incredible detail of specific targets or areas.

## Key Features

- Panoramic and Panoramic with PTZ Models
- 1/1.9-inch 2 MP Progressive Scan CMOS Sensors
- 8 MP and 16 MP models
- 180° and 360° Models
- Smart Tracking (PTZ Models)

## Applications

- Open Areas
- Safe City
- Boardwalk
- Stadiums
- Campus

