



# IP VIDEO DISTRIBUTION PRODUCTS | 2021 Ver. 1

Network Cameras / PTZ / NVR / Thermal / Transmission / Display & Control / Accessories / Video Management Software / DORI Distance



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# WizSense

Launched by Dahua Technology, WizSense is a series of wide range AI products and solutions that adopt independent AI chip and deep learning algorithm. It can recognize human and vehicle in an image with high accuracy, enabling users to focus on real targets. Based on Dahua's advanced technology, WizSense makes your video intelligent, simple and inclusive.



**Intelligent** refers to WizSense powered by AI chip and deep learning algorithm. It provides various features that realize accurate alarms for human and vehicle, as well as quick target search, maximizing resources to increase overall efficiency.



**Simple** means WizSense offers simple configuration, especially for SMD Plus that can be enabled by just a single button. It eases your customer's daily job and also empowers them to make better business decisions.



**Inclusivity** of WizSense is the idea that everyone gets the opportunities and benefits from AI. With affordable prices and easy configuration of Dahua WizSense, AI is no longer confined to the ivory tower, but applied to real scenarios instead.

**WizSense**

**Focus on Human and Vehicle**





# WizSense Core Technologies

## SMD

• SMD Plus, short for Smart Motion Detection Plus, analyzes person and vehicle shapes based on motion detection and sends alarms only when a person or vehicle has been detected for intrusion.

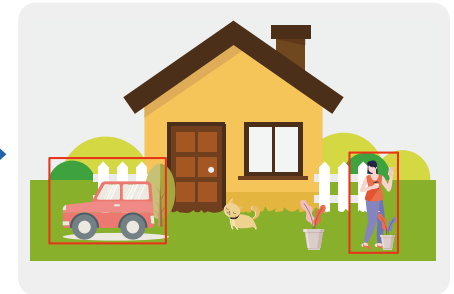
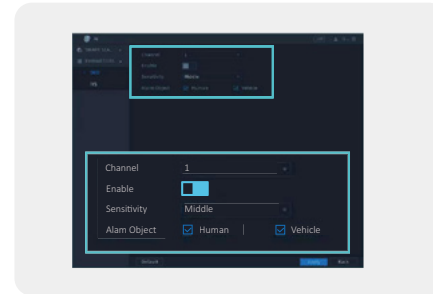
• One key to enable

Alarm triggered



• False alarm rate < 2%

Alarm filtered



## Perimeter Protection

### Visible

• The perimeter protection based on tripwire and area intrusion sends an alarm when unwanted movements triggered by human or vehicle occur, avoiding unnecessary false alarm.



• Traditional IVS

Causes of false or missed alarms



• Perimeter Protection

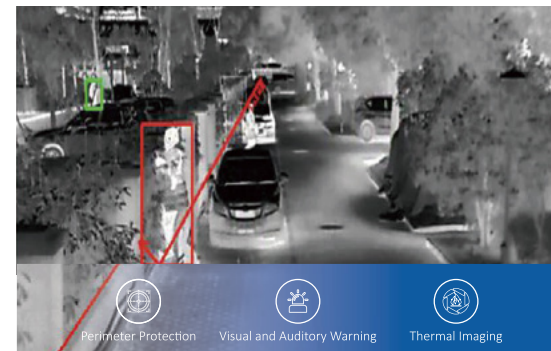
Alarm will be triggered only when a human or vehicle violates a rule



False alarm rate < 1%

### Thermal

• Dahua thermal camera combines thermal imaging technology with AI technology to detect various dangerous situations in time and protect your property from loss.

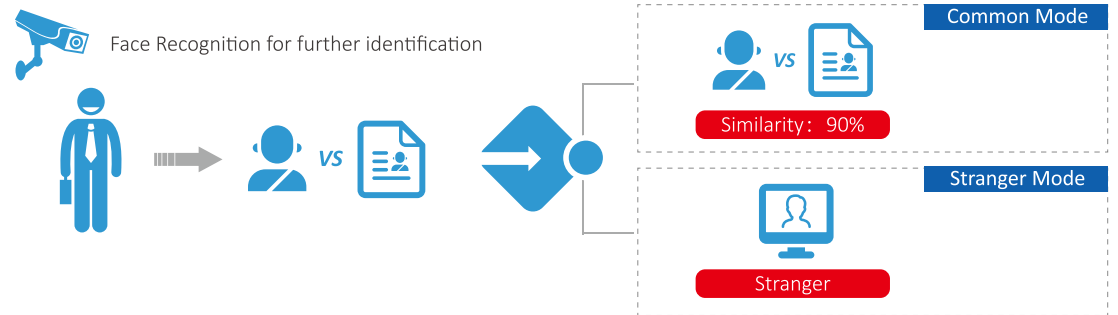




# WizSense Core Technologies

## Face Recognition

- The captured facial features will be compared with the face image data in the database. When a successful match is found, the system provides an output result.
- Only needs **60\*60 pixels** for FR, provides more accurate comparison results and quicker processing
- Up to **95% accuracy** of face recognition
- Recognition speed:**<1s**



## Active Deterrence

- With build-in spotlight and security siren, it can actively warn off intruders and inform user before the user perceives the event.



Video analysis shows there is a human (or vehicle) in the monitored scene



The camera flashes and makes a warning sound to deter the intruder



User receives alert by DMSS instantly

# Full-color

Dahua Technology's full-color camera captures vivid color information even in low-light conditions. It effectively extracts the color features of scenes – be it human, vehicle or details – in places prone to incidents such as a park at night or a dark alley, providing great help to police officers during the evidence obtaining procedure. In addition, the full-color camera also works with AI functions to further enhance the probability and accuracy of target recognition and feature extraction.



## Large Aperture Lens

- F1.0 super aperture collects 2.5 times amount of light compared with F1.6 aperture. More light, brighter image.



## High Performance Sensor

- 30% increase in photosensitive capacity using larger sensor.



## Advanced ISP

- Dahua ISP 4.0 greatly improves signal-to-noise ratio and color reproduction.



## Warm Light

- Blue light weighted radiance is 40% below European Union standards. Lower light pollution, less harm to human eyes.



Colorful View Ever  
Dark Word Never



3-in-1 Camera

# TiOC

Your Effective Deterrent  
Against Intruders



## TiOC

TiOC, also known as three-in-one camera, integrates 24/7 full-color monitoring, active deterrence and AI into one smart and innovative solution, greatly saving time and financial costs for distributors and installers. TiOC can accurately identify potential risks and effectively warn off intruders, effectively protecting life and property's safety.



### Accurate Alarm

- TiOC offers accurate alarm function by precisely targeting people and vehicles, while filtering out non-target objects such as animals, leaves and car headlights. While keeping false alarm rate under 2%, its powerful AI algorithms also delivers a quicker, more accurate and longer range motion detection. (In HDCVI system, all AI functions are realized by XVR).



### Full-color

- 24/7 color monitoring significantly increases probability of collecting valid human, vehicle, and event evidence.
- Provides high color reproduction and excellent low light performance for a more vivid and brighter image.



### Active Deterrence

- Red and Blue Light; Enhanced Sound Alarm; Real-time Notification.

# Thermal

Thermal camera is the ideal choice for users who require high performance but have limited budget. With its small size and dual spectrum with powerful combination of visible light and thermal imaging, this series integrates advanced Dahua image analysis and intelligent algorithms, providing a one-stop solution for small and medium-sized monitoring applications.



## Image Fusion

- Both visible image and thermal image are accurately integrated to produce a new image containing details and temperature information, providing more information that can aid user's decision making.



## Smoking Detection

- Dual spectrum combination – the visible light channel detects human (head) and the thermal channel detects cigarettes, eliminating non-target objects such as cigarette lighter or boiled water.





# NETWORK CAMERAS





# WizSense Series Network Camera

With advanced deep learning algorithm, Dahua WizSense 3 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this camera series provides a better image effect under low light condition.



## SMD Plus

With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.



## Perimeter Protection

Supports people and vehicle classification, which significantly improves accuracy, reduces false alarms and decreases pixel count requirements for object detection.



## Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, the Dahua Smart Encoding technology offers higher encoding efficiency compared to H.265 and H.264, providing high-quality videos and reduces storage and transmission costs.

# NETWORK CAMERAS

## WizSense Series

### Vari-focal Bullet







| Model                          | IPC-HFW3841T-ZAS  | IPC-HFW3841T-ZS   | IPC-HFW3541T-ZAS   | IPC-HFW3541T-ZS  | IPC-HFW3441T-ZAS   | IPC-HFW3441T-ZS  |
|--------------------------------|---|---|--|--|--|--|
| Appearance                     |                                |                                |                          |                         |                         |                         |
| Image Sensor                   | 1/2.8" 8Mp CMOS   | 1/2.8" 8Mp CMOS   | 1/2.7" 5Mp CMOS  | 1/2.7" 5Mp CMOS  | 1/3" 4Mp CMOS  | 1/3" 4Mp CMOS  |
| Focal Length                   | 2.7mm ~13.5mm motorized lens  | 2.7mm ~13.5mm motorized lens  | 2.7mm~13.5mm motorized lens  | 2.7mm~13.5mm motorized lens  | 2.7mm~13.5mm motorized lens  | 2.7mm~13.5mm motorized lens  |
| FOV-H                          | 113°~31°  | 113°~31°  | 99°~26°  | 99°~26°  | 104°~27°   | 104°~27°   |
| Min. Illumination              | 0.007 Lux@F1.5  | 0.007 Lux@F1.5  | 0.005Lux@F1.5  | 0.005Lux@F1.5  | 0.005Lux@F1.5  | 0.005Lux@F1.5  |
| Day/Night                      | ICR   | ICR   | ICR  | ICR  | ICR  | ICR  |
| WDR                            | 120dB   | 120dB   | 120dB  | 120dB  | 120dB  | 120dB  |
| Max. IR Distance               | 60m (197.0 ft)  | 60m (197.0 ft)  | 60m (197.0 ft)   | 60m (197.0 ft)   | 60m (197.0 ft)   | 60m (197.0ft)  |
| Video Compression              | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG  |
| Smart Codec                    | Supported   | Supported   | Supported  | Supported  | Supported  | Supported  |
| Max. Resolution                | 8M (3840 × 2160)  | 8M (3840 × 2160)  | 5M (2592 × 1944)   | 5M (2592 × 1944)   | 4M (2688 × 1520)   | 4M (2688 × 1520)   |
| Frame Rate                     | 3840 × 2160 @ (1~20 fps by default)<br>3840 × 2160 @ (1~25/30 fps when AI function disabled)                    | 3840 × 2160 @ (1~20 fps by default)<br>3840 × 2160 @ (1~25/30 fps when AI function disabled)                    | 2592 × 1944@1~20 fps   | 2592 × 1944@1~20 fps   | 2688 × 1520@1~25/30 fps  | 2688 × 1520@1~25/30 fps  |
| Multi-streaming                | 3 streams   | 3 streams   | 3 streams  | 3 streams  | 3 streams  | 3 streams  |
| Pan/Tilt/Rotation              | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°  | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°  | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   |
| Compatibility                  | ONVIF (Profile S/Profile G/Profile T);<br>CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G/Profile T);<br>CGI; Milestone; Genetec   | ONVIF (profile S&G), CGI, P2P,<br>Milestone, Genetec   | ONVIF (profile S&G), CGI, P2P,<br>Milestone, Genetec   | ONVIF (profile S&G), CGI, P2P,<br>Milestone, Genetec   | ONVIF (profile S&G), CGI, P2P,<br>Milestone, Genetec   |
| Audio In/Out                   | 1/1   | --  | 1/1  | --   | 1/1  | --   |
| Memory Slot                    | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   |
| Alarm In/Out                   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC  | --   | 1channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --   |
| Ingress Protection             | IP67, IK10(optional)  | IP67, IK10(optional)  | IP67   | IP67   | IP67, IK10(optional)   | IP67, IK10(optional)   |
| Working Temperature            | -30°C~+60°C(-22°F ~ +140°F)   | -30°C~+60°C(-22°F ~ +140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   |
| Power                          | 12V DC/POE (802.3af), Max. 10.7W  | 12V DC/POE (802.3af), Max. 10.7W  | 12V DC/POE (802.3af), Max. 9.8W  | 12V DC/POE (802.3af), Max. 9.8W  | 12V DC/POE (802.3af), Max. 9.8W  | 12V DC/POE (802.3af), Max. 9.8W  |
| <b>Artificial Intelligence</b> |   |   |  |  |  |  |
| Perimeter Protection           | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)  | Tripwire; intrusion<br>(Recognition of human and vehicle)  | Tripwire; intrusion<br>(Recognition of human and vehicle)  | Tripwire; intrusion<br>(Recognition of human and vehicle)  |
| Intelligent Search             | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos |
| SMD Plus                       | Supported   | Supported   | Supported  | Supported  | Supported  | Supported  |

## WizSense Series

|                                | Vari-focal Bullet  |  | Vari-focal Dome   |   |  |  |
|--------------------------------|--|--|---|---|--|--|
| Model                          | IPC-HFW3241T-ZAS   | IPC-HFW3241T-ZS  | IPC-HDBW3841R-ZAS   | IPC-HDBW3841R-ZS  | IPC-HDBW3541R-ZAS  | IPC-HDBW3541R-ZS   |
| Appearance                     |                           |                           |                               |                              |                         |                         |
| Image Sensor                   | 1/2.8" 2Mp CMOS  | 1/2.8" 2Mp CMOS  | 1/2.8" 8Mp CMOS   | 1/2.8" 8Mp CMOS   | 1/2.7" 5Mp CMOS  | 1/2.7" 5Mp CMOS  |
| Focal Length                   | 2.7mm~13.5mm motorized lens  | 2.7mm~13.5mm motorized lens  | 2.7mm~13.5mm motorized lens   | 2.7mm~13.5mm motorized lens   | 2.7mm~13.5mm motorized lens  | 2.7mm~13.5mm motorized lens  |
| FOV-H                          | 108°~28°   | 108°~28°   | 113°~31°  | 113°~31°  | 99°~26°  | 99°~26°  |
| Min. Illumination              | 0.002Lux@F1.5  | 0.002Lux@F1.5  | 0.007 Lux @F1.5   | 0.007 Lux @F1.5   | 0.005 Lux@F1.5   | 0.005 Lux@F1.5   |
| Day/Night                      | ICR  | ICR  | ICR   | ICR   | ICR  | ICR  |
| WDR                            | 120dB  | 120dB  | 120dB   | 120dB   | 120dB  | 120dB  |
| Max. IR Distance               | 60m (197.0ft)  | 60m (197.0ft)  | 40m (131.2 ft)  | 40m (131.2 ft)  | 40m (131.23 ft)  | 40m (131.23 ft)  |
| Video Compression              | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG  |
| Smart Codec                    | Supported  | Supported  | Supported   | Supported   | Supported  | Supported  |
| Max. Resolution                | 1080P (1920 x1080)   | 1080P (1920 x 1080)  | 8M (3840 x 21660)   | 8M (3840 x 21660)   | 5M (2592 x 1944)   | 5MP (2592 x 1944)  |
| Frame Rate                     | 1920 x 1080@1~25/30 fps  | 1920 x 1080@1~25/30 fps  | 3840 x 2160 @ (1~20 fps by default)<br>3840 x 2160 @ (1~25/30 fps when AI function disabled)                    | 3840 x 2160 @ (1~20 fps by default)<br>3840 x 2160 @ (1~25/30 fps when AI function disabled)                    | 2592 x 1944@1~20 fps   | 2592 x 1944@1~20 fps   |
| Multi-streaming                | 3 streams  | 3 streams  | 3 streams   | 3 streams   | 3 streams  | 3 streams  |
| Pan/Tilt/Rotation              | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan: 0°~355°;Tilt: 0°~75°;<br>Rotation: 0°~355°   | Pan: 0°~355°;Tilt: 0°~75°;<br>Rotation: 0°~355°   | Pan:0°~355°, Verticle:0°~75°,<br>Rotation:0°~355°  | Pan:0°~355°, Verticle:0°~75°,<br>Rotation:0°~355°  |
| Compatibility                  | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone;Genetec  | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec   | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  |
| Audio In/Out                   | 1/1  | --   | 1/1   | --  | 1/1  | --   |
| Memory Slot                    | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   |
| Alarm In/Out                   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC  | --   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC  | --   |
| Ingress Protection             | IP67, IK10(optional)   | IP67, IK10(optional)   | IP67, IK10  | IP67, IK10  | IP67, IK10   | IP67, IK10   |
| Working Temperature            | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F ~ +140°F)  | -30° C ~ +60° C (-22° F ~ +140° F)  | -30°C~+60°C (-22°F~+140°F)   | -30° C~+60° C (-22° F~+140° F)   |
| Power                          | 12V DC/POE (802.3af), Max. 9.4W  | 12V DC/POE (802.3af), Max. 9.4W  | 12V DC/POE (802.3af), Max. 8.2W   | 12V DC/POE (802.3af), Max. 8.2W   | 12V DC/POE (802.3af), Max. 8.5W  | 12V DC/POE (802.3af), Max. 8.5W  |
| <b>Artificial Intelligence</b> |  |  |   |   |  |  |
| Perimeter Protection           | Tripwire; intrusion<br>(Recognition of human and vehicle)  | Tripwire; intrusion<br>(Recognition of human and vehicle)  | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)  | Tripwire; intrusion<br>(Recognition of human and vehicle)  |
| Intelligent Search             | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos |
| SMD Plus                       | Supported  | Supported  | Supported   | Supported   | Supported  | Supported  |

# NETWORK CAMERAS

## WizSense Series

|                                | Vari-focal Dome  |  |  |  | Vari-focal Eyeball  |   |
|--------------------------------|--|--|--|--|---|---|
| Model                          | IPC-HDBW3441R-ZAS  | IPC-HDBW3441R-ZS   | IPC-HDBW3241R-ZAS  | IPC-HDBW3241R-ZS   | IPC-HDW3841T-ZAS  | IPC-HDW3541T-ZAS  |
| Appearance                     |                           |                           |                          |                         |                              |                          |
| Image Sensor                   | 1/3" 4Mp CMOS  | 1/3" 4Mp CMOS  | 1/2.8" 2Mp CMOS  | 1/2.8" 2Mp CMOS  | 1/2.8" 8Mp CMOS   | 1/2.7" 5Mp CMOS   |
| Focal Length                   | 2.7mm ~13.5mm motorized lens   | 2.7mm ~13.5mm motorized lens   | 2.7mm ~13.5mm motorized lens   | 2.7mm ~13.5mm motorized lens   | 2.7mm~13.5mm motorized lens   | 2.7mm~13.5mm motorized lens   |
| FOV-H                          | 104°~27°   | 104°~27°   | 108°~28°   | 108°~28°   | 113°~31°  | 99°~26°   |
| Min. Illumination              | 0.005 Lux@F1.5   | 0.005 Lux@F1.5   | 0.002 Lux@F1.5   | 0.002 Lux@F1.5   | 0.007 Lux @F1.5   | 0.005 Lux@F1.5  |
| Day/Night                      | ICR  | ICR  | ICR  | ICR  | ICR   | ICR   |
| WDR                            | 120dB  | 120dB  | 120dB  | 120dB  | 120dB   | 120dB   |
| Max. IR Distance               | 40m (131.23 ft)  | 40 m (131.23 ft)   | 40m (131.23 ft)  | 40m (131.23 ft)  | 50m (164 ft)  | 40m (131.2 ft)  |
| Video Compression              | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   |
| Smart Codec                    | Supported  | Supported  | Supported  | Supported  | Supported   | Supported   |
| Max. Resolution                | 4MP (2688 x 1520)  | 4MP (2688 x 1520)  | 1080P (1920 x 1080)  | 1080P (1920 x 1080)  | 8MP (3840 x 2160)   | 5Mp (2592 x 1944)   |
| Frame Rate                     | 2688 x 1520@1~25/30 fps  | 2688 x 1520@1~25/30 fps  | 1920 x 1080@1~25/30 fps  | 1920 x 1080@1~25/30 fps  | 3840 x 2160 @(1~20 fps by default)<br>3840 x 2160 @(1~25/30 fps when AI function disabled)                      | 2592 x 1944@1~20 fps  |
| Multi-streaming                | 3 streams  | 3 streams  | 3 streams  | 3 streams  | 3 streams   | 3 streams   |
| Pan/Tilt/Rotation              | Pan:0°~355°, Verticle:0°~75°, Rotation:0°~355°   | Pan:0°~355°, Verticle:0°~75°, Rotation:0°~355°   | Pan:0°~355°, Verticle:0°~75°, Rotation:0°~355°   | Pan:0°~355°, Verticle:0°~75°, Rotation:0°~355°   | Pan: 0°~360°;Tilt: 0°~78°;Rotation: 0°~360°   | Pan:0°~360°, Tilt:0°~78°, Rotation:0°~360°  |
| Compatibility                  | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (profile S&G), CGI,P2P, Milestone, Genetec   | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec   | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec   |
| Audio In/Out                   | 1/1  | --   | 1/1  | --   | Built-in MIC  | Built-in MIC  |
| Memory Slot                    | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out                   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC  | --   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC  | --   | --  | --  |
| Ingress Protection             | IP67; IK10   | IP67; IK10   | IP67; IK10   | IP67; IK10   | IP67  | IP67  |
| Working Temperature            | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C(-22°F ~ +140°F)   | -30°C~+60°C (-22°F~+140°F)  |
| Power                          | 12V DC/POE (802.3af), Max. 8.5W  | 12V DC/POE (802.3af), Max. 8.5W  | 12V DC/POE (802.3af), Max. 8W  | 12V DC/POE (802.3af), Max. 8W  | 12V DC/POE (802.3af), Max. 7.3W   | 12V DC/POE (802.3af), Max. 8.0W   |
| <b>Artificial Intelligence</b> |  |  |  |  |   |   |
| Perimeter Protection           | Tripwire; intrusion (Recognition of human and vehicle)   | Tripwire; intrusion (Recognition of human and vehicle)   | Tripwire; intrusion (Recognition of human and vehicle)   | Tripwire; intrusion (Recognition of human and vehicle)   | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  |
| Intelligent Search             | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. |
| SMD Plus                       | Supported  | Supported  | Supported  | Supported  | Support   | Supported   |

## WizSense Series

|                                | Vari-focal Eyeball   |  | Fixed-focal Bullet  |   |   |   |
|--------------------------------|--|--|---|---|---|---|
| Model                          | IPC-HDW3441T-ZAS   | IPC-HDW3241T-ZAS   | IPC-HFW3841E-AS   | IPC-HFW3841E-SA   | IPC-HFW3849T1-AS-PV   | IPC-HFW3541E-AS   |
| Appearance                     |                           |                           |                               |                              |                              |                          |
| Image Sensor                   | 1/3" 4Mp CMOS  | 1/2.8" 2MP CMOS  | 1/2.8" 8MP CMOS   | 1/2.8" 8MP CMOS   | 1/2.8" 8MP CMOS   | 1/2.7" 5MP CMOS   |
| Focal Length                   | 2.7mm~13.5mm motorized lens  | 2.7mm~13.5mm motorized lens  | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm/6mm optional)   |
| FOV-H                          | 104°~27°   | 108°~28°   | 0°~108°(2.8mm), 0°~85°(3.6mm)   | 0°~108°(2.8mm), 0°~85°(3.6mm)   | 0°~107°(2.8mm), 0°~89°(3.6mm)   | 98°/80°/50°   |
| Min. Illumination              | 0.005 Lux@F1.5   | 0.002 Lux@F1.5   | 0.007 Lux @F1.4   | 0.007 Lux @F1.4   | 0.007 Lux @ F1.4  | 0.005 Lux@F1.6  |
| Day/Night                      | ICR  | ICR  | ICR   | ICR   | Color/B/W   | ICR   |
| WDR                            | 120dB  | 120dB  | 120dB   | 120dB   | 120dB   | 120dB   |
| Max. IR Distance               | 40m (131.2 ft)   | 40m (131.2 ft)   | 30m (98.4 ft)   | 30m (98.4 ft)   | 30m (98.4 ft)   | 50m (164.0 ft)  |
| Video Compression              | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   |
| Smart Codec                    | Supported  | Supported  | Supported   | Supported   | Supported   | Supported   |
| Max. Resolution                | 4Mp (2688 x 1520)  | 1080P (1920 x 1080)  | 8M (3840 x 2160)  | 8M (3840 x 2160)  | 8Mp (3840 x 2160)   | 5MP (2592 x 1944)   |
| Frame Rate                     | 2688 x 1520@1~25/30 fps  | 1920 x 1080@1~25/30 fps  | 3840 x 2160 @1~20 fps by default)<br>3840 x 2160 @(1~25/30 fps when AI function disabled)                       | 3840 x 2160 @1~20 fps by default)<br>3840 x 2160 @(1~25/30 fps when AI function disabled)                       | 3840 x 2160 @1~20 fps by default)<br>3840 x 2160 @(1~25/30 fps when AI function disabled)                       | 2592 x 1944@1~20 fps  |
| Multi-streaming                | 3 streams  | 3 streams  | 3 streams   | 3 streams   | 3 streams   | 3 streams   |
| Pan/Tilt/Rotation              | Pan:0°~360°, Tilt:0°~78°, Rotation:0°~360°   | Pan:0°~360°, Tilt:0°~78°, Rotation:0°~360°   | Pan:0°~360°;Tilt:0°~90°; Rotation:0°~360°   | Pan:0°~360°;Tilt:0°~90°; Rotation:0°~360°   | Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360°  | Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360°  |
| Compatibility                  | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec   | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec   | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P   | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec   |
| Audio In/Out                   | Built-in MIC   | Built-in MIC   | 1/1, Built-in MIC   | Built-in MIC  | 1/1, Built-in MIC,Built-in Speaker  | 1/1,Built-in MIC  |
| Memory Slot                    | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out                   | --   | --   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   |
| Ingress Protection             | IP67   | IP67   | IP67  | IP67  | IP67, IK10(optional)  | IP67  |
| Working Temperature            | -30°C~+60°C (-22° F~+140° F)   | -30°C~+60°C (-22° F~+140° F)   | -40°C~+60°C(-40°F ~ +140°F)   | -40°C~+60°C(-40°F ~ +140°F)   | -40°C~+60°C(-40°F ~ +140°F)   | -40°C~+60°C (-40°F~+140°F)  |
| Power                          | 12V DC/POE (802.3af), Max. 8.3W  | 12V DC/POE (802.3af), Max. 7.8W  | 12V DC/POE (802.3af), Max.6.3W  | 12V DC/POE (802.3af), Max.6.3W  | 12V DC/POE (802.3af), Max. 9.7W   | 12V DC/POE (802.3af), Max.5.4W  |
| <b>Artificial Intelligence</b> |  |  |   |   |   |   |
| Perimeter Protection           | Tripwire; intrusion (Recognition of human and vehicle)   | Tripwire; intrusion (Recognition of human and vehicle)   | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  |
| Intelligent Search             | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. |
| SMD Plus                       | Supported  | Supported  | Supported   | Supported   | Supported   | Supported   |

# NETWORK CAMERAS

## WizSense Series

### Fixed-focal Bullet

| Model                          | IPC-HFW3541E-SA  | IPC-HFW3549T1-AS-PV   | IPC-HFW3441E-AS   | IPC-HFW3441E-SA  | IPC-HFW3449T1-AS-PV   | IPC-HFW3241E-AS   |
|--------------------------------|--|---|---|--|---|---|
| Appearance                     |  <b>WizSense</b><br>Starlight |  <b>TiOC</b>                   |  <b>WizSense</b><br>Starlight |  <b>WizSense</b><br>Starlight |  <b>TiOC</b>                 |  <b>WizSense</b><br>Starlight+ |
| Image Sensor                   | 1/2.7" 5MP CMOS  | 1/2.7" 5MP CMOS   | 1/3" 4MP CMOS   | 1/3" 4MP CMOS  | 1/2.7" 4MP CMOS   | 1/2.8" 2MP CMOS   |
| Focal Length                   | 2.8mm fixed lens<br>(3.6mm/6mm optional)   | 2.8mm fixed lens (3.6mm/6mm optional)   | 2.8mm fixed lens<br>(3.6mm/6mm optional)  | 2.8mm fixed lens<br>(3.6mm/6mm optional)   | 2.8mm fixed lens<br>(3.6mm/6mm optional)  | 2.8mm fixed lens<br>(3.6mm/6mm optional)  |
| FOV-H                          | 98°/80°/50°  | 0°~98°(2.8mm), 0°~77°(3.6mm)<br>0°~53°(6mm)   | 103°/84°/52°  | 103°/84°/52°   | 0°~103°(2.8mm), 0°~81°(3.6mm)<br>0°~55°(6mm)  | 106°/87°/54°  |
| Min. Illumination              | 0.005 Lux@F1.6   | 0.003 Lux @ F1.0  | 0.005 Lux@F1.6  | 0.005 Lux@F1.6   | 0.003 Lux @ F1.0  | 0.002 Lux@F1.6  |
| Day/Night                      | ICR  | Color/B/W   | ICR   | ICR  | Color/B/W   | ICR   |
| WDR                            | 120dB  | 120dB   | 120dB   | 120dB  | 120dB   | 120dB   |
| Max. IR Distance               | 50m (164.0 ft)   | 40m (131.2 ft)  | 50m (164.0 ft)  | 50m (164.0 ft)   | 40m (131.2 ft)  | 50m (164.0 ft)  |
| Video Compression              | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   |
| Smart Codec                    | Supported  | Supported   | Supported   | Supported  | Supported   | Supported   |
| Max. Resolution                | 5MP (2592 x 1944)  | 5M (2592 x 1944)  | 4M (2688 x 1520)  | 4M (2688 x 1520)   | 4M (2688 x 1520)  | 1080P (1920 x 1080)   |
| Frame Rate                     | 2592 x 1944@1~20 fps   | 2592 x 1944 @1-20 fps   | 2688 x 1520@1~25/30 fps   | 2688 x 1520@1~25/30 fps  | 2688 x 1520 @1-25/30 fps  | 1920 x 1080@1~25/30 fps   |
| Multi-streaming                | 3 streams  | 3 streams   | 3 streams   | 3 streams  | 3 streams   | 3 streams   |
| Pan/Tilt/Rotation              | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°   | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°  | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°   | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°  |
| Compatibility                  | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P   | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec   | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P   | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec   |
| Audio In/Out                   | Built-in MIC   | 1/1, Built-in MIC, Built-in Speaker   | 1/1, Built-in MIC   | Built-in MIC   | 1/1, Built-in MIC, Built-in Speaker   | 1/1, Built-in MIC   |
| Memory Slot                    | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out                   | --   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   |
| Ingress Protection             | IP67   | IP67, IK10(optional)  | IP67  | IP67   | IP67, IK10(optional)  | IP67  |
| Working Temperature            | -40°C~+60°C (-40°F~+140°F)   | -40°C~+60°C(-40°F ~ +140°F)   | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)   | -40°C~+60°C(-40°F ~ +140°F)   | -40°C~+60°C (-40°F~+140°F)  |
| Power                          | 12V DC/POE (802.3af), Max.5.4W   | 12V DC/POE (802.3af), Max. 8.8W   | 12V DC/POE (802.3af), Max.5.4W  | 12V DC/POE (802.3af), Max.5.4W   | 12V DC/POE (802.3af), Max. 8.8W   | 12V DC/POE (802.3af), Max.5.2W  |
| <b>Artificial Intelligence</b> |  |   |   |  |   |   |
| Perimeter Protection           | Tripwire; intrusion<br>(Recognition of human and vehicle)  | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)  | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   |
| Intelligent Search             | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos.    | Work together with Smart NVR to perform refine intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos.     | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos.      | Work together with Smart NVR to perform refine intelligent search, event extraction and merging of event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos.       |
| SMD Plus                       | Supported  | Supported   | Supported   | Supported  | Supported   | Supported   |

## WizSense Series


### Fixed-focal Bullet

| Model                          | IPC-HFW3249T1-AS-PV   | IPC-HFW3241E-SA  | IPC-HFW3549E-AS-LED  | IPC-HFW3449E-AS-LED  | IPC-HFW3449E-AS-NI  | IPC-HFW3249E-AS-LED   |
|--------------------------------|---|--|--|--|---|---|
| Appearance                     |                                |                           |                          |                         |                          |                          |
| Image Sensor                   | 1/2.8" 2MP CMOS   | 1/2.8" 2MP CMOS  | 1/2.7" 5MP CMOS  | 1/2.7" 4MP CMOS  | 1/2.7" 4MP CMOS   | 1/2.8" 2MP CMOS   |
| Focal Length                   | 2.8mm fixed lens (3.6mm/6mm optional)   | 2.8mm fixed lens (3.6mm/6mm optional)  | 2.8mm/F1.0; 3.6mm/F1.0   | 2.8mm/F1.0; 3.6mm/F1.0   | 2.8mm/F1.0; 3.6mm/F1.0  | 2.8mm/F1.0; 3.6mm/F1.0  |
| FOV-H                          | 0°~107°(2.8mm); 0°~84°(3.6mm)<br>0°~57°(6mm)  | 106°/87°/54°   | 98°/77°  | 103°/80°   | 103°/80°  | 107°/84°  |
| Min. Illumination              | 0.0015 Lux @F1.0  | 0.002 Lux@F1.6   | 0.003 Lux @F1.0  | 0.003 Lux @ F1.0   | 0.003 Lux @ F1.0  | 0.0015 Lux @ F1.0   |
| Day/Night                      | Color/B/W   | ICR  | Color/B/W  | Color/B/W  | Color/B/W   | Color/B/W   |
| WDR                            | 120dB   | 120dB  | 120dB  | 120dB  | 120dB   | 120dB   |
| Max. IR Distance               | 40 m (131.2 ft)   | 50m (164.0 ft)   | 30m (98.4 ft)  | 30m (98.4 ft)  | --  | 30m (98.4 ft)   |
| Video Compression              | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG  | H.265/H.264/H.264H/H.264B MJPEG (sub stream)   | H.265/H.264/H.264H/H.264B/MJPEG (sub stream)   | H.265/H.264/H.264H/H.264B MJPEG (sub stream)  | H.265/H.264/H.264H/H.264B MJPEG (sub stream)  |
| Smart Codec                    | Supported   | Supported  | Supported  | Supported  | Supported   | Supported   |
| Max. Resolution                | 1080P (1920 × 1080)   | 1080P (1920 × 1080)  | 5MP (2592 × 1944)  | 4MP (2688 × 1520)  | 4MP (2688 × 1520)   | 1080p (1920 × 1080)   |
| Frame Rate                     | 1920 × 1080 @1~25/30 fps  | 1920 × 1080@1~25/30 fps  | 5MP (2592 × 1944) @20 fps  | 2688 × 1520 @ 1~25/30 fps  | 2688 × 1520 @ 1~25/30 fps   | 1920 × 1080@1~25/30 fps   |
| Multi-streaming                | 3 streams   | 3 streams  | 3 streams  | 3 streams  | 3 streams   | 3 streams   |
| Pan/Tilt/Rotation              | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°   | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan: 0°~360°, Tilt: 0°~90°<br>Rotation: 0°~360°  | Pan: 0°~355°, Tilt: 0°~65°<br>Rotation: 0°~355°  | Pan: 0°~355°;Tilt: 0°~65°<br>Rotation: 0°~355°  | Pan: 0°~355°;Tilt: 0°~65°<br>Rotation: 0°~355°  |
| Compatibility                  | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P   | ONVIF (profile S&G), CGI,P2P,Milestone,Genetec   | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone;Genete   | ONVIF(Profile S/Profile G); CGI; P2P; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; P2P; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; P2P; Milestone; Genetec   |
| Audio In/Out                   | 1/1, Built-in MIC,Built-in Speaker  | Built-in MIC   | 1/1, Built-in MIC  | 1/1, Built-in MIC  | 1/1, Built-in MIC   | 1/1, Built-in MIC   |
| Memory Slot                    | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out                   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   |
| Ingress Protection             | IP67, IK10(optional)  | IP67   | IP67   | IP67   | IP67  | IP67  |
| Working Temperature            | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F~+140°F)   | -40°C~+60°C (-40°F~+142°F)   | -40°C~+60°C (-40°F~+140°F)   | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)  |
| Power                          | 12V DC/POE (802.3af), Max. 8.5W   | 12V DC/POE (802.3af), Max.5.2W   | 12V DC/POE, Max. 8.4W  | 12V DC/POE, Max. 8.4W  | 12V DC/POE, Max. 4.4W   | 12V DC/POE, Max. 8.1W   |
| <b>Artificial Intelligence</b> |   |  |  |  |   |   |
| Perimeter Protection           | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)   | Tripwire; intrusion (Recognition of human and vehicle)   | Tripwire; intrusion (Recognition of human and vehicle)   | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  |
| Intelligent Search             | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Works together with Smart NVR in refining intelligent search,event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search,event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search,event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. |
| SMD Plus                       | Supported   | Supported  | Supported  | Supported  | Supported   | Supported   |




# NETWORK CAMERAS

## WizSense Series

|                                | Fixed-focal Bullet  |   |   | Fixed-focal Dome  |   |   |
|--------------------------------|---|---|---|---|---|---|
| Model                          | IPC-HFW3249E-AS-NI  | IPC-HFW3441M-AS-I2  | IPC-HFW3241M-AS-I2  | IPC-HDBW3841E-AS  | IPC-HDBW3841E-S   | IPC-HDBW3541E-AS  |
| Appearance                     |                            |                            |                           |                              |                              |                          |
| Image Sensor                   | 1/2.8" 2Mp CMOS   | 1/3" 4Mp CMOS   | 1/2.8" 2Mp CMOS   | 1/2.8" 8Mp CMOS   | 1/2.8" 8Mp CMOS   | 1/2.7" 5Mp CMOS   |
| Focal Length                   | 2.8mm/F1.0; 3.6mm/F1.0  | 3.6mm fixed lens<br>(6mm/8mm/12mm optional)   | 3.6mm fixed lens<br>(6mm/8mm/12mm optional)   | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm/6mm optional)   |
| FOV-H                          | 107°/84°  | 84°/52°/40°/24°   | 87°/54°/41°/26°   | 0°~108°(2.8mm), 0°~85°(3.6mm)   | 0°~108°(2.8mm), 0°~85°(3.6mm)   | 98°/80°/50°   |
| Min. Illumination              | 0.0015 Lux @ F1.0   | 0.005 Lux@F1.6  | 0.002 Lux@F1.6  | 0.007 Lux @F1.4   | 0.007 Lux @F1.4   | 0.005 Lux@F1.6  |
| Day/Night                      | Color/B/W   | ICR   | ICR   | ICR   | ICR   | ICR   |
| WDR                            | 120dB   | 120dB   | 120dB   | 120dB   | 120dB   | 120dB   |
| Max. IR Distance               | --  | 80m (262.5 ft)  | 80m (262.5 ft)  | 30m (98.4 ft)   | 30m (98.4 ft)   | 50m (164.0 ft)  |
| Video Compression              | H.265/H.264/H.264H/H.264B MJPEG (sub stream)  | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   |
| Smart Codec                    | Supported   | Supported   | Supported   | Supported   | Supported   | Supported   |
| Max. Resolution                | 1080p (1920 × 1080)   | 4Mp (2688 × 1520)   | 1080P (1920 × 1080)   | 8M (3840 × 2160)  | 8M (3840 × 2160)  | 5M (2592 × 1944)  |
| Frame Rate                     | 1920 × 1080@1~25/30 fps   | 2688 × 1520@1~25/30 fps   | 1920 × 1080@1~25/30 fps   | 3840 × 2160 @(1~20 fps by default)<br>3840 × 2160 @(1~25/30 fps when AI function disabled)                      | 3840 × 2160 @(1~20 fps by default)<br>3840 × 2160 @(1~25/30 fps when AI function disabled)                      | 2592 × 1944@1~20 fps  |
| Multi-streaming                | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams   |
| Pan/Tilt/Rotation              | Pan: 0°~355°;Tilt: 0°~65°<br>Rotation: 0°~355°  | --  | --  | Pan: 0°~360°;Tilt: 0°~60°;<br>Rotation: 0°~355°   | Pan: 0°~360°;Tilt: 0°~60°;<br>Rotation: 0°~355°   | Pan:0°~355°; Verticle:0°~65°;<br>Rotation:0°~355°   |
| Compatibility                  | ONVIF (Profile S/Profile G); CGI; P2P; Milestone; Genetec   | ONVIF (profile S&G),CGI,P2P, Milestone,Genetec  | ONVIF (profile S&G),CGI,P2P, Milestone,Genetec  | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec   | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec   | ONVIF (profile S&G),CGI,P2P, Milestone,Genetec  |
| Audio In/Out                   | 1/1, Built-in MIC   | 1/1   | 1/1   | 1/1   | --  | 1/1   |
| Memory Slot                    | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out                   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | 2 channel In: 5mA 3V-5VDC<br>2 channel Out: 300mA 12VDC   | 2 channel In: 5mA 3V-5VDC<br>2 channel Out: 300mA 12VDC   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   |
| Ingress Protection             | IP67  | IP67  | IP67  | IP67; IK10  | IP67; IK10  | IP67; IK10  |
| Working Temperature            | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)  | -40°C~+55°C(-40°F ~ +131°F)   | -40°C~+55°C(-40°F ~ +131°F)   | -40°C~+60°C (-40°F ~ +140°F)  |
| Power                          | 12V DC/POE, Max. 4.3W   | 12V DC/POE (802.3af), Max.11.6W   | 12V DC/POE (802.3af), Max.11W   | 12V DC/POE (802.3af), Max.7W  | 12V DC/POE (802.3af), Max.7W  | 12V DC/POE (802.3af), Max.7.3W  |
| <b>Artificial Intelligence</b> |   |   |   |   |   |   |
| Perimeter Protection           | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   |
| Intelligent Search             | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. |
| SMD Plus                       | Supported   | Supported   | Supported   | Supported   | Supported   | Supported   |

## WizSense Series

### Fixed-focal Dome

| Model                          | IPC-HDBW3541E-S   | IPC-HDBW3441E-AS  | IPC-HDBW3441E-S   | IPC-HDBW3241E-AS  | IPC-HDBW3241E-S   | IPC-HDBW3449E-AS-NI   |
|--------------------------------|---|---|---|---|---|---|
| Appearance                     |                            |                            |                           |                          |                          |                          |
| Image Sensor                   | 1/2.7" 5Mp CMOS   | 1/3" 4Mp CMOS   | 1/3" 4Mp CMOS   | 1/2.8" 2Mp CMOS   | 1/2.8" 2Mp CMOS   | 1/2.7" 4Mp CMOS   |
| Focal Length                   | 2.8mm fixed lens<br>(3.6mm/6mm optional)  | 2.8mm fixed lens<br>(3.6mm/6mm optional)  | 2.8mm fixed lens<br>(3.6mm/6mm optional)  | 2.8mm fixed lens<br>(3.6mm/6mm optional)  | 2.8mm fixed lens<br>(3.6mm/6mm optional)  | 2.8mm/F1.0; 3.6mm/F1.0  |
| FOV-H                          | 98°/80°/50°   | 103°/84°/52°  | 103°/84°/52°  | 106°/87°/54°  | 106°/87°/54°  | 103°/80°  |
| Min. Illumination              | 0.005 Lux@F1.6  | 0.005 Lux@F1.6  | 0.005 Lux@F1.6  | 0.002 Lux@F1.6  | 0.002 Lux@F1.6  | 0.003 Lux @ F1.0  |
| Day/Night                      | ICR   | ICR   | ICR   | ICR   | ICR   | Color/B/W   |
| WDR                            | 120dB   | 120dB   | 120dB   | 120dB   | 120dB   | 120dB   |
| Max. IR Distance               | 50m (164.0 ft)  | 50m (164.0 ft)  | 50m (164.0 ft)  | 50m (164.0 ft)  | 50m (164.0 ft)  | --  |
| Video Compression              | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265; H.264; H.264H; H.264B; MJPEG (sub stream)  |
| Smart Codec                    | Supported   | Supported   | Supported   | Supported   | Supported   | Supported   |
| Max. Resolution                | 5M (2592 x 1944)  | 4M (2688 x 1520)  | 4Mp (2688 x 1520)   | 1080P (1920 x 1080)   | 1080P (1920 x 1080)   | 4MP (2688 x 1520)   |
| Frame Rate                     | 2592 x 1944@1~20 fps  | 2688 x 1520@1~25/30 fps   | 2688 x 1520@1~25/30 fps   | 1920 x 1080@1~25/30 fps   | 1920 x 1080@1~25/30 fps   | 2688 x 1520 @ 1~25/30 fps   |
| Multi-streaming                | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams   |
| Pan/Tilt/Rotation              | Pan:0°~355°; Verticle:0°~65°;<br>Rotation:0°~355°   | Pan:0°~355°; Verticle:0°~65°;<br>Rotation:0°~355°   | Pan:0°~355°; Verticle:0°~65°;<br>Rotation:0°~355°   | Pan:0°~355°; Verticle:0°~65°;<br>Rotation:0°~355°   | Pan:0°~355°; Verticle:0°~65°;<br>Rotation:0°~355°   | Pan: 0°~355°;Tilt: 0°~65°<br>Rotation: 0°~355°  |
| Compatibility                  | ONVIF (profile S&G),CGI,P2P,<br>Milestone,Genetec   | ONVIF (profile S&G),CGI,P2P,<br>Milestone,Genetec   | ONVIF (profile S&G),CGI,P2P,<br>Milestone,Genetec   | ONVIF (profile S&G),CGI,P2P,<br>Milestone,Genetec   | ONVIF (profile S&G),CGI,P2P,<br>Milestone,Genetec   | ONVIF (Profile S/Profile G),CGI,P2P,<br>Milestone, Genetec  |
| Audio In/Out                   | --  | 1/1   | --  | 1/1   | --  | 1/1   |
| Memory Slot                    | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out                   | --  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   |
| Ingress Protection             | IP67; IK10  | IP67; IK10  | IP67; IK10  | IP67; IK10  | IP67; IK10  | IP67; IK10  |
| Working Temperature            | -40°C~-60°C (-40°F ~ +140°F)  | -40°C~-60°C (-40°F~+140°F)  | -40°C~-60°C (-40°F~+140°F)  | -40°C~-60°C (-40°F~+140°F)  | -40°C~-60°C (-40°F~+140°F)  | -40°C~-60°C (-40°F~+140°F)  |
| Power                          | 12V DC/POE (802.3af), Max.7.3W  | 12V DC/POE (802.3af), Max.7.3W  | 12V DC/POE (802.3af), Max.7.3W  | 12V DC/POE (802.3af), Max.6.9W  | 12V DC/POE (802.3af), Max.6.9W  | 12V DC/POE, Max. 4.4W   |
| <b>Artificial Intelligence</b> |   |   |   |   |   |   |
| Perimeter Protection           | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   | Tripwire; intrusion<br>(Recognition of human and vehicle)   |
| Intelligent Search             | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. |
| SMD Plus                       | Supported   | Supported   | Supported   | Supported   | Supported   | Supported   |

# NETWORK CAMERAS

## WizSense Series

|                                | Fixed-focal Dome  |   |   | Fixed-focal Eyeball   |   |  |
|--------------------------------|---|---|---|---|---|--|
| Model                          | IPC-HDBW3249E-AS-NI   | IPC-HDW3841EM-AS  | IPC-HDW3841TM-AS  | IPC-HDW3849H-AS-PV  | IPC-HDW3549H-AS-PV  | IPC-HDW3541TM-AS   |
| Appearance                     |  <b>WizSense</b><br>Full-Color |  <b>WizSense</b><br>Starlight  |  <b>WizSense</b><br>Starlight |  <b>TiOC</b>                 |  <b>TiOC</b>                 |  <b>WizSense</b><br>Starlight |
| Image Sensor                   | 1/2.8" 2Mp CMOS   | 1/2.8" 8Mp CMOS   | 1/2.8" 8Mp CMOS   | 1/2.8" 8Mp CMOS   | 1/2.7" 5Mp CMOS   | 1/2.7" 5Mp CMOS  |
| Focal Length                   | 2.8mm/F1.0; 3.6mm/F1.0  | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm/6mm optional)  |
| FOV-H                          | 107°/84°  | 0°~108°(2.8mm),<br>0°~85°(3.6mm)  | 0°~108°(2.8mm),<br>0°~85°(3.6mm)  | 0°~107°(2.8mm),<br>0°~89°(3.6mm)  | 0°~103°(2.8mm),<br>0°~81°(3.6mm)  | 98°/80°/50°  |
| Min. Illumination              | 0.0015 Lux @ F1.0   | 0.007 Lux @F1.4   | 0.007 Lux @F1.4   | 0.007 Lux @ F1.4  | 0.003 Lux @ F1.0  | 0.005 Lux@F1.6   |
| Day/Night                      | Color/B/W   | ICR   | ICR   | Color/B/W   | Color/B/W   | ICR  |
| WDR                            | 120dB   | 120dB   | 120dB   | 120dB   | 120dB   | 120dB  |
| Max. IR Distance               | --  | 30m (98.4 ft)   | 30m (98.4 ft)   | 30m (98.4 ft)   | 30 m (98.4 ft)  | 50m (164.0 ft)   |
| Video Compression              | H.265; H.264; H.264H; H.264B; MJPEG (sub stream)  | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG  |
| Smart Codec                    | Supported   | Supported   | Supported   | Supported   | Supported   | Supported  |
| Max. Resolution                | 1080p (1920×1080)   | 8M (3840×2160)  | 8M (3840×2160)  | 8Mp (3840×2160)   | 5M (2592×1944)  | 5Mp (2592 x 1944)  |
| Frame Rate                     | 1920 x 1080@1~25/30 fps   | 3840 x 2160 @(1~20 fps by default)<br>3840 x 2160 @(1~25/30 fps when AI function disabled)                      | 3840 x 2160 @(1~20 fps by default)<br>3840 x 2160 @(1~25/30 fps when AI function disabled)                      | 3840 x 2160 @(1~20 fps by default)<br>3840 x 2160 @(1~25/30 fps when AI function disabled)                      | 2592 x 1944 @1-20 fps   | 2592 x 1944@1~20 fps   |
| Multi-streaming                | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams  |
| Pan/Tilt/Rotation              | Pan: 0°~355°<br>Tilt: 0°~65°; Rotation: 0°~355°   | Pan: 0°~360°<br>Tilt: 0°~78°; Rotation: 0°~360°   | Pan: 0°~360°<br>Tilt: 0°~78°; Rotation: 0°~360°   | Pan:0°~360°<br>Tilt:0°~78°; Rotation: 0°~360°   | Pan:0°~360°<br>Tilt:0°~78°; Rotation: 0°~360°   | Pan:0°~360°<br>Verticle:0°~78°; Rotation:0°~360°   |
| Compatibility                  | ONVIF (Profile S/Profile G), CGI, P2P, Milestone, Genetec   | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec   | ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec   | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P   | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P   | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec  |
| Audio In/Out                   | 1/1   | Built-in MIC  | Built-in MIC  | 1/1, Built-in MIC, Built-in Speaker   | 1/1, Built-in MIC, Built-in Speaker   | Built-in MIC   |
| Memory Slot                    | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   |
| Alarm In/Out                   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --  | --  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --   |
| Ingress Protection             | IP67; IK10  | IP67  | IP67  | IP67  | IP67  | IP67   |
| Working Temperature            | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)   |
| Power                          | 12V DC/POE, Max. 3.9W   | 12V DC/POE (802.3af), Max.7.9W  | 12V DC/POE (802.3af), Max.7.9W  | 12V DC/POE (802.3af), Max. 8.2W   | 12V DC/POE (802.3af), Max. 8.0W   | 12V DC/POE (802.3af), Max.8.1W   |
| <b>Artificial Intelligence</b> |   |   |   |   |   |  |
| Perimeter Protection           | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)   |
| Intelligent Search             | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos.     | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos.      |
| SMD Plus                       | Supported   | Supported   | Supported   | Supported   | Supported   | Supported  |



## WizSense Series

### Fixed-focal Eyeball

| Model                          | IPC-HDW3449H-AS-PV  | IPC-HDW3441TM-AS  | IPC-HDW3249H-AS-PV  | IPC-HDW3241TM-AS  | IPC-HDW3549TM-AS-LED  | IPC-HDW3449TM-AS-LED  |
|--------------------------------|---|---|---|---|---|---|
| Appearance                     |  TiOC                          |  WizSense<br>Starlight     |  TiOC                         |  WizSense<br>Starlight+  |  WizSense<br>Full-color  |  WizSense<br>Full-color  |
| Image Sensor                   | 1/2.7" 4Mp CMOS   | 1/3" 4Mp CMOS   | 1/2.8" 2Mp CMOS   | 1/2.8" 2Mp CMOS   | 1/2.7" 5Mp CMOS   | 1/2.7" 4Mp CMOS   |
| Focal Length                   | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm/6mm optional)   | 2.8mm fixed lens (3.6mm optional)   | 2.8mm fixed lens (3.6mm/6mm optional)   | 2.8mm/F1.0; 3.6mm/F1.0  | 2.8mm/F1.0; 3.6mm/F1.0  |
| FOV-H                          | 0°~103°(2.8mm),<br>0°~81°(3.6mm)  | 103°/84°/52°  | 0°~107°(2.8mm),<br>0°~84°(3.6mm)  | 106°/87°/54°  | 98°/77°   | 103°/80°  |
| Min. Illumination              | 0.003 Lux @ F1.0  | 0.005 Lux@F1.6  | 0.0015 Lux @F1.0  | 0.002 Lux@F1.6  | 0.003 Lux @F1.0   | 0.003 Lux @ F1.0  |
| Day/Night                      | Color/B/W   | ICR   | Color/B/W   | ICR   | Color/B/W   | Color/B/W   |
| WDR                            | 120dB   | 120dB   | 120dB   | 120dB   | 120dB   | 120dB   |
| Max. IR Distance               | 30m (98.4 ft)   | 50m (164.0 ft)  | 30m (98.4 ft)   | 50m (164.0 ft)  | 30m (98.4 ft)   | 20m (65.6 ft)   |
| Video Compression              | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265; H.264; H.264H; H.264B; MJPEG (sub stream)  | H.265; H.264; H.264H; H.264B; MJPEG (sub stream)  |
| Smart Codec                    | Supported   | Supported   | Supported   | Supported   | Supported   | Supported   |
| Max. Resolution                | 4M (2688 × 1520)  | 4M (2688 × 1520)  | 1080p (1920 × 1080)   | 1080p (1920 × 1080)   | 5MP (2592 × 1944)   | 4MP (2688 × 1520)   |
| Frame Rate                     | 2688 × 1520 @1-25/30 fps  | 2688 × 1520@1~25/30 fps   | 1920 × 1080 @1-25/30 fps  | 1920 × 1080@1~25/30 fps   | 5MP (2592 × 1944) @20 fps   | 2688 × 1520 @1-25/30 fps  |
| Multi-streaming                | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams   |
| Pan/Tilt/Rotation              | Pan:0°~360°; Tilt:0°~78°;<br>Rotation:0°~360°   | Pan:0°~360°;<br>Verticle:0°~78°;Rotation:0°~360°  | Pan:0°~360°; Tilt:0°~78°;<br>Rotation:0°~360°   | Pan:0°~360°;<br>Verticle:0°~78°;Rotation:0°~360°  | Pan: 0°~360°;<br>Tilt: 0°~78°; Rotation: 0°~360°  | Pan: 0°~360°;<br>Tilt: 0°~78°; Rotation: 0°~360°  |
| Compatibility                  | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P   | ONVIF (profile S&G), CGI, P2P, Milestone, Genetec   | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P   | ONVIF (profile S&G), CGI,P2P,Milestone,Genetec  | ONVIF (Profile S/Profile G/Profile T), CGI; Milestone, Genetec  | ONVIF (Profile S/Profile G), CGI, P2P, Milestone, Genetec   |
| Audio In/Out                   | 1/1, Built-in MIC, Built-in Speaker   | Built-in MIC  | 1/1, Built-in MIC, Built-in Speaker   | Built-in MIC  | Built-in MIC  | Built-in MIC  |
| Memory Slot                    | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out                   | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --  | 1 channel In: 5mA 3V-5VDC<br>1 channel Out: 300mA 12VDC   | --  | --  | --  |
| Ingress Protection             | IP67  | IP67  | IP67  | IP67  | IP67  | IP67  |
| Working Temperature            | -40°C~+60°C(-40°F ~ +140°F)   | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C(-40°F ~ +140°F)   | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +141°F)  | -40°C~+60°C (-40°F ~ +140°F)  |
| Power                          | 12V DC/POE (802.3af), Max. 8.0W   | 12V DC/POE (802.3af), Max. 7.7W   | 12V DC/POE (802.3af), Max. 7.35W  | 12V DC/POE (802.3af), Max. 7.7W   | 12V DC/POE, Max. 8.4W   | 12V DC/POE, Max. 8.5W   |
| <b>Artificial Intelligence</b> |   |   |   |   |   |   |
| Perimeter Protection           | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  |
| Intelligent Search             | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. |
| SMD Plus                       | Supported   | Supported   | Supported   | Supported   | Supported   | Supported   |

# NETWORK CAMERAS

## WizSense Series

|                                | Fixed-focal Eyeball   |   |   | Wedge Dome  |   |   |
|--------------------------------|---|---|---|---|---|---|
| Model                          | IPC-HDW3449TM-AS-NI   | IPC-HDW3249TM-AS-LED  | IPC-HDW3249TM-AS-NI   | IPC-HDBW3541F-AS-M  | IPC-HDBW3441F-AS-M  | IPC-HDBW3241F-AS-M  |
| Appearance                     |                            |                            |                           |                          |                          |                          |
| Image Sensor                   | 1/2.7" 4Mp CMOS   | 1/2.8" 2Mp CMOS   | 1/2.8" 2Mp CMOS   | 1/2.7" 5Mp CMOS   | 1/3" 4Mp CMOS   | 1/2.8" 2Mp CMOS   |
| Focal Length                   | 2.8mm/F1.0; 3.6mm/F1.0  | 2.8mm/F1.0; 3.6mm/F1.0  | 2.8mm/F1.0; 3.6mm/F1.0  | 2.8mm fixed lens<br>(3.6mm/6mm optional)  | 2.8mm fixed lens<br>(3.6mm/6mm optional)  | 2.8mm fixed lens<br>(3.6mm/6mm optional)  |
| FOV-H                          | 103°/80°  | 107°/84°  | 107°/84°  | 98°/80°/50°   | 103°/84°/52°  | 106°/87°/54°  |
| Min. Illumination              | 0.003 Lux @ F1.0  | 0.0015 Lux @ F1.0   | 0.0015 Lux @ F1.0   | 0.005 Lux@F1.6  | 0.005 Lux@F1.6  | 0.002 Lux@F1.6  |
| Day/Night                      | Color/B/W   | Color/B/W   | Color/B/W   | ICR   | ICR   | ICR   |
| WDR                            | 120dB   | 120dB   | 120dB   | 120dB   | 120dB   | 120dB   |
| Max. IR Distance               | --  | 20m (65.6 ft)   | --  | 30m(98.4ft)   | 30m(98.4ft)   | 30m(98.4ft)   |
| Video Compression              | H.265; H.264; H.264H; H.264B; MJPEG (sub stream)  | H.265; H.264; H.264H; H.264B; MJPEG (sub stream)  | H.265; H.264; H.264H; H.264B; MJPEG (sub stream)  | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   | H.265/H.264/H.264H/H.264B/MJPEG   |
| Smart Codec                    | Supported   | Supported   | Supported   | Supported   | Supported   | Supported   |
| Max. Resolution                | 4MP (2688 x 1520)   | 1080p (1920 x 1080)   | 1080p (1920 x 1080)   | 5M (2592 x 1944)  | 4Mp (2688 x 1520)   | 1080p (1920 x 1080)   |
| Frame Rate                     | 2688 x 1520 @ 1~25/30 fps   | 1920 x 1080@1~25/30 fps   | 1920 x 1080@1~25/30 fps   | 2592 x 1944@1~20 fps  | 2688 x 1520@1~25/30 fps   | 1920 x 1080@1~25/30 fps   |
| Multi-streaming                | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams   | 3 streams   |
| Pan/Tilt/Rotation              | Pan: 0°~360°, Tilt: 0°~78°<br>Rotation: 0°~360°   | Pan: 0°~360°, Tilt: 0°~78°<br>Rotation: 0°~360°   | Pan: 0°~360°, Tilt: 0°~78°<br>Rotation: 0°~360°   | Horizontal: -30°~30°;<br>Vertical: 0°~80°; Rtation: 0°~360°   | Horizontal: -30°~30°;<br>Vertical: 0°~80°; Rtation: 0°~360°   | Horizontal: -30°~30°;<br>Vertical: 0°~80°; Rtation: 0°~360°   |
| Compatibility                  | ONVIF(Profile S/Profile G); CGI; P2P; Milestone; Genetec  | ONVIF(Profile S/Profile G); CGI; P2P; Milestone; Genetec  | ONVIF(Profile S/Profile G); CGI; P2P; Milestone; Genetec  | ONVIF (profile S&G), CGI,P2P,Milestone,Genetec  | ONVIF (profile S&G), CGI,P2P,Milestone,Genetec  | ONVIF (profile S&G), CGI,P2P,Milestone,Genetec  |
| Audio In/Out                   | Built-in MIC  | Built-in MIC  | Built-in MIC  | Built-in MIC  | Built-in MIC  | Built-in MIC  |
| Memory Slot                    | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out                   | --  | --  | --  | --  | --  | --  |
| Ingress Protection             | IP67  | IP67  | IP67  | IP67; IK10  | IP67; IK10  | IP67; IK10  |
| Working Temperature            | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)  | -40°C~+60°C (-40°F ~ +140°F)  |
| Power                          | 12V DC/POE, Max. 4.5W   | 12V DC/POE, Max. 8.1W   | 12V DC/POE, Max. 4.1W   | 12V DC/POE (802.3af), Max. 5.7W   | 12V DC/POE (802.3af), Max. 5.7W   | 12V DC/POE (802.3af), Max. 5.7W   |
| <b>Artificial Intelligence</b> |   |   |   |   |   |   |
| Perimeter Protection           | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  | Tripwire; intrusion (Recognition of human and vehicle)  |
| Intelligent Search             | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. | Works together with Smart NVR in refining intelligent search, event extraction and merging of event videos. |
| SMD Plus                       | Supported   | Supported   | Supported   | Supported   | Supported   | Supported   |



# Lite Series Network Camera

Lite series network camera has efficient video encoding capacity with upgraded H.265 encoding technology, which saves bandwidth and storage space. This camera adopts the starlight technology and displays better color image even under low light condition.



## Starlight

The Dahua Starlight technology provides clear and colorful videos of scenes with low illumination. It can guarantee good quality images even under ultra-low light condition.



## WDR

With advanced Wide Dynamic Range (WDR) technology, Dahua network camera provides clear details in environments with strong brightness contrast. It can capture clear videos of bright and dark areas of a scene with high brightness or backlight shadow. All products in this series support WDR, except fixed 2230 series.



## SD Card

This series offers SD card storage. With 256GB SD card, the Lite Series Network Cameras supports 24/7 continuous motion detection recording and remote DMSS app.



## Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, the Dahua Smart Encoding technology realizes higher encoding efficiency compared with H.265 and H.264, providing high-quality videos and reducing storage and transmission costs.

# NETWORK CAMERAS

## Lite Series

### Vari-focal Bullet

| Model               | IPC-HFW2831T-ZAS-S2  | IPC-HFW2831T-ZS-S2   | IPC-HFW2531T-ZAS-S2  | IPC-HFW2531T-ZS-S2  | IPC-HFW2431T-ZAS-S2  | IPC-HFW2431T-ZS-S2   | IPC-HFW2231T-ZAS-S2   | IPC-HFW2231T-ZS-S2  |
|---------------------|--|--|--|---|--|--|---|---|
| Appearance          | <br>Starlight | <br>Starlight | <br>Starlight | <br>Starlight | <br>Starlight | <br>Starlight | <br>Starlight+ | <br>Starlight+ |
| Image Sensor        | 1/2.7" 8MP CMOS  | 1/2.7" 8MP CMOS  | 1/2.7" 5MP CMOS  | 1/2.7" 5MP CMOS   | 1/3" 4MP CMOS  | 1/3" 4MP CMOS  | 1/2.8" 2MP CMOS   | 1/2.8" 2MP CMOS   |
| Focal Length        | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5   | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5   | 2.7 mm~13.5 mm/F1.5   |
| FOV-H               | 113°~31°   | 113°~31°   | 100°~26°   | 100°~26°  | 104°~27°   | 104°~27°   | 109°~28°  | 109°~28°  |
| Min. Illumination   | 0.008 Lux@F1.5   | 0.008 Lux@F1.5   | 0.008 Lux@F1.5   | 0.008 Lux@F1.5  | 0.008 Lux@F1.5   | 0.008 Lux@F1.5   | 0.002 Lux@F1.5  | 0.002 Lux@F1.5  |
| Day/Night           | ICR  | ICR  | ICR  | ICR   | ICR  | ICR  | ICR   | ICR   |
| WDR                 | 120dB  | 120dB  | 120dB  | 120dB   | 120dB  | 120dB  | 120dB   | 120dB   |
| Max. IR Distance    | 60m (196.85 ft)  | 60m (196.85 ft)  | 60m (196.85 ft)  | 60m (196.85 ft)   | 60m (196.85 ft)  | 60m (196.85 ft)  | 60m (197ft)   | 60m (197ft)   |
| Video Compression   | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec   | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec   | H.265; H.264; H.265B; MJPEG Supported smart codec   |
| Max. Resolution     | 8MP (3840x2160)  | 8MP (3840x2160)  | 5MP (2592x1944)  | 5MP (2592x1944)   | 4MP (2560x1440)  | 4MP (2560x1440)  | 1080P (1920x1080)   | 1080P (1920x1080)   |
| Frame Rate          | 15fps@8MP  | 15fps@8MP  | 20fps@5MP  | 20fps@5MP   | 25/30fps@4MP   | 25/30fps@4MP   | 25/30fps@2MP  | 25/30fps@2MP  |
| Multi-streaming     | 2 streams  | 2 streams  | 2 streams  | 2 streams   | 2 streams  | 2 streams  | 2 streams   | 2 streams   |
| Pan/Tilt/Rotation   | Pan: 0°~360°; Tilt: 0°~78°<br>Rotation: 0°~360°  | Pan: 0°~360°; Tilt: 0°~78°<br>Rotation: 0°~360°  | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°  | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~90°;<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~90°<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~90°<br>Rotation: 0°~360°   |
| Intelligent Video   | Tripwire, Intrusion  | Tripwire, Intrusion  | Tripwire, Intrusion  | Tripwire, Intrusion   | Tripwire, Intrusion  | Tripwire, Intrusion  | Tripwire, Intrusion   | Tripwire, Intrusion   |
| Compatibility       | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec  |
| Audio In/Out        | 1/1  | --   | 1/1  | --  | 1/1  | --   | 1/1   | --  |
| Memory Slot         | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out        | 1 channel In: 5mA 5V DC<br>1 channel Out: 300mA 12VDC  | --   | 1 channel In: 5mA 5VDC<br>1 channel Out: 300mA 12VDC   | --  | 1 channel In: 5mA 5VDC<br>1 channel Out: 300mA 12VDC   | --   | 1 channel In: 5mA 5VDC<br>1 channel Out: 300mA 12VDC  | --  |
| Ingress Protection  | IP67   | IP67   | IP67   | IP67  | IP67; IK10 (optional)  | IP67; IK10 (optional)  | IP67; IK10 (optional)   | IP67; IK10 (optional)   |
| Working Temperature | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)   | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)   | -30°C~+60°C<br>(-22°F ~ +140°F)   |
| Power               | DC12V, PoE<br>Max. 9.9W  | DC12V, PoE<br>Max. 9.9W  | DC12V, PoE<br>Max. 10W   | DC12V, PoE<br>Max. 10W  | DC12V, PoE<br>Max. 9.6W  | DC12V, PoE<br>Max. 9.6W  | DC12V, PoE<br>Max. 9.6W   | DC12V, PoE<br>Max. 9.6W   |

## Lite Series









### Vari-focal Dome

| Model               | IPC-HDBW2831R-ZAS-S2   | IPC-HDBW2831R-ZS-S2  | IPC-HDBW2531R-ZAS-S2   | IPC-HDBW2531R-ZS-S2  | IPC-HDBW2431R-ZAS-S2   | IPC-HDBW2431R-ZS-S2  | IPC-HDBW2231R-ZAS-S2  | IPC-HDBW2231R-ZS-S2   |
|---------------------|--|--|--|--|--|--|---|---|
| Appearance          | <br>Starlight | <br>Starlight | <br>Starlight | <br>Starlight | <br>Starlight | <br>Starlight | <br>Starlight+ | <br>Starlight+ |
| Image Sensor        | 1/2.7" 8MP CMOS  | 1/2.7" 8MP CMOS  | 1/2.7" 5MP CMOS  | 1/2.7" 5MP CMOS  | 1/3" 4MP CMOS  | 1/3" 4MP CMOS  | 1/2.8" 2MP CMOS   | 1/2.8" 2MP CMOS   |
| Focal Length        | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5  | 2.7 mm~13.5 mm/F1.5   | 2.7 mm~13.5 mm/F1.5   |
| FOV-H               | 113°~31°   | 113°~31°   | 100°~26°   | 100°~26°   | 104°~27°   | 104°~27°   | 109°~28°  | 109°~28°  |
| Min. Illumination   | 0.008 Lux@F1.5   | 0.008 Lux@F1.5   | 0.008 Lux@F1.5   | 0.008 Lux@F1.5   | 0.008 Lux@F1.5   | 0.008 Lux@F1.5   | 0.002 Lux@F1.5  | 0.002 Lux@F1.5  |
| Day/Night           | ICR  | ICR  | ICR  | ICR  | ICR  | ICR  | ICR   | ICR   |
| WDR                 | 120dB  | 120dB  | 120dB  | 120dB  | 120dB  | 120dB  | 120dB   | 120dB   |
| Max. IR Distance    | 40m (131.2 ft)   | 40m (131.2 ft)   | 40m (131.2ft)  | 40m (131.2ft)  | 40m (131.2ft)  | 40m (131.2ft)  | 40m (131.2ft)   | 40m (131.2ft)   |
| Video Compression   | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec  | H.265; H.264; H.265B; MJPEG Supported smart codec   | H.265; H.264; H.265B; MJPEG Supported smart codec   |
| Max. Resolution     | 8MP (3840x2160)  | 8MP (3840x2160)  | 5MP (2592x1944)  | 5MP (2592x1944)  | 4MP (2560x1440)  | 4MP (2560x1440)  | 1080P (1920x1080)   | 1080P (1920x1080)   |
| Frame Rate          | 15fps@8MP  | 15fps@8MP  | 20fps@5MP  | 20fps@5MP  | 25/30fps@4MP   | 25/30fps@4MP   | 25/30fps@2MP  | 25/30fps@2MP  |
| Multi-streaming     | 2 streams  | 2 streams  | 2 streams  | 2 streams  | 2 streams  | 2 streams  | 2 streams   | 2 streams   |
| Pan/Tilt/Rotation   | Pan: 0°~355°; Tilt: 0°~67°<br>Rotation: 0°~355°  | Pan: 0°~355°; Tilt: 0°~67°<br>Rotation: 0°~355°  | Pan:0°~355°; Tilt:0°~67°;<br>Rotation:0°~355°  | Pan:0°~355°; Tilt:0°~67°;<br>Rotation:0°~355°  | Pan:0°~355°; Tilt:0°~67°;<br>Rotation:0°~355°  | Pan:0°~355°; Tilt:0°~67°;<br>Rotation:0°~355°  | Pan:0°~355°; Tilt:0°~75°;<br>Rotation:0°~355°   | Pan:0°~355°; Tilt:0°~75°;<br>Rotation:0°~355°   |
| Intelligent Video   | Tripwire; Intrusion  | Tripwire; Intrusion  | Tripwire; Intrusion  | Tripwire; Intrusion  | Tripwire; Intrusion  | Tripwire; Intrusion  | Tripwire; Intrusion   | Tripwire; Intrusion   |
| Compatibility       | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec  |
| Audio In/Out        | 1/1  | --   | 1/1  | --   | 1/1  | --   | 1/1   | --  |
| Memory Slot         | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out        | 1 channel In: 5mA 5V DC<br>1 channel Out: 300mA 12VDC  | --   | 1 channel In: 5mA 5VDC<br>1 channel Out: 300mA 12VDC   | --   | 1 channel In: 5mA 5VDC<br>1 channel Out: 300mA 12VDC   | --   | 1 channel In: 5mA 3V~5VDC<br>1 channel Out: 300mA 12VDC   | --  |
| Ingress Protection  | IP67; IK10   | IP67; IK10   | IP67; IK10   | IP67; IK10   | IP67; IK10   | IP67; IK10   | IP67; IK10  | IP67; IK10  |
| Working Temperature | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F~+140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)  | -30°C~+60°C<br>(-22°F ~ +140°F)   | -30°C~+60°C<br>(-22°F ~ +140°F)   |
| Power               | DC12V,PoE<br>Max. 7.4W   | DC12V,PoE<br>Max. 7.4W   | DC12V,PoE<br>Max. 8W   | DC12V,PoE<br>Max. 7.9W   | DC12V,PoE<br>Max. 6.5W   | DC12V,PoE<br>Max. 6.5W   | DC12V,PoE<br>Max. 6.4W  | DC12V,PoE<br>Max. 6.4W  |







# NETWORK CAMERAS

## Lite Series

|                     | Vari-focal Eyeball  |   |   |  | Fixed-focal Bullet  |   |   |  |
|---------------------|---|---|---|--|---|---|---|--|
| Model               | IPC-HDW2831T-ZS-S2  | IPC-HDW2531T-ZS-S2  | IPC-HDW2431T-ZS-S2  | IPC-HDW2231T-ZS-S2   | IPC-HFW2831T-AS-S2  | IPC-HFW2531T-AS-S2  | IPC-HFW2431T-AS-S2  | IPC-HFW2231T-AS-S2   |
| Appearance          |  Starlight |  Starlight |  Starlight |  Starlight+ |  Starlight |  Starlight |  Starlight |  Starlight+ |
| Image Sensor        | 1/2.7" 8MP CMOS   | 1/2.7" 5MP CMOS   | 1/3" 4MP CMOS   | 1/2.8" 2MP CMOS  | 1/2.7" 8MP CMOS   | 1/2.7" 5MP CMOS   | 1/3" 4MP CMOS   | 1/2.8" 2MP CMOS  |
| Focal Length        | 2.7 mm~13.5 mm/F1.5   | 2.7 mm~13.5 mm/F1.5   | 2.7 mm~13.5 mm/F1.5   | 2.7 mm~13.5 mm/F1.5  | 3.6 mm/F2.0<br>6 mm/F2.0  | 3.6 mm/F1.6; 6 mm/F1.6<br>8 mm/F1.6   | 3.6 mm/F1.6; 6 mm/F1.6<br>8 mm/F1.6   | 3.6 mm/F1.6; 6 mm/F1.6<br>8 mm/F1.6  |
| FOV-H               | 113°~31°  | 100°~26°  | 104°~27°  | 109°~28°   | 87°/ 54°  | 84°/ 51°/ 40°   | 84°/ 52°/ 40°   | 87°/ 54°/ 41°  |
| Min. Illumination   | 0.008 Lux@F1.5  | 0.008 Lux@F1.5  | 0.008 Lux@F1.5  | 0.002 Lux@F1.5   | 0.009 Lux@F1.6  | 0.008 Lux@F1.6  | 0.008 Lux@F1.6  | 0.002 Lux@F1.6   |
| Day/Night           | ICR   | ICR   | ICR   | ICR  | ICR   | ICR   | ICR   | ICR  |
| WDR                 | 120dB   | 120dB   | 120dB   | 120dB  | 120dB   | 120dB   | 120dB   | 120dB  |
| Max. IR Distance    | 40m (131.2 ft)  | 40m (131.2ft)   | 40m (131.2ft)   | 40m (131.2ft)  | 80m (262.5 ft)  | 80m (262.5 ft)  | 80m (262.5 ft)  | 80m (262.5 ft)   |
| Video Compression   | H.265; H.264; H.265B; MJPEG; Supported smart codec  | H.265; H.264; H.265B; MJPEG; Supported smart codec  | H.265; H.264; H.265B; MJPEG; Supported smart codec  | H.265; H.264; H.265B; MJPEG; Supported smart codec   | H.265; H.264; H.265B; MJPEG; Supported smart codec  | H.265; H.264; H.265B; MJPEG; Supported smart codec  | H.265; H.264; H.265B; MJPEG; Supported smart codec  | H.265; H.264; H.265B; MJPEG; Supported smart codec   |
| Max. Resolution     | 8MP (3840x2160)   | 5MP (2592x1944)   | 4MP (2560x1440)   | 1080P (1920x1080)  | 8MP (3840x2160)   | 5MP (2592x1944)   | 4MP (2560x1440)   | 1080P (1920x1080)  |
| Frame Rate          | 15fps@8MP   | 20fps@5MP   | 25/30fps@4MP  | 25/30fps@2MP   | 15fps@8MP   | 20fps@5MP   | 25/30fps@4MP  | 25/30fps@2MP   |
| Multi-streaming     | 2 streams   | 2 streams   | 2 streams   | 2 streams  | 2 streams   | 2 streams   | 2 streams   | 2 streams  |
| Pan/Tilt/Rotation   | Pan: 0°~360°; Tilt: 0°~78°<br>Rotation: 0°~360°   | Pan:0°~355°; Tilt:0°~78°;<br>Rotation:0°~360°   | Pan:0°~355°; Tilt:0°~78°;<br>Rotation:0°~360°   | Pan:0°~355°; Tilt:0°~78°;<br>Rotation:0°~360°  | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°   | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°   | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°   | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°  |
| Intelligent Video   | Tripwire; Intrusion   | Tripwire; Intrusion   | Tripwire; Intrusion   | Tripwire; Intrusion  | Tripwire; Intrusion   | Tripwire; Intrusion   | Tripwire; Intrusion   | Tripwire; Intrusion  |
| Compatibility       | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P                           | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P                           | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P                           | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P                            |
| Audio In/Out        | --  | --  | --  | --   | 1/1   | 1/1   | 1/1   | 1/1  |
| Memory Slot         | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   |
| Alarm In/Out        | --  | --  | --  | --   | 1 channel In: 5mA 5V DC<br>1 channel Out: 300mA 12V DC  | 1 channel In: 5mA 5V DC<br>1 channel Out: 300mA 12V DC  | 1 channel In: 5mA 5V DC<br>1 channel Out: 300mA 12V DC  | 1 channel In: 5mA 5V DC<br>1 channel Out: 300mA 12V DC   |
| Ingress Protection  | IP67  | IP67  | IP67  | IP67   | IP67; IK10 (optional)   | IP67; IK10 (optional)   | IP67; IK10 (optional)   | IP67; IK10 (optional)  |
| Working Temperature | -30°C~+60°C<br>(-22°F ~ +140°F)   | -30°C~+60°C<br>(-22°F ~ +140°F)   | -30°C~+60°C<br>(-22°F ~ +140°F)   | -30°C~+60°C<br>(-22°F ~ +140°F)  | -40°C to +60°C<br>(-40°F to +140°F)   | -40°C to +60°C<br>(-40°F to +140°F)   | -40°C to +60°C<br>(-40°F to +140°F)   | -40°C to +60°C<br>(-40°F to +140°F)  |
| Power               | DC12V,PoE<br>Max. 7.6W  | DC12V,PoE<br>Max. 7.3W  | DC12V,PoE<br>Max. 6.4W  | DC12V,PoE<br>Max. 6.4W   | DC12V,PoE<br>Max. 9.9W  | DC12V,PoE<br>Max. 9.9W  | DC12V,PoE<br>Max. 9.6W  | DC12V,PoE<br>Max. 9.6W   |


## Lite Series

### Fixed-focal Bullet

| Model               | IPC-HFW2831S-S-S2  | IPC-HFW2531S-S-S2  | IPC-HFW2431S-S-S2  | IPC-HFW2231S-S-S2   | IPC-HFW2230S-S-S2  | IPC-HFW2231M-AS-I2-B-S2  | IPC-HFW2239M-AS-LED-B-S2  | IPC-HFW2439M-AS-LED-B-S2  |
|---------------------|--|--|--|---|--|--|---|---|
| Appearance          | <br>Starlight | <br>Starlight | <br>Starlight | <br>Starlight+ | <br>Starlight | <br>Starlight | <br>Full Color | <br>Full Color |
| Image Sensor        | 1/2.7" 8MP CMOS  | 1/2.7" 5MP CMOS  | 1/3" 4MP CMOS  | 1/2.8" 2MP CMOS   | 1/2.7" 2MP CMOS  | 1/2.8" 2MP CMOS  | 1/2.8" 2MP CMOS   | 1/3" 4MP CMOS   |
| Focal Length        | 2.8mm/F2.0<br>3.6mm/F2.0   | 2.8mm/F1.6<br>3.6mm/F1.6   | 2.8mm/F1.6<br>3.6mm/F1.6   | 2.8mm/F1.6<br>3.6mm/F1.6  | 2.8mm/F1.6<br>3.6mm/F1.6   | 3.6 mm: F1.6<br>6 mm: F1.6   | 3.6 mm/F1.0<br>6 mm/F1.0  | 3.6 mm/F1.0<br>6 mm/F1.0  |
| FOV-H               | 105°/ 87°  | 103°/ 84°  | 102°/ 84°  | 106°/ 87°   | 110°/ 91°  | 87°/ 54°   | 91°/55°   | 91°/55°   |
| Min. Illumination   | 0.009 Lux@F2.0   | 0.008 Lux@F1.6   | 0.008 Lux@F1.6   | 0.002 Lux @F1.6   | 0.005 Lux@F1.6   | 0.002Lux@F1.6  | 0.0017 Lux@F1.0   | 0.004 Lux@F1.0  |
| Day/Night           | ICR  | ICR  | ICR  | ICR   | ICR  | ICR  | Color/B/W   | Color/B/W   |
| WDR                 | 120dB  | 120dB  | 120dB  | 120dB   | DWDR   | 120dB  | 120dB   | 120dB   |
| Max. IR Distance    | 30m (98ft)   | 30m (98ft)   | 30m(98ft)  | 30m (98ft)  | 30m (98ft)   | 50 m (164 ft)  | 40m (131.2 ft)  | 40m (131.2 ft)  |
| Video Compression   | H.265; H.264;<br>H.265B; MJPEG;<br>Supported smart codec                                       | H.265; H.264;<br>H.265B; MJPEG;<br>Supported smart codec                                       | H.265; H.264;<br>H.265B; MJPEG;<br>Supported smart codec                                       | H.265; H.264;<br>H.265B; MJPEG;<br>Supported smart codec  | H.265; H.264;<br>H.265B; MJPEG;<br>Supported smart codec   | H.265; H.264;<br>H.265B; MJPEG;<br>Supported smart codec   | H.265; H.264;<br>H.265B; MJPEG;<br>Supported smart codec  | H.265; H.264;<br>H.265B; MJPEG;<br>Supported smart codec  |
| Max. Resolution     | 8MP (3840x2160)  | 5MP (2592x1944)  | 4MP (2560x1440)  | 1080P (1920x1080)   | 1080P (1920x1080)  | 1080P(1920x1080)   | 1080P (1920x1080)   | 4MP (2560x1440)   |
| Frame Rate          | 15fps@8MP  | 20fps@5MP  | 25/30fps@4MP   | 25/30fps@2MP  | 25/30fps@2MP   | 25/30fps@2MP   | 25/30fps@2MP  | 25/30fps@4MP  |
| Multi-streaming     | 2 streams  | 2 streams  | 2 streams  | 2 streams   | 2 streams  | 2 streams  | 2 streams   | 2 streams   |
| Pan/Tilt/Rotation   | Pan: 0°~360°;Tilt: 0°~90°<br>Rotation: 0°~360°   | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°  | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°  | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°   | Pan:0°~360°; Tilt:0°~90°;<br>Rotation:0°~360°  | --   | --  | --  |
| Intelligent Video   | Tripwire; Intrusion  | Tripwire; Intrusion  | Tripwire; Intrusion  | Tripwire; Intrusion   | Tripwire; Intrusion  | Tripwire; intrusion  | Tripwire; Intrusion   | Tripwire; Intrusion   |
| Compatibility       | ONVIF (Profile S/Profile G);<br>CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G);<br>CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G);<br>CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G);<br>CGI; Milestone; Genetec   | ONVIF (Profile S/Profile G);<br>CGI; Milestone; Genetec  | ONVIF (Profile S/Profile G/<br>Profile T); CGI; Milestone;<br>Genetec; P2P                       | ONVIF (Profile S/Profile G/<br>Profile T); CGI; Milestone;<br>Genetec; P2P                        | ONVIF (Profile S/Profile G/<br>Profile T); CGI; Milestone;<br>Genetec; P2P                        |
| Audio In/Out        | --   | --   | --   | --  | --   | 1/1  | 1/1   | 1/1   |
| Memory Slot         | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out        | --   | --   | --   | --  | --   | 2 channels in:<br>5mA 3V~5V DC<br>2 channels out:<br>300mA 12V DC                                | 1 channel In: 5mA 5V DC<br>1 channel Out:<br>300mA 12V DC   | 1 channel In: 5mA 5V DC<br>1 channel Out:<br>300mA 12V DC   |
| Ingress Protection  | IP67   | IP67   | IP67   | IP67  | IP67   | IP67   | IP67  | IP67  |
| Working Temperature | -40°C~-60°C<br>(-40°F~-140°F)  | -40°C ~+60°C<br>(-40°F~+140°F)   | -40°C~-60°C<br>(-40°F~-140°F)  | -40°C~-60°C<br>(-40°F~-140°F)   | -40°C~-60°C<br>(-40°F~-140°F)  | -40°C~-60°C<br>(-40°F~-140°F)  | -40°C~-60°C<br>(-40°F~-140°F)   | -40°C~-60°C<br>(-40°F~-140°F)   |
| Power               | DC12V,PoE<br>Max. 5.5W   | DC12V,PoE<br>Max. 5.6W   | DC12V,PoE<br>Max. 5W   | DC12V,PoE<br>Max. 4.9W  | DC12V,PoE<br>Max. 4.6W   | DC12V,PoE<br>Max. 9.9W   | DC12V,PoE<br>Max. 10W   | DC12V,PoE<br>Max. 10.2W   |

# NETWORK CAMERAS

## Lite Series

|                     | Fixed-focal Bullet  |   | Fixed-focal Dome   |   |   |   |   |
|---------------------|---|---|--|---|---|---|---|
| Model               | IPC-HFW2239S-SA-LED-S2  | IPC-HFW2439S-SA-LED-S2  | IPC-HDBW2831E-S-S2   | IPC-HDBW2531E-S-S2  | IPC-HDBW2431E-S-S2  | IPC-HDBW2231E-S-S2  | IPC-HDBW2230E-S-S2  |
| Appearance          |  |  |  |  |  |  |  |
|                     | Full-color  | Full-color  | Starlight  | Starlight   | Starlight   | Starlight+  | Starlight   |
| Image Sensor        | 1/2.8" 2MP CMOS   | 1/3" 4MP CMOS   | 1/2.7" 8MP CMOS  | 1/2.7" 5MP CMOS   | 1/3" 4MP CMOS   | 1/2.8" 2MP CMOS   | 1/2.7" 2MP CMOS   |
| Focal Length        | 2.8 mm/F1.0<br>3.6 mm/F1.0  | 2.8 mm/F1.0<br>3.6 mm/F1.0  | 2.8mm/F2.0<br>3.6mm/F2.0   | 2.8mm/F1.6<br>3.6mm/F1.6  | 2.8mm/F1.6<br>3.6mm/F1.6  | 2.8mm/F1.6<br>3.6mm/F1.6  | 2.8mm/F1.6<br>3.6mm/F1.6  |
| FOV-H               | 107°/91°  | 96°/81°   | 105°/ 87°  | 103°/ 84°   | 102°/ 84°   | 106°/ 87°   | 110°/ 91°   |
| Min. Illumination   | 0.0017 Lux@F1.0   | 0.004 Lux@F1.0  | 0.009 Lux@F2.0   | 0.008 Lux@F1.6  | 0.008 Lux@F1.6  | 0.002 Lux @F1.6   | 0.005 Lux @ F1.6  |
| Day/Night           | Color/B/W   | Color/B/W   | ICR  | ICR   | ICR   | ICR   | ICR   |
| WDR                 | 120dB   | 120dB   | 120dB  | 120dB   | 120dB   | 120dB   | DWDR  |
| Max. IR Distance    | 30m (98.4 ft)   | 30m (98.4 ft)   | 30m (98ft)   | 30m (98ft)  | 30m (98ft)  | 30m (98ft)  | 30m (98ft)  |
| Video Compression   | H.265; H.264; H.265B; MJPEG<br>Supported smart codec                              | H.265; H.264; H.265B; MJPEG<br>Supported smart codec                              | H.265; H.264; H.265B; MJPEG<br>Supported smart codec                               | H.265; H.264; H.265B; MJPEG<br>Supported smart codec                                | H.265; H.264; H.265B; MJPEG<br>Supported smart codec                                | H.265; H.264; H.265B; MJPEG<br>Supported smart codec                                | H.265; H.264; H.265B; MJPEG<br>Supported smart codec                                |
| Max. Resolution     | 1080P(1920x1080)  | 4MP(2560x1440)  | 8MP (3840x2160)  | 5MP(2592x1944)  | 4MP(2560x1440)  | 1080P(1920x1080)  | 1080P(1920x1080)  |
| Frame Rate          | 25/30fps@2MP  | 25/30fps@4MP  | 15fps@8MP  | 20fps@5MP   | 25/30fps@4MP  | 25/30fps@2MP  | 25/30fps@2MP  |
| Multi-streaming     | 2 streams   | 2 streams   | 2 streams  | 2 streams   | 2 streams   | 2 streams   | 2 streams   |
| Pan/Tilt/Rotation   | Pan: 0°~360°; Tilt: 0°~90°<br>Rotation: 0°~360°                                   | Pan: 0°~360°; Tilt: 0°~90°<br>Rotation: 0°~360°                                   | Pan: 0°~355°; Tilt: 0°~65°<br>Rotation: 0°~355°                                    | Pan:0°~355°; Tilt:0°~65°;<br>Rotation:0°~355°                                       | Pan:0°~355°; Tilt:0°~65°;<br>Rotation:0°~355°                                       | Pan:0°~355°; Tilt:0°~65°;<br>Rotation:0°~355°                                       | Pan:0°~355°; Tilt:0°~65°;<br>Rotation:0°~355°                                       |
| Intelligent Video   | Tripwire; Intrusion   | Tripwire; Intrusion   | Tripwire; Intrusion  | Tripwire; Intrusion   | Tripwire; Intrusion   | Tripwire; Intrusion   | Tripwire; Intrusion   |
| Compatibility       | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P               | ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P               | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec                               | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec                                | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec                                | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec                                | ONVIF (Profile S/Profile G); CGI; Milestone; Genetec                                |
| Audio In/Out        | Built-in MIC  | Built-in MIC  | --   | --  | --  | --  | --  |
| Memory Slot         | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out        | --  | --  | --   | --  | --  | --  | --  |
| Ingress Protection  | IP67  | IP67  | IP67; IK10   | IP67; IK10  | IP67; IK10  | IP67; IK10  | IP67; IK10  |
| Working Temperature | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)   | -40°C to +60°C (-40°F to +140°F)  | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)  |
| Power               | DC12V,PoE<br>Max. 6W  | DC12V,PoE<br>Max. 6.2W  | DC12V,PoE<br>Max. 6.2W   | DC12V,PoE<br>Max. 6.1W  | DC12V,PoE<br>Max. 5.2W  | DC12V,PoE<br>Max. 5.4W  | DC12V,PoE<br>Max. 5W  |







## Lite Series

### Fixed-focal Eyeball

| Model               | IPC-HDW2831TM-AS-S2   | IPC-HDW2531TM-AS-S2   | IPC-HDW2431TM-AS-S2  | IPC-HDW2231TM-AS-S2  | IPC-HDW2831T-AS-S2  | IPC-HDW2531T-AS-S2  | IPC-HDW2431T-AS-S2  |
|---------------------|---|---|--|--|---|---|---|
| Appearance          |  Starlight |  Starlight |  Starlight |  Starlight+ |  Starlight |  Starlight |  Starlight |
| Image Sensor        | 1/2.7" 8MP CMOS   | 1/2.7" 5MP CMOS   | 1/3" 4MP CMOS  | 1/2.8" 2MP CMOS  | 1/2.7" 8MP CMOS   | 1/2.7" 5MP CMOS   | 1/3" 4MP CMOS   |
| Focal Length        | 2.8mm/F2.0<br>3.6mm/F2.0  | 2.8mm/F1.6<br>3.6mm/F1.6  | 2.8mm/F1.6<br>3.6mm/F1.6   | 2.8mm/F1.6<br>3.6mm/F1.6   | 2.8mm/F2.0<br>3.6mm/F2.0  | 2.8mm/F1.6<br>3.6mm/F1.6  | 2.8mm/F1.6<br>3.6mm/F1.6  |
| FOV-H               | 105°/ 87°   | 103°/ 84°   | 102°/ 84°  | 106°/ 87°  | 105°/ 87°   | 103°/ 84°   | 102°/ 84°   |
| Min. Illumination   | 0.009 Lux@F2.0  | 0.008 Lux@F1.6  | 0.008 Lux@F1.6   | 0.002 Lux @F1.6  | 0.009 Lux@F2.0  | 0.008 Lux@F1.6  | 0.008 Lux@F1.6  |
| Day/Night           | ICR   | ICR   | ICR  | ICR  | ICR   | ICR   | ICR   |
| WDR                 | 120dB   | 120dB   | 120dB  | 120dB  | 120dB   | 120dB   | 120dB   |
| Max. IR Distance    | 30m (98ft)  | 30m (98ft)  | 30m (98ft)   | 30m (98ft)   | 30m (98ft)  | 30m (98ft)  | 30m (98ft)  |
| Video Compression   | H.265; H.264; H.265B; MJPEG<br>Supported smart codec  | H.265; H.264; H.265B; MJPEG<br>Supported smart codec  | H.265; H.264; H.265B; MJPEG<br>Supported smart codec   | H.265; H.264; H.265B; MJPEG<br>Supported smart codec   | H.265; H.264; H.265B; MJPEG<br>Supported smart codec  | H.265; H.264; H.265B; MJPEG<br>Supported smart codec  | H.265; H.264; H.265B; MJPEG<br>Supported smart codec  |
| Max. Resolution     | 8MP (3840x2160)   | 5MP (2592x1944)   | 4MP (2560x1440)  | 1080P (1920x1080)  | 8MP (3840x 2160)  | 5MP (2592x1944)   | 4MP (2560x1440)   |
| Frame Rate          | 15fps@8MP   | 20fps@5MP   | 25/30fps@4MP   | 15fps@8MP  | 15fps@8MP   | 20fps@5MP   | 25/30fps@4MP  |
| Multi-streaming     | 2 streams   | 2 streams   | 2 streams  | 2 streams  | 2 streams   | 2 streams   | 2 streams   |
| Pan/Tilt/Rotation   | Pan: 0°~360°; Tilt: 0°~78°<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~78°<br>Rotation: 0°~360°   | Pan: 0°~360°; Tilt: 0°~78°<br>Rotation: 0°~360°  | Pan: 0°~360°; Tilt: 0°~78°<br>Rotation: 0°~360°  | Pan: 0°~360°; Tilt: 0°~78°<br>Rotation: 0°~360°   | Pan:0°~360°; Tilt:0°~78°<br>Rotation:0°~360°  | Pan:0°~360°; Tilt:0°~78°<br>Rotation:0°~360°  |
| Intelligent Video   | Tripwire; Intrusion   | Tripwire; Intrusion   | Tripwire; Intrusion  | Tripwire; Intrusion  | Tripwire; Intrusion   | Tripwire; Intrusion   | Tripwire; Intrusion   |
| Compatibility       | ONVIF (Profile S/Profile G); CGI;<br>Milestone; Genetec                                     | ONVIF (Profile S/Profile G); CGI;<br>Milestone; Genetec                                     | ONVIF (Profile S/Profile G); CGI;<br>Milestone; Genetec                                      | ONVIF (Profile S/Profile G); CGI;<br>Milestone; Genetec  | ONVIF (Profile S/Profile G);<br>CGI; Milestone; Genetec                                       | ONVIF (Profile S/Profile G);<br>CGI; Milestone; Genetec                                       | ONVIF (Profile S/Profile G);<br>CGI; Milestone; Genetec                                       |
| Audio In/Out        | Built-in MIC  | Built-in MIC  | Built-in MIC   | Built-in MIC   | Built-in MIC  | Built-in MIC  | Built-in MIC  |
| Memory Slot         | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out        | --  | --  | --   | --   | --  | --  | --  |
| Ingress Protection  | IP67  | IP67  | IP67   | IP67   | IP67  | IP67  | IP67  |
| Working Temperature | -40°C~-60°C (-40°F~+140°F)  | -40°C~-60°C (-40°F~+140°F)  | -40°C~-60°C (-40°F~+140°F)   | -40°C to +60°C (-40°F to +140°F)   | -40°C~-60°C (-40°F~+140°F)  | -40°C~-60°C (-40°F~+140°F)  | -40°C~-60°C (-40°F~+140°F)  |
| Power               | DC12V,PoE<br>Max. 7.2W  | DC12V,PoE<br>Max. 7.2W  | DC12V,PoE<br>Max. 6.6W   | DC12V,PoE<br>Max. 6.5W   | DC12V,PoE<br>Max. 7.2W  | DC12V,PoE<br>Max. 7.2W  | DC12V,PoE<br>Max. 6.6W  |

# NETWORK CAMERAS

## Lite Series

|                     | Fixed-focal Eyeball  |   |   |  | Wedge Dome   |   |
|---------------------|--|---|---|--|--|---|
| Model               | IPC-HDW2231T-AS-S2   | IPC-HDW2230T-AS-S2  | IPC-HDW2239T-AS-LED-S2  | IPC-HDW2439T-AS-LED-S2   | IPC-HDBW2231F-AS-S2  | IPC-HDBW2431F-AS-S2   |
| Appearance          |  Starlight+ |  Starlight |  Full-color |  Full-color |  Starlight+ |  Starlight |
| Image Sensor        | 1/2.8" 2MP CMOS  | 1/2.7" 2MP CMOS   | 1/2.8" 2MP CMOS   | 1/3" 4MP CMOS  | 1/2.8" 2MP CMOS  | 1/3" 4MP CMOS   |
| Focal Length        | 2.8mm/F1.6<br>3.6mm/F1.6   | 2.8mm/F1.6<br>3.6mm/F1.6  | 2.8 mm/F1.0<br>3.6 mm/F1.0  | 2.8 mm/F1.0<br>3.6 mm/F1.0   | 2.8 mm/F1.6<br>3.6 mm/F1.6   | 2.8 mm/F1.6<br>3.6 mm/F1.6  |
| FOV-H               | 106°/ 87°  | 110°/ 91°   | 107°/91°  | 96°/81°  | 106°/87°   | 102°/84°  |
| Min. Illumination   | 0.002 Lux @F1.6  | 0.005 Lux @ F1.6  | 0.0017 Lux@F1.0   | 0.004 Lux@F1.0   | 0.002 Lux@F1.6   | 0.008 Lux@F1.6  |
| Day/Night           | ICR  | ICR   | Color/B/W   | Color/B/W  | ICR  | ICR   |
| WDR                 | 120dB  | DWDR  | 120dB   | 120dB  | 120dB  | 120dB   |
| Max. IR Distance    | 30m (98ft)   | 30m (98ft)  | 30m (98.4 ft)   | 30m (98.4 ft)  | 30m (98.4 ft)  | 30m (98.4 ft)   |
| Video Compression   | H.265; H.264; H.265B; MJPEG<br>Supported smart codec   | H.265; H.264; H.265B; MJPEG<br>Supported smart codec  | H.265; H.264; H.265B; MJPEG<br>Supported smart codec  | H.265; H.264; H.265B; MJPEG<br>Supported smart codec   | H.265; H.264; H.265B; MJPEG<br>Supported smart codec   | H.265; H.264; H.265B; MJPEG<br>Supported smart codec  |
| Max.. Resolution    | 1080P (1920x1080)  | 1080P (1920x1080)   | 1080P (1920x1080)   | 4MP (2560x1440)  | 1080P (1920x1080)  | 4MP (2560x1440)   |
| Frame Rate          | 25/30fps@2MP   | 25/30fps@2MP  | 25/30fps@2MP  | 25/30fps@4MP   | 25/30fps@2MP   | 25/30fps@4MP  |
| Multi-streaming     | 2 streams  | 2 streams   | 2 streams   | 2 streams  | 2 streams  | 2 streams   |
| Pan/Tilt/Rotation   | Pan:0°~360°; Tilt:0°~78°<br>Rotation:0°~360°   | Pan:0°~355°; Tilt:0°~78°<br>Rotation:0°~360°  | Pan: 0°~360°;Tilt: 0°~78°<br>Rotation: 0°~360°  | Pan: 0°~360°;Tilt: 0°~78°<br>Rotation: 0°~360°   | Pan: -30°~30°;Tilt: 0°~80°<br>Rotation: 0°~360°  | Pan: -30°~30°;Tilt: 0°~80°<br>Rotation: 0°~360°   |
| Intelligent Video   | Tripwire,Intrusion   | Tripwire,Intrusion  | Tripwire; intrusion   | Tripwire; intrusion  | Tripwire; intrusion  | Tripwire; intrusion   |
| Compatibility       | ONVIF (Profile S/Profile G); CGI;<br>Milestone; Genetec                                      | ONVIF (Profile S/Profile G); CGI;<br>Milestone; Genetec                                     | ONVIF (Profile S/Profile G/Profile T);<br>CGI; Milestone; Genetec; P2P                        | ONVIF (Profile S/Profile G/Profile T);<br>CGI; Milestone; Genetec; P2P                         | ONVIF (Profile S/Profile G/Profile T);<br>CGI; Milestone; Genetec; P2P                         | ONVIF (Profile S/Profile G/Profile T);<br>CGI; Milestone; Genetec; P2P                        |
| Audio In/Out        | Built-in MIC   | Built-in MIC  | Built-in MIC  | Built-in MIC   | Built-in MIC; 1/1  | Built-in MIC; 1/1   |
| Memory Slot         | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  |
| Alarm In/Out        | --   | --  | --  | --   | 1 channel In: 5mA 5V DC<br>1 channel Out: 300mA 12V DC   | 1 channel In: 5mA 5V DC<br>1 channel Out: 300mA 12V DC  |
| Ingress Protection  | IP67   | IP67  | IP67  | IP67   | IP67; IK10   | IP67; IK10  |
| Working Temperature | -40°C~+60°C (-40°F~+140°F)   | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)   | -40°C~+60°C (-40°F~+140°F)   | -40°C~+60°C (-40°F~+140°F)  |
| Power               | DC12V,PoE<br>Max. 6.5W   | DC12V,PoE<br>Max. 5.9W  | DC12V,PoE<br>Max. 7.1W  | DC12V,PoE<br>Max. 7.4W   | DC12V,PoE<br>Max. 5.4W   | DC12V,PoE<br>Max. 5.4W  |

# NETWORK PTZ CAMERAS





# WizSense Series PTZ Camera

The WizSense Series PTZ Camera offers intelligent functions including Perimeter Protection, Video Metadata, and SMD Plus. Powered by deep-learning AI algorithms, it features Starlight and PFA technologies and provides significantly higher accuracy.



## Face Detection

Supports detection, tracking, optimization and capturing, providing high-quality face images on videos.



## SMD PLUS

With intelligent algorithm, the Dahua Smart Motion Detection technology categorizes targets that trigger the detection alarm, and filters alarms caused by non-target objects, realizing an effective and accurate alarm.



## Perimeter Protection

Supports people and vehicle classification, which significantly improves accuracy, reduces false alarms and decreases pixel count requirements for object detection.




## Active Deterrence

Supports light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention.

# NETWORK PTZ CAMERAS

## WizSense Series

### IR PTZ Camera

| Model                          | SD6CE445XA-HNR   | SD5A825-HNR-YA  | SD5A445XA-HNR   | SD5A425XA-HNR   | SD5A432XA-HNR  | SD5A232XA-HNR  |
|--------------------------------|--|---|---|---|--|--|
| Appearance                     |  <b>Wiz Sense</b><br>H.265+ Starlight |  <b>Wiz Sense</b><br>4K H.265+ Starlight |  <b>Wiz Sense</b><br>H.265+ Starlight |  <b>Wiz Sense</b><br>H.265+ Starlight+ |  <b>Wiz Sense</b><br>H.265+ Starlight |  <b>Wiz Sense</b><br>H.265+ Starlight |
| Image Sensor                   | 1/2.8" 4MP STARVIS™ CMOS   | 1/1.8" STARVIS™ CMOS  | 1/2.8" 4MP STARVIS™ CMOS  | 1/1.8" 4MP CMOS   | 1/2.8" STARVIS™ CMOS   | 1/2.8" STARVIS™ CMOS   |
| Lens                           | 3.9 mm~177.7 mm<br>(45x Optical zoom)  | 5.4 mm~135 mm<br>(25x Optical zoom)   | 3.9 mm~177.7mm<br>(45x Optical zoom)  | 5.4 mm~135mm<br>(25x Optical zoom)  | 4.9 mm~156 mm<br>(32x Optical zoom)  | 4.9 mm~156 mm<br>(32x Optical zoom)  |
| FOV-H                          | 70.3°~1.8°   | 61.6°~3.6°  | 70.3°~1.8°  | 61.6°~3.6°  | 61.6°~2.1°   | 62.8°~2.2°   |
| Min. Illumination              | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.005Lux@F1.6 (Color)<br>0Lux@F1.6 (IR on)  | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)  | 0.001Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)  | 0.005Lux@F1.35 (Color)<br>0Lux@F1.35 (IR on)   | 0.005Lux@F1.35 (Color)<br>0Lux@F1.35 (IR on)   |
| WDR                            | 120dB  | 120dB   | 120dB   | 120dB   | 120dB  | 120dB  |
| Max. IR Distance               | 250m (820 ft)  | 150m (492 ft)   | 150m (492 ft)   | 150m (492.13 ft)  | 150m (492 ft)  | 150m (492 ft)  |
| Video Compression              | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  |
| Max. Resolution                | 4MP (2560x1440)  | 8MP (3840x2160)   | 4MP (2560x1440)   | 4MP (2560x1440)   | 4MP (2560x1440)  | 1080P (1920x1080)  |
| Frame Rate                     | 30fps@4MP  | 30fps@8MP   | 30fps@4MP   | 30fps@4MP   | 30fps@4MP  | 60fps@1080P  |
| Multi-streaming                | 3 streams  | 3 streams   | 3 streams   | 3 streams   | 3 streams  | 3 streams  |
| Pan/Tilt                       | Pan: 0°~360° endless<br>Tilt: -20°~90°   | Pan: 0°~360° endless<br>Tilt: -15°~90°  | Pan: 0°~360° endless<br>Tilt: -15°~90°  | Pan: 0°~360° endless<br>Tilt: -15°~90°  | Pan: 0°~360° endless<br>Tilt: -15°~90°   | Pan: 0°~360° endless<br>Tilt: -15°~90°   |
| Preset Speed                   | Pan: 300°/s; Tilt: 200°/s  | Pan: 400°/s; Tilt: 300°/s   | Pan: 400°/s; Tilt: 300°/s   | Pan: 400°/s; Tilt: 300°/s   | Pan: 400°/s; Tilt: 300°/s  | Pan: 400°/s; Tilt: 300°/s  |
| Compatibility                  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   |
| Audio In/Out                   | 1/1  | 1/1   | 1/1   | 1/1   | 1/1  | 1/1  |
| Memory Slot                    | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   |
| Alarm In/Out                   | 7/2  | 2/1   | 2/1   | 2/1   | 2/1  | 2/1  |
| Ingress Protection             | IP67; IK10   | IP67; IK10  | IP67; IK10  | IP67; IK10  | IP67; IK10   | IP67; IK10   |
| Working Temperature            | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)  | -40°C~+70°C (-40°F~+158°F)  | -40°C~+70°C (-40°F~+158°F)  | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)   |
| Power                          | AC24V, PoE+(802.3at)<br>Max. 26W   | DC24V, PoE+ (802.3at)<br>Max. 20W   | DC24V, PoE+(802.3at)<br>Max. 20W  | DC24V,POE+(802.3at)<br>Max.20W  | DC24V, PoE+ (802.3at)<br>Max. 20W  | DC24V, PoE+ (802.3at)<br>Max. 20W  |
| <b>Artificial Intelligence</b> |  |   |   |   |  |  |
| Perimeter Protection           | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                 | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                    | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                  | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                    | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                   | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                   |
| SMD                            | Supported  | NA  | Supported   | Supported   | Supported  | Supported  |
| Auto Tracking                  | Supported  | Supported   | Supported   | Supported   | Supported  | Supported  |
| Smart Capture                  | Supported  | NA  | Supported   | Supported   | Supported  | Supported  |
| Face Detection                 | Supported  | NA  | Supported   | Supported   | Supported  | Supported  |



# NETWORK PTZ CAMERAS















## WizSense Series

|                                | IR PTZ Camera   |  |  | Vandal-proof PTZ Camera   |   |
|--------------------------------|---|--|--|---|---|
| Model                          | SD5A225XA-HNR   | SD59432XA-HNR  | SD59232XA-HNR  | SD50432XA-HNR   | SD50232XA-HNR   |
| Appearance                     |  <b>WizSense</b><br>H.265+ Starlight |  <b>WizSense</b><br>H.265+ Starlight+ |  <b>WizSense</b><br>H.265+ Starlight+ |  <b>WizSense</b><br>H.265+ Starlight |  <b>WizSense</b><br>H.265+ Starlight |
| Image Sensor                   | 1/2.8" STARVIS™ CMOS  | 1/2.8" STARVIS™ CMOS   | 1/2.8" STARVIS™ CMOS   | 1/2.8" STARVIS™ CMOS  | 1/2.8" STARVIS™ CMOS  |
| Lens                           | 5.4 mm~135 mm<br>(25x Optical zoom)   | 4.9 mm~156 mm<br>(32x Optical zoom)  | 4.9 mm~156 mm<br>(32x Optical zoom)  | 4.9 mm~156 mm<br>(32x Optical zoom)   | 4.9 mm~156 mm<br>(32x Optical zoom)   |
| FOV-H                          | 58.7°~3.1°  | 61.6°~2.1°   | 62.8°~2.2°   | 61.6°~2.1°  | 62.8°~2.2°  |
| Min. Illumination              | 0.005Lux@F1.6 (Color)<br>0Lux@F1.6 (IR on)  | 0.005Lux@F1.35 (Color)<br>0Lux@F1.35 (IR on)   | 0.005Lux@F1.35 (Color)<br>0Lux@F1.35 (IR on)   | 0.005Lux@F1.35 (Color)<br>0.0005Lux@F1.35 (B/W)   | 0.005Lux@F1.35 (Color)<br>0.0005Lux@F1.35 (B/W)   |
| WDR                            | 120dB   | 120dB  | 120dB  | 120dB   | 120dB   |
| Max. IR Distance               | 150m (492 ft)   | 150m (492 ft)  | 150m (492 ft)  | --  | --  |
| Video Compression              | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264   |
| Max. Resolution                | 1080P (1920x1080)   | 4MP (2560x1440)  | 1080P (1920x1080)  | 4MP (2560x1440)   | 1080P (1920x1080)   |
| Frame Rate                     | 60fps@1080P   | 30fps@4MP  | 60fps@1080P  | 30fps@4MP   | 60fps@1080P   |
| Multi-streaming                | 3 streams   | 3 streams  | 3 streams  | 3 streams   | 3 streams   |
| Pan/Tilt                       | Pan: 0°~360° endless<br>Tilt: -15°~90°  | Pan: 0°~360° endless<br>Tilt: -15°~90°   | Pan: 0°~360° endless<br>Tilt: -15°~90°   | Pan: 0°~360° endless<br>Tilt: 0°~90°  | Pan: 0°~360° endless<br>Tilt: 0°~90°  |
| Preset Speed                   | Pan: 400°/s; Tilt: 300°/s   | Pan: 400°/s; Tilt: 300°/s  | Pan: 400°/s; Tilt: 300°/s  | Pan: 500°/s; Tilt: 500°/s   | Pan: 500°/s; Tilt: 500°/s   |
| Compatibility                  | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API  |
| Audio In/Out                   | 1/1   | 1/1  | 1/1  | 1/1   | 1/1   |
| Memory Slot                    | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB  |
| Alarm In/Out                   | 2/1   | 2/1  | 2/1  | 2/1   | 2/1   |
| Ingress Protection             | IP67; IK10  | IP66   | IP66   | IP67; IK10  | IP67; IK10  |
| Working Temperature            | -40°C~+70°C (-40°F~+158°F)  | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)   | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)  |
| Power                          | DC24V, PoE+ (802.3at)<br>Max. 20W   | DC24V, PoE+ (802.3at)<br>Max. 24W  | DC24V, PoE+ (802.3at)<br>Max. 24W  | DC24V, PoE+ (802.3at)<br>Max. 16W   | DC24V, PoE+ (802.3at)<br>Max. 16W   |
| <b>Artificial Intelligence</b> |   |  |  |   |   |
| Perimeter Protection           | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                 | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                   | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                  | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing                                  |
| SMD                            | Supported   | Supported  | Supported  | Supported   | Supported   |
| Auto Tracking                  | Supported   | Supported  | Supported  | Supported   | Supported   |
| Smart Capture                  | Supported   | Supported  | Supported  | Supported   | Supported   |
| Face Detection                 | Supported   | Supported  | Supported  | Supported   | Supported   |

# NETWORK PTZ CAMERAS



## WizSense Series

NETWORK PTZ CAMERAS

|                                | In-ceiling PTZ Camera  |  | IR PTZ Camera  |  | 4G PTZ Camera  |
|--------------------------------|--|--|--|--|--|
| Model                          | SD52C432XA-HNR   | SD52C232XA-HNR   | SD49425XB-HNR  | SD49225XA-HNR  | SD49425XB-HNR-G  |
| Appearance                     |  <br> |  <br> |  <br> |  <br> |  <br> |
| Image Sensor                   | 1/2.8" STARVIS™ CMOS   | 1/2.8" STARVIS™ CMOS   | 1/2.8" STARVIS™ CMOS   | 1/2.8" STARVIS™ CMOS   | 1/2.8" STARVIS™ CMOS   |
| Lens                           | 4.9 mm~156 mm<br>(32x Optical zoom)  | 4.9 mm ~ 156 mm<br>(32x Optical zoom)  | 4.8 mm~120 mm<br>(25x Optical zoom)  | 4.8 mm~120 mm<br>(25x Optical zoom)  | 4.8 mm~120 mm<br>(25x Optical zoom)  |
| FOV-H                          | 61.6°~2.1°   | 62.8°~2.2°   | 60.0°~2.5°   | 62.8°~2.6°   | 60.0°~2.5°   |
| Min. Illumination              | 0.005Lux@F1.35 (Color)<br>0.0005Lux@F1.35 (B/W)  | 0.005Lux@F1.35 (Color)<br>0.0005Lux@F1.35 (B/W)  | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   |
| WDR                            | 120dB  | 120dB  | 120dB  | 120dB  | 120dB  |
| Max. IR Distance               | --   | /  | 100m (328.08 ft)   | 100m (328.08 ft)   | 100m (328.08 ft)   |
| Video Compression              | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  |
| Max. Resolution                | 4MP (2560x1440)  | 1080P (1920x1080)  | 4MP (2560x1440)  | 1080P (1920x1080)  | 4MP (2560x1440)  |
| Frame Rate                     | 30fps@4MP  | 60fps@1080P  | 30fps@4MP  | 30fps@1080P  | 30fps@4MP  |
| Multi-streaming                | 3 streams  | 3 streams  | 3 streams  | 3 streams  | 3 streams  |
| Pan/Tilt                       | Pan: 0°~360° endless<br>Tilt: 0°~90°   | Pan: 0°~360° endless<br>Tilt: 0°~90°   | Pan: 0°~360° endless<br>Tilt: -15°~90°   | Pan: 0°~360° endless<br>Tilt: -15°~90°   | Pan: 0°~360° endless<br>Tilt: -15°~90°   |
| Preset Speed                   | Pan: 500°/s; Tilt: 500°/s  | Pan: 500°/s; Tilt: 500°/s  | Pan: 240°/s; Tilt: 200°/s  | Pan: 240°/s; Tilt: 200°/s  | Pan: 240°/s; Tilt: 200°/s  |
| Compatibility                  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   |
| Audio In/Out                   | 1/1  | 1/1  | 1/1  | 1/1  | 1/1  |
| Memory Slot                    | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   |
| Alarm In/Out                   | 2/1  | 2/1  | 2/1  | 2/1  | 2/1  |
| Ingress Protection             | IK10   | IK10   | IP66   | IP66   | IP66   |
| Working Temperature            | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)   |
| Power                          | DC24V, PoE+ (802.3at)<br>Max. 16W  | DC24V, PoE+ (802.3at)<br>Max. 16W  | DC12V, POE+ (802.3at)<br>Max. 21W  | DC12V, POE+ (802.3at)<br>Max. 22W  | DC12V, POE+ (802.3at)<br>Max. 21W  |
| <b>Artificial Intelligence</b> |  |  |  |  |  |
| Perimeter Protection           | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing   | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing   | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing   | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing   | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing   |
| SMD                            | Supported  | Supported  | Supported  | Supported  | Supported  |
| Auto Tracking                  | Supported  | Supported  | --   | --   | --   |
| Smart Capture                  | Supported  | Supported  | Supported  | Supported  | Supported  |
| Face Detection                 | Supported  | Supported  | Supported  | Supported  | Supported  |

# NETWORK PTZ CAMERAS

## WizSense Series

|                                | Active Deterrence Camera   |  |  | Full-color Camera  | Mini IR PTZ Camera   | IR Positioning System  |
|--------------------------------|--|--|--|--|--|--|
| Model                          | SD3A200-GNP-W-PV   | SD3A200-GNP-PV   | SD3A205-GNP-PV   | SD3A400N-GNP-B-PV  | SD1A404XB-GNR  | PTZ1A225XA-HNR   |
| Appearance                     |       |       |      |     |     |     |
| Image Sensor                   | 1/2.8" 2MP CMOS  | 1/2.8" 2MP CMOS  | 1/2.8" 2MP CMOS  | 1/2.8" 4MP CMOS  | 1/2.8" STARVIS™ CMOS   | 1/2.8" STARVIS™ CMOS   |
| Lens                           | 4mm  | 4mm  | 2.7mm-13.5mm   | 4mm  | 2.8 mm~12 mm<br>(4x Optical zoom)  | 4.8 mm~120 mm<br>(25x Optical zoom)  |
| FOV-H                          | 86.8°  | 86.8°  | 101.6°~33.5°   | 86.8°  | 31.6°~96.9°  | 62.8°~2.6°   |
| Min. Illumination              | 0.002Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.002Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.002Lux/F1.6 (Color)<br>0Lux/F1.8 (IR on)   |  | 0.005Lux/F1.8 (Color)<br>0Lux/F1.8 (IR on)   | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on) 120dB                                       |
| WDR                            | DWDR   | DWDR   | DWDR   | DWDR   | 120dB  | 120dB  |
| Max. IR Distance               | 30 m (98 ft)   | 30 m (98 ft)   | 30 m (98 ft)   | 30 m (98 ft)   | 15m (49.21 ft)   | 150m (492.13ft)  |
| Video Compression              | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  |
| Max. Resolution                | 2MP (1920×1080)  | 2MP (1920×1080)  | 2MP (1920×1080)  | 4MP (2560×1440)  | 4MP (2560×1440)  | 1080P (1920×1080)  |
| Frame Rate                     | 30fps@1080P  | 30fps@1080P  | 30fps@1080P  | 30fps@4MP  | 30fps@4MP  | 30fps@1080P  |
| Multi-streaming                | 3 streams  | 3 streams  | 3 streams  | 3 streams  | 3 streams  | 3 streams  |
| Pan/Tilt                       | "Pan: 0° ~ 355°<br>Tilt: -15° ~ 90°"   | Pan: 0° ~ 355°<br>Tilt: -15° ~ 90°   | Pan: 0° ~ 355°<br>Tilt: -15° ~ 90°   | Pan: 0° ~ 355°<br>Tilt: -15° ~ 90°   | Pan: 0°~355°<br>Tilt: 5°~90°   | Pan: 0°~360° endless Tilt: -90°~90°<br>(Effective angle: -51°~+90°)                    |
| Preset Speed                   | Pan: 81°/s; Tilt: 43°/s  | Pan: 81°/s; Tilt: 43°/s  | Pan: 81°/s; Tilt: 43°/s  | Pan: 81°/s; Tilt: 43°/s  | Pan: 80°/s; Tilt: 40°/s  | Pan: 180° /s; Tilt: 120° /s  |
| Compatibility                  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF profile S & G & T, API   |
| Audio In/Out                   | 1/1  | 1/1  | 1/1  | 1/1  | 1/1  | 1/1  |
| Memory Slot                    | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   |
| Alarm In/Out                   | --   | --   | --   | --   | --   | 2/1  |
| Ingress Protection             | IP66   | IP66   | IP66   | IP66   | IP66, IK08   | IP67   |
| Working Temperature            | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -40°C~+70°C (-40°F~+158°F)   |
| Power                          | DC12V, Max. 8.5W   | DC12V, PoE (802.3af), Max. 8.5W  | DC12V, PoE (802.3af), Max. 8.5W  | DC12V, PoE (802.3af), Max. 8.5W  | DC12V, POE (802.3af)<br>Max. 8.5W  | AC12V, POE+ (802.3at)<br>Max. 23W  |
| <b>Artificial Intelligence</b> |  |  |  |  |  |  |
| Perimeter Protection           | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing | Tripwire, Intrusion (Human & Vehicle Classification), Object Abandoned, Object Missing |
| SMD                            | Supported  | Supported  | Supported  | Supported  | Supported  | Supported  |
| Auto Tracking                  | --   | --   | --   | --   | --   | Supported  |
| Smart Capture                  | --   | --   | --   | --   | Supported  | Supported  |
| Face Detection                 | --   | --   | --   | --   | Supported  | Supported  |



# Pro Series PTZ Camera

The Pro Series PTZ is designed to meet high image quality and low-light surveillance requirements with the help of Starlight technology. Rich housing and model selections are available to meet diverse application needs.



## Rich Choices

Wide range of housings and models to suit all requirements.



## Optimized Image

High quality images using Starlight technology.



## PFA

Improves focusing performance to a new level.



## Powerful Protection

Protection IP67 / IK10 ratings ensure cameras can withstand tough conditions.

# NETWORK PTZ CAMERAS






## Pro Series

|                     | IR PTZ Camera  |  |   | PTZ Camera   |  |  |
|---------------------|--|--|---|--|--|--|
| Model               | SD6CE245U-HNI  | SD6CE230U-HNI  | SD6CE225U-HNI   | SD60430U-HNI   | SD60230U-HNI   | SD60225U-HNI   |
| Appearance          |  H.265+ Starlight |  H.265+ Starlight |  H.265+ Starlight |  H.265+ |  H.265+ Starlight |  H.265+ Starlight |
| Image Sensor        | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS  | 1/3" 4MP CMOS  | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   |
| Lens                | 3.95~177.7mm<br>(45x Optical zoom)   | 4.5~135mm<br>(30x Optical zoom)  | 4.8~120mm<br>(25x Optical zoom)   | 4.5~135mm<br>(30x Optical zoom)  | 4.5~135mm<br>(30x Optical zoom)  | 4.8~120mm<br>(25x Optical zoom)  |
| FOV-H               | 70.3~1.8°  | 67.8~2.4°  | 62.8~2.6°   | 60~2.2°  | 67.8~2.4°  | 62.8~2.6°  |
| Min. Illumination   | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)  | 0.05Lux/F1.6 (Color)<br>0.005Lux/F1.6 (B/W)  | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  |
| WDR                 | 120dB  | 120dB  | 120dB   | 120dB  | 120dB  | 120dB  |
| Max. IR Distance    | 250m (820 ft)  | 250m (820 ft)  | 250m (820 ft)   | --   | --   | --   |
| Video Compression   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  |
| Max. Resolution     | 1080P (1920x1080)  | 1080P (1920x1080)  | 1080P (1920x1080)   | 4MP (2592x1520)  | 1080P (1920x1080)  | 1080P (1920x1080)  |
| Frame Rate          | 60fps@1080P  | 60fps@1080P  | 60fps@1080P   | 30fps@4MP/3MP<br>60fps@1080P   | 60fps@1080P  | 60fps@1080P  |
| Multi-streaming     | 3 streams  | 3 streams  | 3 streams   | 3 streams  | 3 streams  | 3 streams  |
| Pan/Tilt            | Pan: 0°~360° endless; Tilt: -20°~90°   | Pan: 0°~360° endless; Tilt: -20°~90°   | Pan: 0°~360° endless; Tilt: -20°~90°  | Pan: 0°~360° endless; Tilt: -20°~90°   | Pan: 0°~360° endless; Tilt: -20°~90°   | Pan: 0°~360° endless; Tilt: -20°~90°   |
| Preset Speed        | Pan: 300°/s; Tilt: 200°/s  | Pan: 300°/s; Tilt: 200°/s  | Pan: 300°/s; Tilt: 200°/s   | Pan: 600°/s; Tilt: 500°/s  | Pan: 600°/s; Tilt: 500°/s  | Pan: 600°/s; Tilt: 500°/s  |
| Intelligent Video   | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                                | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                                | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                                 | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                        | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                                  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                                  |
| Compatibility       | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   |
| Audio In/Out        | 1/1  | 1/1  | 1/1   | 1/1  | 1/1  | 1/1  |
| Memory Slot         | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   |
| Alarm In/Out        | 7/2  | 7/2  | 7/2   | 7/2  | 7/2  | 7/2  |
| Ingress Protection  | IP67; IK10   | IP67; IK10   | IP67; IK10  | IP67; IK10   | IP67; IK10   | IP67; IK10   |
| Working Temperature | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)  | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)   |
| Power               | AC24V, PoE+ (802.3at)<br>Max. 25W  | AC24V, PoE+ (802.3at)<br>Max. 25W  | AC24V, PoE+ (802.3at)<br>Max. 25W   | AC24V, PoE+ (802.3at)<br>Max. 20W  | AC24V, PoE+ (802.3at)<br>Max. 20W  | AC24V, PoE+ (802.3at)<br>Max. 20W  |

# NETWORK PTZ CAMERAS






## Pro Series

NETWORK PTZ CAMERAS

|                     | IR PTZ Camera   |  |  | Vandal-proof PTZ Camera   |  |
|---------------------|---|--|--|---|--|
| Model               | SD59430U-HNI  | SD59230U-HNI   | SD59225U-HNI   | SD50430U-HNI  | SD50230U-HNI   |
| Appearance          |  <span>H.265+</span> |  <span>H.265+</span> <span>Starlight</span> |  <span>H.265+</span> <span>Starlight</span> |  <span>H.265+</span> |  <span>H.265+</span> <span>Starlight</span> |
| Image Sensor        | 1/3" 4MP CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/3" 4MP CMOS   | 1/2.8" 2MP STARVIS™ CMOS   |
| Lens                | 4.5~135mm<br>(30x Optical zoom)   | 4.5~135mm<br>(30x Optical zoom)  | 4.8~120mm<br>(25x Optical zoom)  | 4.5~135mm<br>(30x Optical zoom)   | 4.5~135mm<br>(30x Optical zoom)  |
| FOV-H               | 60°~2.2°  | 67.8°~2.4°   | 62.8°~2.6°   | 60°~2.2°  | 67.8°~2.4°   |
| Min. Illumination   | 0.05Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.05Lux/F1.6 (Color)<br>0.005Lux/F1.6 (B/W)   | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  |
| WDR                 | 120dB   | 120dB  | 120dB  | 120dB   | 120dB  |
| Max. IR Distance    | 150m (492 ft)   | 150m (492 ft)  | 150m (492 ft)  | --  | --   |
| Video Compression   | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  |
| Max. Resolution     | 4MP (2592x1520)   | 1080P (1920x1080)  | 1080P (1920x1080)  | 4MP (2592x1520)   | 1080P (1920x1080)  |
| Frame Rate          | 30fps@4MP/3MP<br>60fps@1080P  | 60fps@1080P  | 60fps@1080P  | 30fps@4MP/3MP<br>60fps@1080P  | 60fps@1080P  |
| Multi-streaming     | 3 streams   | 3 streams  | 3 streams  | 3 streams   | 3 streams  |
| Pan/Tilt            | Pan: 0°~360° endless<br>Tilt: -15°~90°  | Pan: 0°~360° endless<br>Tilt: -15°~90°   | Pan: 0°~360° endless<br>Tilt: -15°~90°   | Pan: 0°~360° endless<br>Tilt: 0°~90°  | Pan: 0°~360° endless<br>Tilt: 0°~90°   |
| Preset Speed        | Pan: 400°/s; Tilt: 300°/s   | Pan: 400°/s; Tilt: 300°/s  | Pan: 400°/s; Tilt: 300°/s  | Pan: 500°/s; Tilt: 500°/s   | Pan: 500°/s; Tilt: 500°/s  |
| Intelligent Video   | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                                   | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                                     | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  |
| Compatibility       | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API   |
| Audio In/Out        | 1/1   | 1/1  | 1/1  | 1/1   | 1/1  |
| Memory Slot         | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   |
| Alarm In/Out        | 2/1   | 2/1  | 2/1  | 2/1   | 2/1  |
| Ingress Protection  | IP66  | IP66   | IP66   | IP66; IK10  | IP66; IK10   |
| Working Temperature | -40°C~-70°C (-40°F~+158°F)  | -40°C~-70°C (-40°F~+158°F)   | -40°C~-70°C (-40°F~+158°F)   | -40°C~+60°C (-40°F~+140°F)  | -40°C~+60°C (-40°F~+140°F)   |
| Power               | DC24V, PoE+ (802.3at)<br>Max. 23W   | DC24V, PoE+ (802.3at)<br>Max. 23W  | DC24V, PoE+ (802.3at)<br>Max. 23W  | DC24V, PoE+ (802.3at)<br>Max. 23W   | DC24V, PoE+ (802.3at)<br>Max. 23W  |

# NETWORK PTZ CAMERAS

## Pro Series

|                     | Vandal-proof PTZ Camera  | In-ceiling PTZ Camera   |  |  | Zoom Camera  |
|---------------------|--|---|--|--|--|
| Model               | SD50225U-HNI   | SD52C430U-HNI   | SD52C230U-HNI  | SD52C225U-HNI  | SDZ2030S-N   |
| Appearance          |  <span>H.265+</span> <span>Starlight</span> |  <span>H.265+</span> |  <span>H.265+</span> <span>Starlight</span> |  <span>H.265+</span> <span>Starlight</span> |  <span>H.265+</span> <span>Starlight</span> |
| Image Sensor        | 1/2.8" 2MP STARVIS™ CMOS   | 1/3" 4MP CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   |
| Lens                | 4.8~120mm<br>(25x Optical zoom)  | 4.5~135mm<br>(30x Optical zoom)   | 4.5~135mm<br>(30x Optical zoom)  | 4.8~120mm<br>(25x Optical zoom)  | 4.5~135mm<br>(30x Optical zoom)  |
| FOV-H               | 62.8°~2.6°   | 60°~2.2°  | 67.8°~2.4°   | 62.8°~2.6°   | 67.8°~2.4°   |
| Min. Illumination   | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  | 0.05Lux/F1.6 (Color)<br>0.005Lux/F1.6 (B/W)   | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  |
| WDR                 | 120dB  | 120dB   | 120dB  | 120dB  | 120dB  |
| Max. IR Distance    | --   | --  | --   | --   | --   |
| Video Compression   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  |
| Max. Resolution     | 1080P (1920x1080)  | 4MP (2592x1520)   | 1080P (1920x1080)  | 1080P (1920x1080)  | 1080P (1920x1080)  |
| Frame Rate          | 60fps@1080P  | 30fps@4MP/3MP<br>60fps@1080P  | 60fps@1080P  | 60fps@1080P  | 60fps@1080P  |
| Multi-streaming     | 3 streams  | 3 streams   | 3 streams  | 3 streams  | 3 streams  |
| Pan/Tilt            | Pan: 0°~360° endless<br>Tilt: 0°~90°   | Pan: 0°~360° endless<br>Tilt: 0°~90°  | Pan: 0°~360° endless<br>Tilt: 0°~90°   | Pan: 0°~360° endless<br>Tilt: 0°~90°   | --   |
| Preset Speed        | Pan: 500°/s; Tilt: 500°/s  | Pan: 500°/s; Tilt: 500°/s   | Pan: 500°/s; Tilt: 500°/s  | Pan: 500°/s; Tilt: 500°/s  | --   |
| Intelligent Video   | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                                   | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  |
| Compatibility       | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   |
| Audio In/Out        | 1/1  | 1/1   | 1/1  | 1/1  | 1/1  |
| Memory Slot         | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   |
| Alarm In/Out        | 2/1  | 2/1   | 2/1  | 2/1  | 2/1  |
| Ingress Protection  | IP66; IK10   | IK10  | IK10   | IK10   | --   |
| Working Temperature | -40°C~-60°C (-40°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)  | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -40°C~+70°C (-40°F~+158°F)   |
| Power               | DC24V, PoE+ (802.3at)<br>Max. 23W  | DC24V, PoE+ (802.3at)<br>Max. 13W   | DC24V, PoE+ (802.3at)<br>Max. 13W  | DC24V, PoE+ (802.3at)<br>Max. 13W  | DC12V, PoE (802.3af)<br>Max. 10W   |

# Lite Series PTZ Camera

The Lite Series PTZ offers a cost/performance solution suitable for a wide range of applications. Its compact design based on Dahua quality standards and assurance enables the products in the entire series to meet customer's requirements.



## Mini IR PTZ

Pan, tilt, zoom and IR functions in compact housing.



## Advanced Intelligence

Intelligent IVS and Face Detection ensure efficient surveillance.



## Powerful Zoom

It can cover large areas with up to 25x optical zoom capability










## Cost-effective

Performance and quality are combined at an affordable price.



# NETWORK PTZ CAMERAS

## Lite Series

|                     | IR PTZ Camera   |  |   | Vandal-proof PTZ Camera  |  | In-ceiling PTZ Camera  |
|---------------------|---|--|---|--|--|--|
| Model               | SD49412T-HN   | SD49225T-HN  | DH-SD49216UE-HN   | SD40212T-HN (-S2)  | SD42212T-HN (-S2)  | SD42C212T-HN (-S2)   |
| Appearance          |  <span>H.265+</span> |  <span>H.265+</span> <span>Starlight</span> |  <span>H.265+</span> <span>Starlight</span> |  <span>H.265+</span> <span>Starlight</span> |  <span>H.265+</span> <span>Starlight</span>  |  <span>H.265+</span> <span>Starlight</span> |
| Image Sensor        | 1/3" 4MP CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   |
| Lens                | 5.3~64mm<br>(12x Optical zoom)  | 4.8~120mm<br>(25x Optical zoom)  | 5~80mm<br>(16x Optical zoom)  | 5.3~64mm<br>(12x Optical zoom)   | 5.3~64mm<br>(12x Optical zoom)   | 5.3~64mm<br>(12x Optical zoom)   |
| FOV-H               | 58.2°~4.8°  | 62.8°~2.6°   | 57.7°~4.5°  | 58.2°~4.8°   | 58.2°~4.8°   | 58.2°~4.8°   |
| Min. Illumination   | 0.05Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.005Lux/F1.6 (Color)<br>0Lux/F1.6 (IR on)   | 0.005Lux/F1.5 (Color)<br>0Lux/F1.5 (IR on)  | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  | 0.005Lux/F1.6 (Color)<br>0.0005Lux/F1.6 (B/W)  |
| WDR                 | 120dB   | 120dB  | DWDR  | 120dB  | 120dB  | 120dB  |
| Max. IR Distance    | 100m (328 ft)   | 100m (328 ft)  | 100m (328 ft)   | --   | --   | --   |
| Video Compression   | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265H.264+/H.264   |
| Max. Resolution     | 4MP (2592x1520)   | 1080P (1920x1080)  | 1080P (1920x1080)   | 1080P (1920x1080)  | 1080P (1920x1080)  | 1080P (1920x1080)  |
| Frame Rate          | 30fps@4MP/3MP   | 30fps@1080P  | 30fps@1080P   | 30fp@1080P   | 30fp@1080P   | 30fp@1080P   |
| Multi-streaming     | 3 streams   | 3 streams  | 3 streams   | 3 streams  | 3 streams  | 3 streams  |
| Pan/Tilt            | Pan: 0°~360° endless<br>Tilt: -15°~90°  | Pan: 0°~360° endless<br>Tilt: -15°~90°   | Pan: 0°~360° endless<br>Tilt: -15°~90°  | Pan: 0°~360° endless<br>Tilt: -2°~90°  | Pan: 0°~360° endless<br>Tilt: -2°~90°  | Pan: 0°~360° endless<br>Tilt: -2°~90°  |
| Preset Speed        | Pan: 240°/s, Tilt: 200°/s   | Pan: 240°/s, Tilt: 200°/s  | Pan: 240°/s, Tilt: 200°/s   | Pan: 300°/s, Tilt: 200°/s  | Pan: 300°/s; Tilt: 200°/s  | Pan: 300°/s; Tilt: 200°/s  |
| Intelligent Video   | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection                                   | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection   | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  |
| Compatibility       | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API  | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   |
| Audio In/Out        | 1/1   | 1/1  | 1/1   | 1/1  | 1/1  | 1/1  |
| Memory Slot         | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB  | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   |
| Alarm In/Out        | 2/1   | 2/1  | 2/1   | 2/1  | 2/1  | 2/1  |
| Ingress Protection  | IP66  | IP66   | IP66  | IP66; IK10   | IP66; IK10   | IK10   |
| Working Temperature | -40°C~+70°C (-40°F~+158°F)  | -40°C~+70°C (-40°F~+158°F)   | -40°C~+70°C (-40°F~+158°F)  | -40°C~+60°C (-40°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   |
| Power               | DC12V, PoE+ (802.3at)<br>Max. 22W   | DC12V, PoE+ (802.3at)<br>Max. 22W  | DC12V, PoE+ (802.3at)<br>Max. 17W   | AC24V, PoE+ (802.3at)<br>Max. 22W  | AC24V, PoE+ (802.3at)<br>Max. 12W  | AC24V, PoE+ (802.3at)<br>Max. 12W  |

# NETWORK PTZ CAMERAS

## Lite Series

|                     | Mini IR PTZ Camera   | Mini PTZ Camera  |  | Mini IR PTZ Camera   |  |  |  |
|---------------------|--|--|--|--|--|--|--|
| Model               | SD29204UE-GN   | SD22404T-GN  | SD22204UE-GN   | SD1A203T-GN  | SD1A203T-GN-W  | PTZ1C203UE-GN  | PTZ1C203UE-GN-W  |
| Appearance          | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| Image Sensor        | 1/2.8" 2MP STARVIS™ CMOS   | 1/3" 4MP CMOS  | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   | 1/2.8" 2MP STARVIS™ CMOS   |
| Lens                | 2.7~11mm<br>(4x Optical zoom)  | 2.7~11mm<br>(4x Optical zoom)  | 2.7~11mm<br>(4x Optical zoom)  | 2.7~8.1mm<br>(3x optical zoom)   | 2.7~8.1mm<br>(3x optical zoom)   | 2.7~8.1mm<br>(3x Optical zoom)   | 2.7~8.1mm<br>(3x Optical zoom)   |
| FOV-H               | 112.5°~30°   | 112.5°~30°   | 112.5°~30°   | 105.6°~35.2°   | 105.6°~35.2°   | 105.6°~35.2°   | 105.6°~35.2°   |
| Min. Illumination   | 0.005Lux/F1.6(Color)<br>0Lux/F1.6(IR on)   | 0.05Lux/F1.6(Color)<br>0.005Lux/F1.6(B/W)  | 0.005Lux/F1.6(Color)<br>0.0005Lux/F1.6(B/W)  | 0.005Lux/F1.8(Color)<br>0Lux/F1.8 (IR on)  | 0.005Lux/F1.8(Color)<br>0Lux/F1.8(IR on)   | 0.005Lux/F1.6(Color)<br>0Lux@F1.6(IR on)   | 0.005Lux/F1.6(Color)<br>0Lux@F1.6(IR on)   |
| WDR                 | 120dB  | 120dB  | 120dB  | 120dB  | 120dB  | 120dB  | 120dB  |
| Max. IR Distance    | 30m (98 ft)  | --   | --   | 15m (49 ft)  | 15m (49 ft)  | 20m (65.6 ft)  | 20m (65.6 ft)  |
| Video Compression   | H.265+/H.265<br>H.264+/H.264   | H.265/H.264  | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265/H.264+/H.264  |
| Max. Resolution     | 1080P (1920x1080)  | 4MP (2592x1520)  | 1080P (1920x1080)  | 1080P (1920x1080)  | 1080P (1920x1080)  | 1080P (1920x1080)  | 1080P (1920x1080)  |
| Frame Rate          | 30fps@1080P  | 30fps@4MP/3MP  | 30fps@1080P  | 30fps@1080P  | 30fps@1080P  | 30fps@1080P<br>60fps@720P  | 30fps@1080P<br>60fps@720P  |
| Multi-streaming     | 3 streams  | 3 streams  | 3 streams  | 3 streams  | 3 streams  | 3 streams  | 3 streams  |
| Pan/Tilt            | Pan: 0°~360° limited<br>Tilt: 0°~90°   | Pan: 0°~355°<br>Tilt: 0°~90°   | Pan: 0°~355°<br>Tilt: 0°~90°   | Pan: 0°~355°<br>Tilt: 5°~90°   | Pan: 0°~355° , Tilt: 5°~90°  | Pan: 0°~180°<br>Tilt: -5°~55°  | Pan: 0°~180° , Tilt: -5°~55°   |
| Preset Speed        | Pan: 100°/s; Tilt: 60°/s   | Pan: 100°/s; Tilt: 60°/s   | Pan: 100°/s; Tilt: 60°/s   | Pan: 80° /s; Tilt: 40° /s  | Pan: 80° /s; Tilt: 40° /s  | --   | --   |
| Intelligent Video   | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  | Tripwire, Intrusion,<br>Object Abandoned/Missing,<br>Face Detection  |
| Compatibility       | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   | ONVIF Profile S & G & T, API   |
| Audio In/Out        | Built-in Mic   | --   | --   | 1 (Mic in/Line in)/1   | 1 (Mic in/Line in)/1   | 1 (Mic in/Line in)/1   | 1 (Mic in/Line in)/1   |
| Memory Slot         | Micro SD, Max. 128GB   | Micro SD, Max. 256GB   | Micro SD, Max. 128GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   | Micro SD, Max. 256GB   |
| Alarm In/Out        | --   | --   | --   | --   | --   | --   | --   |
| Ingress Protection  | --   | IP66; IK10   | IP66; IK10   | IP66; IK10   | IP66; IK10   | IP66   | IP66   |
| Working Temperature | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C (-22°F~+140°F)   | -30°C~+60°C, (-22°F~+140°F)  |
| Power               | DC12V, PoE (802.3af)<br>Max. 13W   | DC12V, PoE (802.3af)<br>Max. 10W   | DC12V, PoE (802.3af)<br>Max. 10W   | DC12V, PoE (802.3af)<br>Max. 10.5W   | DC12V, Max. 10.5W  | DC12V, PoE(802.3af)<br>Max. 11W  | DC12V, Max. 11W  |

# NETWORK VIDEO RECORDERS





# WizSense Series NVR

WizSense NVR are entry-level AI products with reasonable prices and easy configuration, allowing them to meet the needs of ordinary customers. It is an ideal choice for SMB solution. Featuring SMD Plus, Perimeter Protection and Face Recognition, this series provides potential risk prevention and real-time alarm.



## SMD PLUS

With intelligent algorithm, the Dahua Smart Motion Detection technology categorizes targets that trigger the detection alarm, and filters alarms caused by non-target objects, realizing an effective and accurate alarm.



## Perimeter Protection

Supports people and vehicle classification, which significantly improves accuracy, reduces false alarms and decreases pixel count requirements for object detection.



## Face Recognition

Supports recording of face image metadata and real-time crosschecking with incredible accuracy to locate the face image that matches the target's features.



## Rich Features

Offers AI by camera features including Perimeter Protection, Face Detection, Heat Map, and People Counting.

# NETWORK VIDEO RECORDERS

## WizSense Series



### WizSense Series

| Model                                    | NVR4832-I   | NVR4416-16P-I   | NVR4432-I   | NVR4216-16P-I   |
|--|---|---|---|---|
| Appearance                               |    |   |    |    |
| Processor                                | Multi-core embedded processor   | Multi-core embedded processor   | Multi-core embedded processor   | Multi-core embedded processor   |
| Video Compression                        | H.265+/H.264+   | H.265+/H.264+   | H.265+/H.264+   | H.265+/H.264+   |
| IP Video Inputs                          | 32 channel  | 16 channel  | 32 channel  | 16 channel  |
| Max Input/Record                         | 200Mbps/200Mbps   | 200Mbps/200Mbps   | 200Mbps/200Mbps   | 200Mbps/200Mbps   |
| Max Decoding                             | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   |
| Display                                  | 1HDMI, 1VGA   | 1HDMI, 1VGA   | 1HDMI, 1VGA   | 1HDMI, 1VGA   |
| Max HDD                                  | 8x8TB   | 4x8TB   | 4x8TB   | 2x8TB   |
| RAID                                     | --  | --  | --  | --  |
| eSATA/Mini SAS                           | --  | --  | --  | --  |
| Audio In/Out                             | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  |
| Alarm In/Out                             | 16/4  | 16/4  | 16/4  | 4/2   |
| Ethernet                                 | 2 Gigabit Ports   | 1 Gigabit Port  | 2 Gigabit Ports   | 1 Gigabit Port  |
| PoE                                      | --  | 16 Ports (IEEE802.3at/af)<br>1-8 PoE ports support ePoE&EoC<br>Max 150W   | --  | 16 Ports (IEEE802.3at/af)<br>1-8 PoE ports support ePoE&EoC<br>Max 130W   |
| USB                                      | 1 USB3.0, 2 USB2.0  | 1 USB3.0, 1 USB2.0  | 1 USB3.0, 1 USB2.0  | 1 USB3.0, 1 USB2.0  |
| Power                                    | AC100V ~ 240V<br><7.4W (Without HDD)  | AC100V ~ 240V<br><8.2W (Without HDD)  | AC100V ~ 240V<br><7.0W (Without HDD)  | AC100V ~ 240V<br><6.1W (Without HDD)  |
| Star Features                            | P2P   | ePoE&EoC, Plug & Play, P2P  | P2P   | ePoE&EoC, Plug & Play, P2P  |
| <b>Artificial Intelligence by Device</b> |   |   |   |   |
| Perimeter Protection                     | Up to 4 channel perimeter protection  | Up to 4 channel perimeter protection  | Up to 4 channel perimeter protection  | Up to 4 channel perimeter protection  |
| Face Recognition                         | Up to 8 channels face recognition with FD camera ;<br>Up to 2 channels face recognition with normal camera;<br>10 face databases with up to 20,000 face images in total | Up to 8 channels face recognition with FD camera ;<br>Up to 2 channels face recognition with normal camera;<br>10 face databases with up to 20,000 face images in total | Up to 8 channels face recognition with FD camera ;<br>Up to 2 channels face recognition with normal camera;<br>10 face databases with up to 20,000 face images in total | Up to 8 channels face recognition with FD camera ;<br>Up to 2 channels face recognition with normal camera;<br>10 face databases with up to 20,000 face images in total |
| SMD Plus                                 | Up to 8 channel SMD Plus  | Up to 8 channel SMD Plus  | Up to 8 channel SMD Plus  | Up to 8 channel SMD Plus  |
| Image search                             | Search by face images   | Search by face images   | Search by face images   | Search by face images   |
| <b>Artificial Intelligence by Camera</b> |   |   |   |   |
| SMD Plus                                 | Supported   | Supported   | Supported   | Supported   |
| Perimeter Protection                     | Supported   | Supported   | Supported   | Supported   |
| Face Recognition                         | Supported   | Supported   | Supported   | Supported   |
| People Counting                          | Supported   | Supported   | Supported   | Supported   |
| Heat Map                                 | Supported   | Supported   | Supported   | Supported   |
| ANPR                                     | Supported   | Supported   | Supported   | Supported   |

# NETWORK VIDEO RECORDERS

## WizSense Series





### WizSense Series

| Model                                    | NVR4216-I   | NVR4208-8P-I  | NVR2216-16P-I  | NVR2216-I  |
|--|---|---|--|--|
| Appearance                               |    |   |   |   |
| Processor                                | Multi-core embedded processor   | Multi-core embedded processor   | Multi-core embedded processor  | Multi-core embedded processor  |
| Video Compression                        | H.265+/H.264+   | H.265+/H.264+   | H.265+/H.264+  | H.265+/H.264+  |
| IP Video Inputs                          | 16 channel  | 8 channel   | 16 channel   | 16 channel   |
| Max Input/Record                         | 200Mbps/200Mbps   | 200Mbps/200Mbps   | 200Mbps/200Mbps  | 200Mbps/200Mbps  |
| Max Decoding                             | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  |
| Display                                  | 1HDMI, 1VGA   | 1HDMI, 1VGA   | 1HDMI, 1VGA  | 1HDMI, 1VGA  |
| Max HDD                                  | 2x8TB   | 2x8TB   | 2x8TB  | 2x8TB  |
| RAID                                     | --  | --  | --   | --   |
| eSATA/Mini SAS                           | --  | --  | --   | --   |
| Audio In/Out                             | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way   | 1/1, 2-way   |
| Alarm In/Out                             | 4/2   | 4/2   | 4/2  | --   |
| Ethernet                                 | 1 Gigabit Port  | 1 Gigabit Port  | 1 Gigabit Port   | 1 Gigabit Port   |
| PoE                                      | --  | 8 Ports (IEEE802.3at/af)<br>1-8 PoE ports support ePoE&EoC<br>Max 130W  | 16 Ports (IEEE802.3at/af)<br>Max 130W  | --   |
| USB                                      | 1 USB3.0, 1 USB2.0  | 1 USB3.0, 1 USB2.0  | 2 USB2.0   | 2 USB2.0   |
| Power                                    | DC12V/4A<br><2.9W (Without HDD)   | AC100V ~ 240V<br><6.0W (Without HDD)  | AC100V ~ 240V<br>≤8.0W (Without HDD)   | DC12V/4A<br>≤7.0W (without HDD)  |
| Star Features                            | P2P   | ePoE&EoC, Plug & Play, P2P  | Plug & Play, P2P   | P2P  |
| <b>Artificial Intelligence by Device</b> |   |   |  |  |
| Perimeter Protection                     | Up to 4 channel perimeter protection  | Up to 4 channel perimeter protection  | Up to 2 channel perimeter protection   | Up to 2 channel perimeter protection   |
| Face Recognition                         | Up to 8 channels face recognition with FD camera ;<br>Up to 2 channels face recognition with normal camera;<br>10 face databases with up to 20,000 face images in total | Up to 8 channels face recognition with FD camera ;<br>Up to 2 channels face recognition with normal camera;<br>10 face databases with up to 20,000 face images in total | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total |
| SMD Plus                                 | Up to 8 channel SMD Plus  | Up to 8 channel SMD Plus  | Up to 4 channel SMD Plus   | Up to 4 channel SMD Plus   |
| Image search                             | Search by face images   | Search by face images   | Search by face images  | Search by face images  |
| <b>Artificial Intelligence by Camera</b> |   |   |  |  |
| SMD Plus                                 | Supported   | Supported   | Supported  | Supported  |
| Perimeter Protection                     | Supported   | Supported   | Supported  | Supported  |
| Face Recognition                         | Supported   | Supported   | Supported  | Supported  |
| People Counting                          | Supported   | Supported   | --   | --   |
| Heat Map                                 | Supported   | Supported   | --   | --   |
| ANPR                                     | Supported   | Supported   | --   | --   |

# NETWORK VIDEO RECORDERS

## WizSense Series

### WizSense Series

| Model                                    | NVR2208-8P-I   | NVR2208-I  | NVR2204-P-I  | NVR2204-I  |
|--|--|--|--|--|
| Appearance                               |   |    |   |   |
| Processor                                | Multi-core embedded processor  | Multi-core embedded processor  | Multi-core embedded processor  | Multi-core embedded processor  |
| Video Compression                        | H.265+/H.264+  | H.265+/H.264+  | H.265+/H.264+  | H.265+/H.264+  |
| IP Video Inputs                          | 8 channel  | 8 channel  | 4 channel  | 4 channel  |
| Max Input/Record                         | 200Mbps/200Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  |
| Max Decoding                             | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  |
| Display                                  | 1HDMI, 1VGA  | 1HDMI, 1VGA  | 1HDMI, 1VGA  | 1HDMI, 1VGA  |
| Max HDD                                  | 2x8TB  | 2x8TB  | 2x8TB  | 2x8TB  |
| RAID                                     | --   | --   | --   | --   |
| eSATA/Mini SAS                           | --   | --   | --   | --   |
| Audio In/Out                             | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   |
| Alarm In/Out                             | --   | --   | --   | --   |
| Ethernet                                 | 1 Gigabit Port   | 1x100M Port  | 1x100M Port  | 1x100M Port  |
| PoE                                      | 8 Ports (IEEE802.3at/af)<br>Max 80W  | --   | 4 Ports (IEEE802.3at/af)<br>Max 60W  | --   |
| USB                                      | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   |
| Power                                    | DC54V/2.22A<br>≤7.2W (without HDD)   | DC12V/4A<br>≤6.3W (without HDD)  | DC53V/1.8A<br>≤6.7W (Without HDD)  | DC12V/4A<br>≤5.7W (without HDD)  |
| Star Features                            | Plug & Play, P2P   | P2P  | Plug & Play, P2P   | P2P  |
| <b>Artificial Intelligence by Device</b> |  |  |  |  |
| Perimeter Protection                     | Up to 2 channel perimeter protection   | Up to 2 channel perimeter protection   | Up to 2 channel perimeter protection   | Up to 2 channel perimeter protection   |
| Face Recognition                         | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total |
| SMD Plus                                 | Up to 4 channel SMD Plus   | Up to 4 channel SMD Plus   | Up to 4 channel SMD Plus   | Up to 4 channel SMD Plus   |
| Image search                             | Search by face images  | Search by face images  | Search by face images  | Search by face images  |
| <b>Artificial Intelligence by Camera</b> |  |  |  |  |
| SMD Plus                                 | Supported  | Supported  | Supported  | Supported  |
| Perimeter Protection                     | Supported  | Supported  | Supported  | Supported  |
| Face Recognition                         | Supported  | Supported  | Supported  | Supported  |
| People Counting                          | --   | --   | --   | --   |
| Heat Map                                 | --   | --   | --   | --   |
| ANPR                                     | --   | --   | --   | --   |

# NETWORK VIDEO RECORDERS

## WizSense Series

### WizSense Series

| Model                                    | NVR2116HS-I   | NVR2108HS-8P-I  | NVR2108HS-I   | NVR2104HS-P-I   | NVR2104HS-I   |
|--|---|---|---|---|---|
| Appearance                               |    |   |    |    |    |
| Processor                                | Multi-core embedded processor   | Multi-core embedded processor   | Multi-core embedded processor   | Multi-core embedded processor   | Multi-core embedded processor   |
| Video Compression                        | H.265+/H.264+   | H.265+/H.264+   | H.265+/H.264+   | H.265+/H.264+   | H.265+/H.264+   |
| IP Video Inputs                          | 16 channel  | 8 channel   | 8 channel   | 4 channel   | 4 channel   |
| Max Input/Record                         | 200Mbps/200Mbps   | 200Mbps/200Mbps   | 80Mbps/80Mbps   | 80Mbps/80Mbps   | 80Mbps/80Mbps   |
| Max Decoding                             | 1ch@8MP/4ch@1080P   | 1ch@8MP/4ch@1080P   | 1ch@8MP/4ch@1080P   | 1ch@8MP/4ch@1080P   | 1ch@8MP/4ch@1080P   |
| Display                                  | 1HDMI, 1VGA   | 1HDMI, 1VGA   | 1HDMI, 1VGA   | 1HDMI, 1VGA   | 1HDMI, 1VGA   |
| Max HDD                                  | 1x8TB   | 1x8TB   | 1x8TB   | 1x8TB   | 1x8TB   |
| RAID                                     | --  | --  | --  | --  | --  |
| eSATA/Mini SAS                           | --  | --  | --  | --  | --  |
| Audio In/Out                             | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  |
| Alarm In/Out                             | --  | --  | --  | --  | --  |
| Ethernet                                 | 1 Gigabit Port  | 1 Gigabit Port  | 1x100M Port   | 1x100M Port   | 1x100M Port   |
| PoE                                      | --  | 8 Ports (IEEE802.3at/af)<br>Max 72W   | --  | 4 Ports (IEEE802.3at/af)<br>Max 38W   | --  |
| USB                                      | 2 USB2.0  | 2 USB2.0  | 2 USB2.0  | 2 USB2.0  | 2 USB2.0  |
| Power                                    | DC12V/1.5A<br>≤6.5W (without HDD)   | DC53V/1.8A<br>≤7.2W (without HDD)   | DC12V/1.5A<br>≤6.0W (without HDD)   | DC53V/1.13A<br>≤6.5W (without HDD)  | DC12V/1.5A<br>≤5.5W (without HDD)   |
| Star Features                            | P2P   | Plug & Play, P2P  | P2P   | Plug & Play, P2P  | P2P   |
| <b>Artificial Intelligence by Device</b> |   |   |   |   |   |
| Perimeter Protection                     | Up to 2 channel perimeter protection  | Up to 2 channel perimeter protection  | Up to 2 channel perimeter protection  | Up to 2 channel perimeter protection  | Up to 2 channel perimeter protection  |
| Face Recognition                         | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. | Up to 4 channels face recognition with FD camera;<br>Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. |
| SMD Plus                                 | Up to 4 channel SMD Plus  | Up to 4 channel SMD Plus  | Up to 4 channel SMD Plus  | Up to 4 channel SMD Plus  | Up to 4 channel SMD Plus  |
| Image search                             | Search by face images   | Search by face images   | Search by face images   | Search by face images   | Search by face images   |
| <b>Artificial Intelligence by Camera</b> |   |   |   |   |   |
| SMD Plus                                 | Supported   | Supported   | Supported   | Supported   | Supported   |
| Perimeter Protection                     | Supported   | Supported   | Supported   | Supported   | Supported   |
| Face Recognition                         | Supported   | Supported   | Supported   | Supported   | Supported   |
| People Counting                          | --  | --  | --  | --  | --  |
| Heat Map                                 | --  | --  | --  | --  | --  |
| ANPR                                     | --  | --  | --  | --  | --  |



# NETWORK VIDEO RECORDERS

## WizSense Series

### WizSense Series

| Model                                    | NVR2116-I  | NVR2108-8P-I   | NVR2108-I  | NVR2104-P-I  | NVR2104-I  |
|--|--|--|--|--|--|
| Appearance                               |                                 |                                 |                               |                               |                               |
| Processor                                | Multi-core embedded processor  | Multi-core embedded processor  | Multi-core embedded processor  | Multi-core embedded processor  | Multi-core embedded processor  |
| Video Compression                        | H.265+/H.264+  | H.265+/H.264+  | H.265+/H.264+  | H.265+/H.264+  | H.265+/H.264+  |
| IP Video Inputs                          | 16 channel   | 8 channel  | 8 channel  | 4 channel  | 4 channel  |
| Max Input/Record                         | 200Mbps/200Mbps  | 200Mbps/200Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  |
| Max Decoding                             | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  |
| Display                                  | 1HDMI, 1VGA  | 1HDMI, 1VGA  | 1HDMI, 1VGA  | 1HDMI, 1VGA  | 1HDMI, 1VGA  |
| Max HDD                                  | 1x6TB  | 1x6TB  | 1x6TB  | 1x6TB  | 1x6TB  |
| RAID                                     | --   | --   | --   | --   | --   |
| eSATA/Mini SAS                           | --   | --   | --   | --   | --   |
| Audio In/Out                             | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   |
| Alarm In/Out                             | --   | --   | --   | --   | --   |
| Ethernet                                 | 1 Gigabit Port   | 1 Gigabit Port   | 1x100M Port  | 1x100M Port  | 1x100M Port  |
| PoE                                      | --   | 8 Ports (IEEE802.3at/af)<br>Max72W   | --   | 4 Ports (IEEE802.3at/af)<br>Max 38W  | --   |
| USB                                      | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   |
| Power                                    | DC12V/1.5A<br>≤6.5W (without HDD)  | DC53V/1.8A<br>≤6W (Without HDD)  | DC12V/1.5A<br>≤6W (without HDD)  | DC53V/1.13A<br>≤5.5W (Without HDD)   | DC12V/1.5A<br>≤5.5W (without HDD)  |
| Star Features                            | P2P  | Plug & Play, P2P   | P2P  | Plug & Play, P2P   | P2P  |
| <b>Artificial Intelligence by Device</b> |  |  |  |  |  |
| Perimeter Protection                     | Up to 2 channel perimeter protection<br>Up to 4 channels face recognition with FD camera;                        | Up to 2 channel perimeter protection<br>Up to 4 channels face recognition with FD camera;                        | Up to 2 channel perimeter protection<br>Up to 4 channels face recognition with FD camera;                        | Up to 2 channel perimeter protection<br>Up to 4 channels face recognition with FD camera;                        | Up to 2 channel perimeter protection<br>Up to 4 channels face recognition with FD camera;                        |
| Face Recognition                         | Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. | Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. | Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. | Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. | Up to 1 channel face recognition with normal camera;<br>10 face databases with up to 5,000 face images in total. |
| SMD Plus                                 | Up to 4 channel SMD Plus   | Up to 4 channel SMD Plus   | Up to 4 channel SMD Plus   | Up to 4 channel SMD Plus   | Up to 4 channel SMD Plus   |
| Image search                             | Search by face images  | Search by face images  | Search by face images  | Search by face images  | Search by face images  |
| <b>Artificial Intelligence by Camera</b> |  |  |  |  |  |
| SMD Plus                                 | Supported  | Supported  | Supported  | Supported  | Supported  |
| Perimeter Protection                     | Supported  | Supported  | Supported  | Supported  | Supported  |
| Face Recognition                         | Supported  | Supported  | Supported  | Supported  | Supported  |
| People Counting                          | --   | --   | --   | --   | --   |
| Heat Map                                 | --   | --   | --   | --   | --   |
| ANPR                                     | --   | --   | --   | --   | --   |



## Lite Series NVR

The Lite Series NVR is designed with high cost performance ratio as well as Dahua's excellent quality. It supports innovative H.265+ encoding and energy-saving techniques to help save costs. The NVR can serve as edge storage, central storage or backup storage with an intuitive shortcut operation menu for remote management and control.



### Smart H.265+ & Smart H.264+

Supports Smart H.265+/H.264+ decoding, providing high-quality videos and reducing storage and transmission costs.



### UI 4.0

Adopts new UI 4.0 style which is more consistent with users' habits. Functional modules are divided properly to make them clearer and easier to understand.



### Easy Setup

Plug&Play installation, P2P, and smart app for carefree surveillance.



### More Features

Offers AI by camera features including Perimeter Protection, People Counting and Heat Map.

# NETWORK VIDEO RECORDERS

## Lite Series












|  | 8HDD Lite 4K & H.265 NVR   |  |   |  | 4HDD Lite 4K & H.265 NVR   |  |
|--|--|--|---|--|--|--|
| Model                                    | NVR4832-4KS2   | NVR4832-16P-4KS2   | NVR4816-4KS2  | NVR4816-16P-4KS2   | NVR4432-4KS2   | NVR4432-16P-4KS2   |
| Appearance                               | <br> | <br> | <br> | <br> | <br> | <br> |
| Processor                                | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU   | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU  |
| Video Compression                        | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  |
| IP Video Inputs                          | 32 channel   | 32 channel   | 16 channel  | 16 channel   | 32 channel   | 32 channel   |
| Max Input/Record                         | 200Mbps/200Mbps  | 200Mbps/200Mbps  | 200Mbps/200Mbps   | 200Mbps/200Mbps  | 200Mbps/200Mbps  | 200Mbps/200Mbps  |
| Max Decoding                             | 2ch@8MP/8ch@1080P  | 2ch@8MP/8ch@1080P  | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P  | 2ch@8MP/8ch@1080P  | 2ch@8MP/8ch@1080P  |
| Display                                  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  |
| Max HDD                                  | 8x8TB  | 8x8TB  | 8x8TB   | 8x8TB  | 4x8TB  | 4x8TB  |
| RAID                                     | --   | --   | --  | --   | --   | --   |
| eSATA/Mini SAS                           | --   | --   | --  | --   | --   | --   |
| Audio In/Out                             | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way  | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   |
| Alarm In/Out                             | 16/4   | 16/4   | 16/4  | 16/4   | 16/4   | 16/4   |
| Ethernet                                 | 2 Gigabit Ports  | 1 Gigabit Port   | 2 Gigabit Ports   | 1 Gigabit Port   | 2 Gigabit Ports  | 1 Gigabit Port   |
| PoE                                      | --   | 16 Ports (IEEE802.3at/af)<br>Max 150W  | --  | 16 Ports (IEEE802.3at/af)<br>Max 150W  | --   | 16 Ports (IEEE802.3at/af)<br>Max 150W  |
| USB                                      | 1 USB3.0, 2 USB2.0   | 1 USB3.0, 2 USB2.0   | 1 USB3.0, 2 USB2.0  | 1 USB3.0, 2 USB2.0   | 1 USB3.0, 2 USB2.0   | 1 USB3.0, 1 USB2.0   |
| Power                                    | AC100V~240V<br><12W (Without HDD)  | AC100V~240V<br><13.7W (Without HDD)  | AC100V~240V<br><12W (Without HDD)   | AC100V~240V<br><14.1W (Without HDD)  | AC100V~240V<br><11.7W (Without HDD)  | AC100V~240V<br><13.7W (Without HDD)  |
| Star Features                            | P2P  | Plug & Play, P2P   | P2P   | Plug & Play, P2P   | P2P  | Plug & Play, P2P   |
| <b>Artificial Intelligence by Camera</b> |  |  |   |  |  |  |
| SMD Plus                                 | Supported  | Supported  | Supported   | Supported  | Supported  | Supported  |
| Perimeter Protection                     | Supported  | Supported  | Supported   | Supported  | Supported  | Supported  |
| Face Recognition                         | --   | --   | --  | --   | --   | --   |
| People Counting                          | Supported  | Supported  | Supported   | Supported  | Supported  | Supported  |
| Heat Map                                 | Supported  | Supported  | Supported   | Supported  | Supported  | Supported  |
| ANPR                                     | --   | --   | --  | --   | --   | --   |

# NETWORK VIDEO RECORDERS

## Lite Series

### 4HDD Lite 4K & H.265 NVR

### 2HDD Lite 4K & H.265 NVR

| Model                                    | NVR4416-4KS2  | NVR4416-16P-4KS2  | NVR4232-4KS2   | NVR4216-4KS2  | NVR4208-4KS2  | NVR4216-16P-4KS2  |
|--|---|---|--|---|---|---|
| Appearance                               |   |   |   |   |   |   |
| Processor                                | ARM Quad Core CPU   | ARM Quad Core CPU   | ARM Quad Core CPU  | ARM Quad Core CPU   | ARM Quad Core CPU   | ARM Quad Core CPU   |
| Video Compression                        | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264   |
| IP Video Inputs                          | 16 channel  | 16 channel  | 32 channel   | 16 channel  | 8 channel   | 16 channel  |
| Max Input/Record                         | 200Mbps/200Mbps   | 200Mbps/200Mbps   | 200Mbps/200Mbps  | 200Mbps/200Mbps   | 200Mbps/200Mbps   | 200Mbps/200Mbps   |
| Max Decoding                             | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P  | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   |
| Display                                  | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   |
| Max HDD                                  | 4x8TB   | 4x8TB   | 2x8TB  | 2x8TB   | 2x8TB   | 2x8TB   |
| RAID                                     | --  | --  | --   | --  | --  | --  |
| eSATA/Mini SAS                           | --  | --  | --   | --  | --  | --  |
| Audio In/Out                             | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way   | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  |
| Alarm In/Out                             | 16/4  | 16/4  | 4/2  | 4/2   | 4/2   | 4/2   |
| Ethernet                                 | 2 Gigabit Ports   | 1 Gigabit Port  | 1 Gigabit Port   | 1 Gigabit Port  | 1 Gigabit Port  | 1 Gigabit Port  |
| PoE                                      | --  | 16 Ports (IEEE802.3at/af)<br>Max 150W   | --   | --  | --  | 16 Ports (IEEE802.3at/af)<br>Max 130W   |
| USB                                      | 1 USB3.0, 1 USB2.0  | 1 USB3.0, 1 USB2.0  | 1 USB3.0, 1 USB2.0   | 1 USB3.0, 1 USB2.0  | 1 USB3.0, 1 USB2.0  | 1 USB3.0, 1 USB2.0  |
| Power                                    | AC100V~240V<br><11.7W (Without HDD)   | AC100V~240V<br><13.7W (Without HDD)   | DC12V/4A<br><6.9W (Without HDD)  | DC12V/4A<br><6.9W (Without HDD)   | DC12V/4A<br><6.9W (Without HDD)   | AC100V~240V<br><13.2W (Without HDD)   |
| Star Features                            | P2P   | Plug & Play, P2P  | P2P  | P2P   | P2P   | Plug & Play, P2P  |
| <b>Artificial Intelligence by Camera</b> |   |   |  |   |   |   |
| SMD Plus                                 | Supported   | Supported   | Supported  | Supported   | Supported   | Supported   |
| Perimeter Protection                     | Supported   | Supported   | Supported  | Supported   | Supported   | Supported   |
| Face Recognition                         | --  | --  | --   | --  | --  | --  |
| People Counting                          | Supported   | Supported   | Supported  | Supported   | Supported   | Supported   |
| Heat Map                                 | Supported   | Supported   | Supported  | Supported   | Supported   | Supported   |
| ANPR                                     | --  | --  | --   | --  | --  | --  |

# NETWORK VIDEO RECORDERS

## Lite Series

|  | 2HDD Lite 4K & H.265 NVR   |  | 1HDD Compact 1U Lite 4K & H.265 NVR   |  |  |  |
|--|--|--|---|--|--|--|
| Model                                    | NVR4208-8P-4KS2  | NVR4204-P-4KS2   | NVR4108HS-4KS2  | NVR4104HS-4KS2   | NVR4108HS-8P-4KS2  | NVR4104HS-P-4KS2   |
| Appearance                               | <br> | <br> | <br> | <br> | <br> | <br> |
| Processor                                | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU   | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU  |
| Video Compression                        | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264   | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  | H.265+/H.265/H.264+/H.264  |
| IP Video Inputs                          | 8 channel  | 4 channel  | 8 channel   | 4 channel  | 8 channel  | 4 channel  |
| Max Input/Record                         | 200Mbps/200Mbps  | 200Mbps/200Mbps  | 80Mbps/80Mbps   | 80Mbps/80Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  |
| Max Decoding                             | 2ch@8MP/8ch@1080P  | 2ch@8MP/8ch@1080P  | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P  | 2ch@8MP/8ch@1080P  | 2ch@8MP/8ch@1080P  |
| Display                                  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  |
| Max HDD                                  | 2x8TB  | 2x8TB  | 1x8TB   | 1x8TB  | 1x8TB  | 1x8TB  |
| RAID                                     | --   | --   | --  | --   | --   | --   |
| eSATA/Mini SAS                           | --   | --   | --  | --   | --   | --   |
| Audio In/Out                             | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way  | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   |
| Alarm In/Out                             | 4/2  | 4/2  | --  | --   | --   | --   |
| Ethernet                                 | 1 Gigabit Port   | 1 Gigabit Port   | 1x100M Port   | 1x100M Port  | 1x100M Port  | 1x100M Port  |
| PoE                                      | 8 Ports (IEEE802.3at/af)<br>Max 130W   | 4 Ports (IEEE802.3at/af)<br>Max 50W  | --  | --   | 8 Ports (IEEE802.3at/af),<br>Max 80W   | 4 Ports (IEEE802.3at/af)<br>Max 50W  |
| USB                                      | 1 USB3.0, 1 USB2.0   | 1 USB3.0, 1 USB2.0   | 2 USB2.0  | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   |
| Power                                    | AC100V~240V<br><9.6W (Without HDD)   | DC48V/2A<br><9W (Without HDD)  | DC12V/2A<br><6.3W (Without HDD)   | DC12V/2A<br><6.3W (Without HDD)  | DC48V/2A<br><8.3W (Without HDD)  | DC48V/1.5A<br><7.5W (Without HDD)  |
| Star Features                            | Plug & Play, P2P   | Plug & Play, P2P   | P2P   | P2P  | Plug & Play, P2P   | Plug & Play, P2P   |
| <b>Artificial Intelligence by Camera</b> |  |  |   |  |  |  |
| SMD Plus                                 | Supported  | Supported  | Supported   | Supported  | Supported  | Supported  |
| Perimeter Protection                     | Supported  | Supported  | Supported   | Supported  | Supported  | Supported  |
| Face Recognition                         | --   | --   | --  | --   | --   | --   |
| People Counting                          | Supported  | Supported  | Supported   | Supported  | Supported  | Supported  |
| Heat Map                                 | Supported  | Supported  | Supported   | Supported  | Supported  | Supported  |
| ANPR                                     | --   | --   | --  | --   | --   | --   |

# NETWORK VIDEO RECORDERS

## Lite Series

### 1HDD Smart 1U Lite 4K & H.265 NVR

### 2HDD Lite 4K & H.265 NVR










| Model             | NVR4108-4KS2  | NVR4104-4KS2  | NVR4108-8P-4KS2   | NVR4104-P-4KS2  | NVR2208-4KS2  | NVR2204-4KS2  | NVR2208-8P-4KS2   | NVR2204-P-4KS2  |
|-------------------|---|---|---|---|---|---|---|---|
| Appearance        |   |   |   |   |   |   |   |   |
| Processor         | ARM Quad Core CPU   | ARM Quad Core CPU   | ARM Quad Core CPU   | ARM Quad Core CPU   | ARM Quad Core CPU   | ARM Quad Core CPU   | ARM Quad Core CPU   | ARM Quad Core CPU   |
| Video Compression | H.265+/H.265<br>H.264+/H.264  | H.265+/H.265<br>H.264+/H.264  | H.265+/H.265<br>H.264+/H.264  | H.265+/H.265<br>H.264+/H.264  | H.265+/H.265<br>H.264+/H.264  | H.265+/H.265<br>H.264+/H.264  | H.265+/H.265<br>H.264+/H.264  | H.265+/H.265<br>H.264+/H.264  |
| IP Video Inputs   | 8 channel   | 4 channel   | 8 channel   | 4 channel   | 8 channel   | 4 channel   | 8 channel   | 4 channel   |
| Max Input/Record  | 80Mbps/80Mbps   | 80Mbps/80Mbps   | 80Mbps/80Mbps   | 80Mbps/80Mbps   | 80Mbps/80Mbps   | 80Mbps/80Mbps   | 80Mbps/80Mbps   | 80Mbps/80Mbps   |
| Max Decoding      | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   | 2ch@8MP/8ch@1080P   | 1ch@8MP/4ch@1080P   | 1ch@8MP/4ch@1080P   | 1ch@8MP/4ch@1080P   | 1ch@8MP/4ch@1080P   |
| Display           | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   | 1 HDMI, 1 VGA   |
| Max HDD           | 1x8TB   | 1x8TB   | 1x8TB   | 1x8TB   | 2x8TB   | 2x8TB   | 2x8TB   | 2x8TB   |
| RAID              | --  | --  | --  | --  | --  | --  | --  | --  |
| eSATA/Mini SAS    | --  | --  | --  | --  | --  | --  | --  | --  |
| Audio In/Out      | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  | 1/1, 2-way  |
| Alarm In/Out      | --  | --  | --  | --  | --  | --  | --  | --  |
| Ethernet          | 1x100M Port   | 1x100M Port   | 1x100M Port   | 1x100M Port   | 1x100M Port   | 1x100M Port   | 1 Gigabit Port  | 1x100M Port   |
| PoE               | --  | --  | 8 Ports (IEEE802.3at/af)<br>Max 80W   | 4 Ports (IEEE802.3at/af)<br>Max 50W   | --  | --  | 8 Ports (IEEE802.3at/af)<br>Max 80W   | 4 Ports (IEEE802.3at/af)<br>Max 50W   |
| USB               | 2 USB2.0  | 2 USB2.0  | 2 USB2.0  | 2 USB2.0  | 2 USB2.0  | 2 USB2.0  | 2 USB2.0  | 2 USB2.0  |
| Power             | DC12V/2A<br><6.3W (Without HDD)   | DC12V/2A<br><6.3W (Without HDD)   | DC48V/2A<br><8.3W (Without HDD)   | DC48V/1.5A<br><7.5W (Without HDD)   | DC12V/4A<br><3W (Without HDD)   | DC12V/4A<br><3W (Without HDD)   | DC54V/2.2A<br><5.8W (Without HDD)   | DC48V/1.5A<br><5.3W (Without HDD)   |
| Star Features     | P2P   | P2P   | Plug & Play, P2P  | Plug & Play, P2P  | P2P   | P2P   | Plug & Play, P2P  | Plug & Play, P2P  |

### Artificial Intelligence by Camera

|                      |           |           |           |           |           |           |           |           |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| SMD Plus             | Supported | Supported | Supported | Supported | Supported | Supported | Supported | Supported |
| Perimeter Protection | Supported | Supported | Supported | Supported | --        | --        | --        | --        |
| Face Recognition     | --        | --        | --        | --        | --        | --        | --        | --        |
| People Counting      | Supported | Supported | Supported | Supported | --        | --        | --        | --        |
| Heat Map             | Supported | Supported | Supported | Supported | --        | --        | --        | --        |
| ANPR                 | --        | --        | --        | --        | --        | --        | --        | --        |

# NETWORK VIDEO RECORDERS

## Lite H.265 Series

|  | 1HDD Lite 4K & H.265 NVR   |  |  |  | 1HDD Lite 4K & H.265 NVR   |  |  |  |
|--|--|--|--|--|--|--|--|--|
| Model                                    | NVR2108HS-4KS2   | NVR2104HS-4KS2   | NVR2108HS-8P-4KS2  | NVR2104HS-P-4KS2   | NVR2108-4KS2   | NVR2104-4KS2   | NVR2108-8P-4KS2  | NVR2104-P-4KS2   |
| Appearance                               | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| Processor                                | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU  | ARM Quad Core CPU  |
| Video Compression                        | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265<br>H.264+/H.264   | H.265+/H.265<br>H.264+/H.264   |
| IP Video Inputs                          | 8 channel  | 4 channel  | 8 channel  | 4 channel  | 8 channel  | 4 channel  | 8 channel  | 4 channel  |
| Max Input/Record                         | 80Mbps/80Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  | 80Mbps/80Mbps  |
| Max Decoding                             | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  | 1ch@8MP/4ch@1080P  |
| Display                                  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  | 1 HDMI, 1 VGA  |
| Max HDD                                  | 1x8TB  | 1x8TB  | 1x8TB  | 1x8TB  | 1x8TB  | 1x8TB  | 1x8TB  | 1x8TB  |
| RAID                                     | --   | --   | --   | --   | --   | --   | --   | --   |
| eSATA/Mini SAS                           | --   | --   | --   | --   | --   | --   | --   | --   |
| Audio In/Out                             | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   | 1/1, 2-way   |
| Alarm In/Out                             | --   | --   | --   | --   | --   | --   | --   | --   |
| Ethernet                                 | 1x100M Port  | 1x100M Port  | 1 Gigabit Port   | 1x100M Port  | 1x100M Port  | 1x100M Port  | 1 Gigabit Port   | 1x100M Port  |
| PoE                                      | --   | --   | 8 Ports (IEEE802.3at/af)<br>Max 80W  | 4 Ports (IEEE802.3at/af)<br>Max 50W  | --   | --   | 8 Ports (IEEE802.3at/af)<br>Max 80W  | 4 Ports (IEEE802.3at/af)<br>Max 50W  |
| USB                                      | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   | 2 USB2.0   |
| Power                                    | DC12V/2A<br><3W(Without HDD)   | DC12V/2A<br><3W(Without HDD)   | DC48V/2A<br><5.8W(Without HDD)   | DC48V/1.25A<br><5.3W(Without HDD)  | DC12V/2A<br><3W(Without HDD)   | DC12V/2A<br><3W(Without HDD)   | DC48V/2A<br><5.8W(Without HDD)   | DC48V/1.25A<br><5.3W(Without HDD)  |
| Star Features                            | P2P  | P2P  | Plug & Play, P2P   | Plug & Play, P2P   | P2P  | P2P  | Plug & Play, P2P   | Plug & Play, P2P   |
| <b>Artificial Intelligence by Camera</b> |  |  |  |  |  |  |  |  |
| SMD Plus                                 | Supported  | Supported  | Supported  | Supported  | Supported  | Supported  | Supported  | Supported  |
| Perimeter Protection                     | --   | --   | --   | --   | --   | --   | --   | --   |
| Face Recognition                         | --   | --   | --   | --   | --   | --   | --   | --   |
| People Counting                          | --   | --   | --   | --   | --   | --   | --   | --   |
| Heat Map                                 | --   | --   | --   | --   | --   | --   | --   | --   |
| ANPR                                     | --   | --   | --   | --   | --   | --   | --   | --   |

# NETWORK THERMAL CAMERAS





# Security

Dahua adopts clearer, more cost-effective sensors and AI technology to provide all-weather monitoring, as well as timely and accurate alarms in order to protect the safety of SMB users' property.



## Perimeter Protection

With the simple background of a thermal image and built-in AI algorithm, it supports classification of human and vehicle that significantly improves alarm accuracy.



## Advance Fire Detection

Dual-channel monitoring allows thermal cameras to detect the early source of the fire, and visibly track it in the system.



## Excellent Environmental Adaptability

The Dahua thermal camera can penetrate through fog and haze, allowing it to capture clear images in any light conditions, whether it's day or night.







## Smoking Detection

The Dual-channel detection algorithm can effectively identify smoking behavior in the image.

# NETWORK THERMAL CAMERAS

## Security

|            | Model               | DH-TPC-SD2221  | DH-TPC-BF2221  | DH-TPC-BF1241  | DH-TPC-DF1241  |
|------------|---------------------|--|--|--|--|
| Appearance |                     |     |    |             |             |
| Thermal    | Image sensor        | Uncooled VOx Microbolometer  | Uncooled VOx Microbolometer  | Uncooled VOx Microbolometer  | Uncooled VOx Microbolometer  |
|            | Effective Pixels    | 256(H) × 192(V)  | 256(H) × 192(V)  | 256(H) × 192(V)  | 256(H) × 192(V)  |
|            | Sensitivity         | ≤50mK  | ≤50mK  | ≤50mK  | ≤50mK  |
|            | Lens                | 3.5mm/7mm  | 3.5mm/7mm  | 3.5mm/7mm/10mm   | 2mm/3.5mm/7mm  |
|            | FOV-H               | H: 50.6°/24°   | H: 50.6°/24°   | H: 50.6°/24°/17.3°   | H: 87.8°/50.6°/24°   |
| Visible    | Image sensor        | 1/2.8" 2M CMOS   | 1/2.8" 2M CMOS   | 1/2.7" 4M CMOS   | 1/2.7" 4M CMOS   |
|            | Lens                | 4mm/8mm  | 4mm/8mm  | 4mm/8mm/12mm   | 2mm/4mm/8mm  |
|            | FOV-H               | H: 84°/40°   | H: 84°/40°   | H: 84°/40°/22°   | H: 94°/84°/40°   |
|            | Min. Illumination   | 0.005Lux (Color)<br>0.0005Lux (B/W)<br>0Lux (IR On)                                  | 0.005Lux (Color)<br>0.0005Lux (B/W)<br>0Lux (IR On)                                  | 0.05Lux (Color)<br>0.005Lux (B/W)<br>0Lux (IR On)  | 0.05Lux (Color)<br>0.005Lux (B/W)<br>0Lux (IR On)  |
|            | IR Distance         | 35m/50m  | 35m/50m  | 30m  | 30m  |
| General    | Video Compression   | H.265/H.264/MJPEG  | H.265/H.264/MJPEG  | H.265/H.264M/H.264H/H.264B/MJPEG   | H.265/H.264M/H.264H/H.264B/MJPEG   |
|            | Frame Rate          | Thermal: 1280*960/XVGA/VGA/256*192 @25/30fps<br>Visible: 1080P/720P/D1/CIF @25/30fps | Thermal: 1280*960/XVGA/VGA/256*192 @25/30fps<br>Visible: 1080P/720P/D1/CIF @25/30fps | Thermal: 1280*960/XVGA/VGA/256*192 @25/30fps<br>Visible: 2336*1752/1080P/720P/D1/CIF @25/30fps | Thermal: 1280*960/XVGA/VGA/256*192 @25/30fps<br>Visible: 2336*1752/1080P/720P/D1/CIF @25/30fps |
|            | Pan/Tilt Range      | 300 presets, Pan: 0° ~ 360° endless, Tilt: -15° ~ 90°                                | --   | --   | --   |
|            | Intelligent Video   | IVS, Human/Vehicle Classification, Fire Detection & Alarm, Cold/Hot Spot Tracing     | IVS, Human/Vehicle Classification, Fire Detection & Alarm, Cold/Hot Spot Tracing     | IVS, Human/Vehicle Classification, Fire Detection & Alarm, Cold/Hot Spot Tracing               | IVS, Human/Vehicle Classification, Fire Detection & Alarm, Cold/Hot Spot Tracing               |
|            | Compatibility       | ONVIF Profile S&G, API   | ONVIF Profile S&G, API   | ONVIF Profile S&G, CGI   | ONVIF Profile S&G, CGI   |
|            | Ingress Protection  | IP66   | IP67   | IP67   | IP67   |
|            | Working Temperature | -30°C ~ +60°C  | -30°C ~ +60°C  | -30°C ~ +60°C  | -30°C ~ +60°C  |
|            | Power               | DC12V/PoE+, <24W   | DC12V/PoE/ePoE, <12W   | DC12V/PoE, <13W  | DC12V/PoE, <13W  |

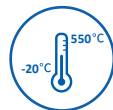
# Thermography

Designed for industrial temperature measurement, it is equipped with highly efficient sensors and industry-leading high-precision temperature measurement algorithm. It supports flexible temperature measurement rule setting to help users monitor the status of the equipment in real time.



## Flexible Rules

Supports point, line, and area temperature measurement rule setting and displays the highest, lowest or average temperature. It also supports up to 12 rules simultaneously in one scene.



## High Accuracy

Wide temperature measurement range from -20°C to 550°C, with high accuracy up to  $\pm 5^\circ\text{C}$  or  $\pm 5\%$  (whichever is greater).





## Real-time Alarm

Online, long distance, and non-contact 24/7 temperature measurement, with millisecond response speed.

# NETWORK THERMAL CAMERAS

## Thermography

|                   | Model  | DH-TPC-SD2221-T  | DH-TPC-BF2221-T  |
|-------------------|--|--|--|
| Appearance        |  |   |   |
| Thermal           | Image sensor   | Uncooled VOx Microbolometer  | Uncooled VOx Microbolometer  |
|                   | Effective Pixels   | 256(H) × 192(V)  | 256(H) × 192(V)  |
|                   | Sensitivity  | ≤50mK  | ≤50mK  |
|                   | Lens   | 3.5mm/7mm  | 3.5mm/7mm  |
|                   | FOV-H  | H: 50.6°/24°   | H: 50.6°/24°   |
|                   | Temperature Range & Accuracy   | Low temperature mode: -20°C ~ +150°C<br>High temperature mode: 0°C ~ +550°C<br>Max (±5°C, ±5%)<br>Operating temperature: -10°C ~ +50°C | Low temperature mode: -20°C ~ +150°C<br>High temperature mode: 0°C ~ +550°C<br>Max (±5°C, ±5%)<br>Operating temperature: -10°C ~ +50°C |
| Measurement Rule  | Spot: 12<br>Line: 12<br>Area: 12<br>Supports 12 rules simultaneously | Spot: 12<br>Line: 12<br>Area: 12<br>Supports 12 rules simultaneously   |  |
| Temperature Alarm | Supported  | Supported  |  |
| Visible           | Image sensor   | 1/2.8" 2M CMOS   | 1/2.8" 2M CMOS   |
|                   | Lens   | 4mm/8mm  | 4mm/8mm  |
|                   | FOV-H  | H: 84°/40°   | H: 84°/40°   |
|                   | Min. Illumination  | 0.005Lux (Color)<br>0.0005Lux (B/W)<br>0Lux (IR On)  | 0.005Lux (Color)<br>0.0005Lux (B/W)<br>0Lux (IR On)  |
|                   | IR Distance  | 35m/50m  | 35m/50m  |
| General           | Video Compression  | H.265/H.264/MJPEG  | H.265/H.264/MJPEG  |
|                   | Frame Rate   | Thermal: 1280*960/XVGA/VGA/256*192 @ 25/30fps<br>Visible: 1080P/720P/D1/CIF @ 25/30fps   | Thermal: 1280*960/XVGA/VGA/256*192 @ 25/30fps<br>Visible: 1080P/720P/D1/CIF @ 25/30fps   |
|                   | Pan/Tilt Range   | 300 presets, Pan: 0° ~ 360° endless, Tilt: -15° ~ 90°  | --   |
|                   | Intelligent Video  | IVS, Human/Vehicle Classification, Fire Detection & Alarm, Cold/Hot Spot Tracing   | IVS, Human/Vehicle Classification, Fire Detection & Alarm, Cold/Hot Spot Tracing   |
|                   | Compatibility  | ONVIF Profile S&G, API   | ONVIF Profile S&G, API   |
|                   | Ingress Protection   | IP66   | IP67   |
|                   | Working Temperature  | -30°C ~ +60°C  | -30°C ~ +60°C  |
| Power             | DC12V/PoE+, <24W   | DC12V/PoE/ePoE, <12W   |  |

# TRANSMISSION





# Transmission

Dahua has a complete product lineup and mature network solution design capabilities. From wired to wireless, it can provide different products and solutions for various applications such as safe cities, enterprises, parks, streets, and shops. These solutions have been commercially applied in more than 100 countries and regions around the world.



## High Protection

High surge/ESD protection protect the switches not to be damaged.



## Wide Working Temperature Design

With wider working temperature compared to normal commercial switches, Dahua PoE Switch is able to work in non-standard machine room and other harsh environment in security system.



## Long Distance PoE

250 meters PoE transmission, which is convenient and also save cost in construction.





## Intelligent PoE

- Guarantee power supply for VIP ports.
- Real-time monitoring to guarantee proper function.

# TRANSMISSION






## PoE Switch

### Desktop PoE Switch

| Model                          | PFS3005-4ET-60  | PFS3006-4ET-60  | PFS3006-4GT-60   | PFS3008-8ET-60  | PFS3008-8GT-60  | PFS3008-8GT-96  |
|--------------------------------|---|---|--|---|---|---|
| Appearance                     |  |  |  |  |  |  |
| Fast/Gigabit Ethernet          | 4FE PoE+1FE   | 4FE PoE+2FE   | 4GE PoE+2GE  | 4FE PoE+4FE   | 4GE PoE+4GE   | 8GE PoE   |
| SFP Slots                      | --  | --  | --   | --  | --  | --  |
| Switching Capacity             | 1Gbps   | 1.8Gbps   | 14Gbps   | 1.8Gbps   | 20Gbps  | 20Gbps  |
| Packet Forwarding Rate         | 744Kpps   | 890Kpps   | 8.93 Mpps  | 1.19Mpps  | 11.9Mpps  | 11.9Mpps  |
| Packet Buffer Memory           | 448kb   | 768Kb   | 1Mb  | 768Kb   | 1.5Mb   | 1.5Mb   |
| MAC Table Size                 | 1K  | 2K  | 2K   | 2K  | 8K  | 8K  |
| PoE Standard                   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE  | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   |
| PoE Budget                     | 60W   | 60W   | 60W  | 60W   | 60W   | 96W   |
| Long Distance PoE Transmission | Yes (250 meters)  | Yes (250 meters)  | --   | Yes (250 meters)  | --  | --  |
| VLAN                           | --  | --  | --   | --  | --  | --  |
| Link Aggregation               | --  | --  | --   | --  | --  | --  |
| Flow Control                   | Supported   | Supported   | Supported  | Supported   | Supported   | Supported   |
| Spanning Tree                  | --  | --  | --   | --  | --  | --  |
| Management                     | --  | --  | --   | --  | --  | --  |
| Lightning Protection           | Common Mode 2KV<br>Differential Mode 1KV  | Common Mode 2KV<br>Differential Mode 0.5KV  | Common Mode 2KV<br>Differential Mode 1KV   | Common Mode 2KV<br>Differential Mode 0.5KV  | Common Mode 2KV<br>Differential Mode 0.5KV  | Common Mode 2KV<br>Differential Mode 0.5KV  |
| Working Temperature            | -10°C ~ +55°C<br>(14°F~+131°F)  | -10°C ~ +55°C<br>(14°F~+131°F)  | -10°C ~ +55°C<br>(14°F~+131°F)   | -10°C ~ +55°C<br>(14°F~+131°F)  | -10°C ~ +55°C<br>(14°F~+131°F)  | -10°C ~ +55°C<br>(14°F~+131°F)  |
| Dimensions (WxDxH)             | 130mmx85mmx26mm<br>(5.1"x3.3"x1.0")   | 130mmx85mmx26mm<br>(5.1"x3.3"x1.0")   | 130mmx85mmx26mm<br>(5.1"x3.3"x1.0")  | 190mmx100mmx 30mm<br>(7.5"x3.9"x1.2")   | 190mmx100mmx30mm<br>(7.5"x3.9"x1.2")  | 190mmx100mmx30mm<br>(7.5"x3.9"x1.2")  |

## PoE Switch

### Desktop PoE Switch

| Model                          | PFS3009-8ET-96  | PFS3009-8ET1GT-96   | PFS3010-8ET-96  | PFS4218-16ET-190/240  | PFS4226-24ET-240/360  |
|--------------------------------|---|---|---|---|---|
| Appearance                     |  |  |  |  |  |
| Fast/Gigabit Ethernet          | 8 FE PoE + 1FE  | 8 FE PoE + 1GE  | 8 FE PoE + 2GE  | 16FE PoE+2GE (Combo)  | 24FE PoE+2GE (Combo)  |
| SFP Slots                      | --  | --  | --  | 2GE SFP (Combo)   | 2GE SFP (Combo)   |
| Switching Capacity             | 1.8Gbps   | 3.6 Gbps  | 5.6Gbps   | 8.8Gbps   | 8.8Gbps   |
| Packet Forwarding Rate         | 1.34Mpps  | 2.68 Mpps   | 4.17Mpps  | 5.36Mpps  | 6.55Mpps  |
| Packet Buffer Memory           | 768Kb   | 1Mb   | 4Mb   | 2.75Mb  | 2.75Mb  |
| MAC Table Size                 | 2K  | 2K  | 16K   | 4K  | 4K  |
| PoE Standard                   | PoE (802.3af),<br>PoE+ (802.3at), Hi-PoE  | PoE (802.3af),<br>PoE+ (802.3at), Hi-PoE  | PoE (802.3af),<br>PoE+ (802.3at), Hi-PoE  | PoE (802.3af),<br>PoE+ (802.3at), Hi-PoE  | PoE (802.3af),<br>PoE+ (802.3at), Hi-PoE  |
| PoE Budget                     | 96W   | 96W   | 96W   | 190W/240W   | 240W/360W   |
| Long Distance PoE Transmission | Yes (250 meters)  | Yes (250 meters)  | Yes (250 meters)  | Yes (250 meters)  | Yes (250 meters)  |
| VLAN                           | --  | --  | --  | Supported   | Supported   |
| Link Aggregation               | --  | --  | --  | Supported   | Supported   |
| Flow Control                   | Supported   | Supported   | Supported   | Supported   | Supported   |
| Spanning Tree                  | --  | --  | --  | Supported   | Supported   |
| Management                     | --  | --  | --  | Web   | Web   |
| Lightning Protection           | Common Mode 2KV<br>Differential Mode 0.5KV  | Common Mode 4KV<br>Differential Mode 2KV  | Common Mode 2KV<br>Differential Mode 0.5KV  | Common Mode 4KV<br>Differential Mode 2KV  | Common Mode 4KV<br>Differential Mode 2KV  |
| Working Temperature            | -10°C ~ +55°C<br>(14°F~+131°F)  | -10°C ~ +55°C<br>(14°F~+131°F)  | -10°C ~ +55°C<br>(14°F~+131°F)  | -10°C ~ +55°C<br>(14°F~+131°F)  | -10°C ~ +55°C<br>(14°F~+131°F)  |
| Dimensions (WxDxH)             | 190mmx100mmx30mm<br>(7.5"x3.9"x1.2")  | 190mmx100mmx30mm<br>(7.5"x3.9"x1.2")  | 190mmx100mmx30mm<br>(7.5"x3.9"x1.2")  | 440mmx300mmx44mm<br>(17.3"x11.8"x1.7")  | 440mmx300mmx44mm<br>(17.3"x11.8"x1.7")  |








# TRANSMISSION






## PoE Switch

### Hardened PoE Switch

### Flat PoE Switch

| Model                          | PFS3103-1GT1ET-60   | PFS3106-4ET-60  | PFS3110-8ET-96  | PFS3409-4GT-96  | PFS3111-8ET-96-F  |
|--------------------------------|---|---|---|---|---|
| Appearance                     |  |  |  |  |  |
| Fast/Gigabit Ethernet          | 1FE PoE+1GE PoE   | 4FE PoE+1GE   | 8FE PoE+1GE   | 4GE PoE+1GE   | 8FE PoE+2GE   |
| SFP Slots                      | 1GE SFP   | 1GE SFP   | 1GE SFP   | 4GE SFP   | 1GE SFP   |
| Switching Capacity             | 6.8Gbps   | 6.8Gbps   | 7.6Gbps   | 33Gbps  | 13.6Gbps  |
| Packet Forwarding Rate         | 3.12Mpps  | 3.57Mpps  | 4.17Mpps  | 13.39Mpps   | 5.65Mpps  |
| Packet Buffer Memory           | 2Mb   | 1Mb   | 1Mb   | 1.75Mb  | 2Mb   |
| MAC Table Size                 | 8K  | 8K  | 8K  | 4K  | 8K  |
| PoE Standard                   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   | PoE (802.3af),<br>PoE+ (802.3at),Hi-PoE   |
| PoE Budget                     | 60W   | 60W   | 96W   | 96W   | 96W   |
| Long Distance PoE Transmission | --  | --  | --  | --  | Port1-4 (250 meters)  |
| VLAN                           | --  | --  | --  | --  | --  |
| Link Aggregation               | --  | --  | --  | --  | --  |
| Flow Control                   | Supported   | Supported   | Supported   | Supported   | Supported   |
| Spanning Tree                  | --  | --  | --  | --  | --  |
| Management                     | --  | --  | --  | --  | --  |
| Lightning Protection           | Common Mode 4KV<br>Differential Mode 2KV  | Common Mode 6KV<br>Differential Mode 4KV  | Common Mode 6KV<br>Differential Mode 4KV  | Common Mode 4KV<br>Differential Mode 2KV  | Common Mode 4KV<br>Differential Mode 2KV  |
| Working Temperature            | -30°C~+65°C (-22°F~+149°F)  | -30°C~+65°C (-22°F~+149°F)  | -30°C ~ +65°C (-22°F~+149°F)  | -30°C ~ +65°C (-22°F~+149°F)  | -30°C ~ +65°C (-22°F~+149°F)  |
| Dimensions (WxDxH)             | 105mm x75mm x30mm<br>(4.1"x3.0"x1.2")   | 150mm x100mm x30mm<br>(5.9"x3.9"x1.2")  | 150mm x100mm x42mm<br>(5.9"x3.9"x1.7")  | 150mm x110mm 42mm<br>(5.9"x4.3"x1.7")   | 158mmx130mmx25mm<br>(6.2"x5.1"x1.0")  |







## Access Switch

|                        | Plastic Switch  |   |  |   | Metal Switch  |   |
|------------------------|---|---|--|---|---|---|
| Model                  | PFS3005-5ET-L   | PFS3005-5GT-L   | PFS3008-8ET-L  | PFS3008-8GT-L   | PFS3005-5GT   | PFS3008-8GT   |
| Appearance             |  |  |  |  |  |  |
| Fast/Gigabit Ethernet  | 5FE   | 5GE   | 8FE  | 8GE   | 5GE   | 8GE   |
| SFP Slots              | --  | --  | --   | --  | --  | --  |
| Switching Capacity     | 1Gbps   | 1Gbps   | 1.6Gbps  | 16Gbps  | 10Gbps  | 16Gbps  |
| Packet Forwarding Rate | 0.744Mpps   | 7.44Mpps  | 1.19Mpps   | 11.9Mpps  | 7.44Mpps  | 11.9Mpps  |
| Packet Buffer Memory   | 448Kb   | 1.5Mb   | 448Kb  | 1.5Mb   | 1Mb   | 1.5Mb   |
| MAC Table Size         | 1K  | 2K  | 1K   | 2K  | 2K  | 4K  |
| PoE Standard           | --  | --  | --   | --  | --  | --  |
| PoE Budget             | --  | --  | --   | --  | --  | --  |
| Long PoE Transmission  | --  | --  | --   | --  | --  | --  |
| VLAN                   | --  | --  | --   | --  | --  | --  |
| Link Aggregation       | --  | --  | --   | --  | --  | --  |
| Flow Control           | --  | --  | --   | --  | --  | --  |
| Spanning Tree          | --  | --  | --   | --  | --  | --  |
| Management             | --  | --  | --   | --  | --  | --  |
| Protection             | Common Mode 2KV   | Common Mode 2KV   | Common Mode 2KV  | Common Mode 2KV   | Common Mode 4KV<br>Differential Mode 0.5KV  | Common Mode 4KV<br>Differential Mode 0.5KV  |
| Working Temperature    | -10°C~+55°C<br>(14°F~+131°F)  | -10°C~+55°C<br>(14°F~+131°F)  | -10°C~+55°C<br>(14°F~+131°F)   | -10°C~+55°C<br>(14°F~+131°F)  | 0°C~+40°C<br>(32°F~+104°F)  | 0°C~+40°C<br>(32°F~+104°F)  |
| Dimensions (WxDxH)     | 77mmx46mmx21mm<br>(3.03"x1.81"x0.83")   | 125mmx65mmx22mm<br>(4.92"x2.56"x0.87")  | 125mmx65mmx22mm<br>(4.92"x2.56"x0.87")   | 125mmx65mmx22mm<br>(4.92"x2.56"x0.87")  | 100mmx64mmx25mm<br>(3.9"x2.5"x1.0")   | 186mmx106mmx33mm<br>(7.3"x4.2"x1.3")  |

# TRANSMISSION

## Access Switch

### Metal Switch

| Model                  | PFS3016-16GT  | PFS3024-24GT  | PFS3106-4T  | PFS3110-8T  | PFS3409-4GT   | PFS3211-8GT   |
|------------------------|---|---|---|---|---|---|
| Appearance             |  |  |  |  |  |  |
| Fast/Gigabit Ethernet  | 16GE  | 24GE  | 4FE+1GE   | 8FE+1GE   | 5GE   | 9GE   |
| SFP Slots              | --  | --  | 1GE SFP   | 1GE SFP   | 4GE SFP   | 2GE SFP   |
| Switching Capacity     | 32Gbps  | 48Gbps  | 6.8Gbps   | 13.6Gbps  | 33Gbps  | 33Gbps  |
| Packet Forwarding Rate | 23.8Mpps  | 35.7Mpps  | 3.57Mpps  | 4.17Mpps  | 16.37Mpps   | 16.37Mpps   |
| Packet Buffer Memory   | 2Mb   | 2Mb   | 1Mb   | 2Mb   | 1.75Mb  | 1.75Mb  |
| MAC Table Size         | 8K  | 8K  | 8K  | 8K  | 4K  | 4K  |
| PoE Standard           | --  | --  | --  | --  | --  | --  |
| PoE Budget             | --  | --  | --  | --  | --  | --  |
| Long PoE Transmission  | --  | --  | --  | --  | --  | --  |
| VLAN                   | --  | --  | --  | --  | --  | --  |
| Link Aggregation       | --  | --  | --  | --  | --  | --  |
| Flow Control           | --  | -   | Supported   | Supported   | Supported   | Supported   |
| Spanning Tree          | --  | --  | --  | --  | --  | --  |
| Management             | --  | --  | --  | --  | --  | --  |
| Protection             | Common Mode 6KV<br>Differential Mode 0.5KV  | Common Mode 6KV<br>Differential Mode 0.5KV  | Common Mode 4KV<br>Differential Mode 2KV  | Common Mode 4KV<br>Differential Mode 2KV  | Common Mode 4KV<br>Differential Mode 2KV  | Common Mode 4KV<br>Differential Mode 2KV  |
| Working Temperature    | 0°C ~ +40°C<br>(32°F ~ +104°F)  | 0°C ~ +40°C<br>(32°F ~ +104°F)  | -40°C ~ +70°C<br>(-40°F ~ +158°F)   | -40°C ~ +70°C<br>(-40°F ~ +158°F)   | -30°C ~ +65°C<br>(-22°F ~ +149°F)   | -30°C ~ +65°C<br>(-22°F ~ +149°F)   |
| Dimensions (WxDxH)     | 294mm x178mm x44mm<br>(11.6"x7.0"x1.7")   | 294mm x178mm x44mm<br>(11.6"x7.0"x1.7")   | 150mm x100mm x30mm<br>(5.9"x3.9"x1.2")  | 150mm x100mm x42mm<br>(5.9"x3.9"x1.7")  | 150mm x110mm x42mm<br>(5.9"x4.3"x1.7")  | 150mm x110mm x42mm<br>(5.9"x4.3"x1.7")  |





## V-Radio Wireless Bridge Series

### CPE

| Model                 | PFWB2-60n   | PFWB2-30n   | PFWB5-30n   | PFWB5-10n   | PFWB5-30ac  |
|-----------------------|---|---|---|---|---|
| Appearance            |  |  |  |  |  |
| Fast/Gigabit Ethernet | 1FE   | 1FE   | 1FE   | 1FE   | 1GE   |
| Wireless Standard     | 802.11 b/g/n  | 802.11 b/g/n  | 802.11 a/n  | 802.11 a/n  | 802.11 a/n/ac   |
| Working Frequency     | 2.402- 2.492GHz<br>(FCC 2.412- 2.462 GHz)   | 2.402- 2.492GHz<br>(FCC 2.412- 2.462 GHz)   | 5.150- 5.850 GHz<br>(FCC 5.150- 5.250 and 5.725- 5.850 GHz)                         | 5.150- 5.850 GHz<br>(FCC 5.150- 5.250 and 5.725- 5.850 GHz)                         | 5.150- 5.850 GHz<br>(FCC 5.150- 5.250 and 5.725- 5.850 GHz)                         |
| Wireless Speed        | 300Mbps   | 300Mbps   | 300Mbps   | 300Mbps   | 867Mbps   |
| Transmission Distance | 0-3km   | 0-5km   | 0-3km   | 0-5km   | 0-3km   |
| Antenna Gain          | 9dBi  | 14dBi   | 15dBi   | 20dBi   | 15dBi   |
| Polarization          | Dual Linear:<br>Horizontal 60°, vertical 60°                                      | Dual Linear:<br>Horizontal 34°, vertical 36°                                      | Dual Linear:<br>Horizontal 30°, vertical 30°  | Dual Linear:<br>Horizontal 10°, vertical 10°  | Dual Linear:<br>Horizontal 30°, vertical 30°  |
| Tx Power Max          | 31dBm   | 31dBm   | 29dBm   | 29dBm   | 30dBm   |
| Proprietary Protocol  | TDMA  | TDMA  | TDMA  | TDMA  | TDMA  |
| Network Security      | WPA/WPA2 Personal, WPA/WPA2 Enterprise, WACL, User Isolation                      | WPA/WPA2 Personal, WPA/WPA2 Enterprise, WACL, User Isolation                      | WPA/WPA2 Personal, WPA/WPA2 Enterprise, WACL, User Isolation                        | WPA/WPA2 Personal, WPA/WPA2 Enterprise, WACL, User Isolation                        | WPA/WPA2 Personal, WPA/WPA2 Enterprise, WACL, User Isolation                        |
| Management            | Web/WNMS Platform   | Web/WNMS Platform   | Web/WNMS Platform   | Web/WNMS Platform   | Web/WNMS Platform   |
| Lightning Protection  | Common Mode 3KV<br>Differential Mode 1KV  | Common Mode 3KV<br>Differential Mode 1KV  | Common Mode 3KV<br>Differential Mode 1KV  | Common Mode 3KV<br>Differential Mode 1KV  | Common Mode 3KV<br>Differential Mode 1KV  |
| Ingress Protection    | IP66  | IP66  | IP66  | IP66  | IP66  |
| Working Temperature   | -30°C ~ + 70°C<br>(-22°F ~ +158°F)  | -30°C ~ + 70°C<br>(-22°F ~ +158°F)  | -30°C ~ + 70°C<br>(-22°F ~ +158°F)  | -30°C ~ + 70°C<br>(-22°F ~ +158°F)  | -30°C ~ + 70°C<br>(-22°F ~ +158°F)  |
| Dimension             | 145 mmx116mmx58mm<br>(5.7"x4.6"x2.3")   | 185mmx185mmx81mm<br>(7.3"x7.3"x3.2")  | 128 mmx97mmx40mm<br>(5.0"x3.8"x1.6")  | 185mmx185mmx81mm<br>(7.3"x7.3"x3.2")  | 128 mmx97mmx40mm<br>(5.0"x3.8"x1.6")  |
| Power                 | 12- 24 VDC passive PoE  | 12- 24 VDC passive PoE  | 12- 24 VDC passive PoE  | 12- 24 VDC passive PoE  | 12- 24 VDC passive PoE  |

# TRANSMISSION

## V-Radio Wireless Bridge Series

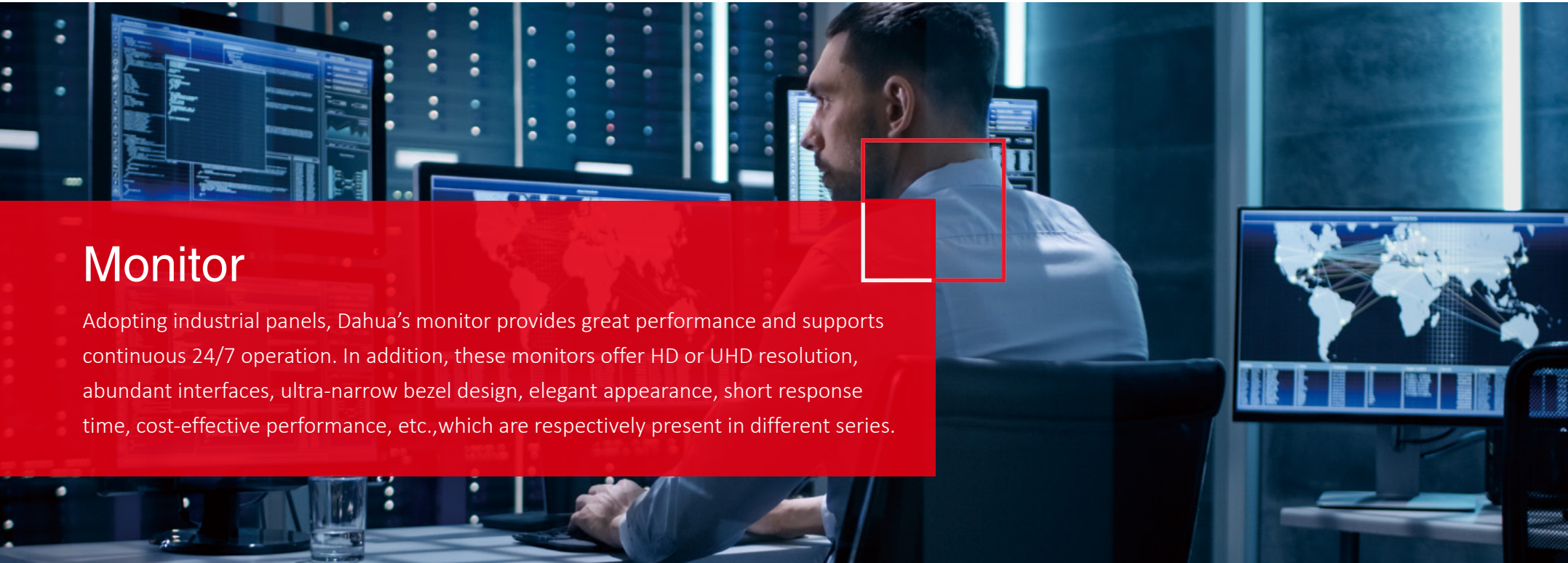
|                       | CPE   |  | Base Station  |   |
|-----------------------|---|--|---|---|
| Model                 | PFWB5-10ac  | PFWB2-90n  | PFWB5-90n   | PFWB5-90ac  |
| Appearance            |  |  |  |  |
| Fast/Gigabit Ethernet | 1GE   | 1FE  | 1FE   | 1GE   |
| Wireless Standard     | 802.11 a/n/ac   | 802.11 b/g/n   | 802.11 a/n  | 802.11 a/n/ac   |
| Working Frequency     | 5.150- 5.850 GHz<br>(FCC 5.150- 5.250 and 5.725- 5.850 GHz)                       | 2.402- 2.492GHz<br>(FCC 2.412- 2.462 GHz)  | 5.150- 5.850 GHz<br>(FCC 5.150- 5.250 and 5.725- 5.850 GHz)                         | 5.150- 5.850 GHz<br>(FCC 5.150- 5.250 and 5.725- 5.850 GHz)                         |
| Wireless Speed        | 867Mbps   | 300Mbps  | 300Mbps   | 867Mbps   |
| Transmission Distance | 0-5km   | 0-5km  | 0-5km   | 0-5km   |
| Antenna Gain          | 20dBi   | 16dBi  | 18dBi   | 18dBi   |
| Polarization          | Dual Linear:<br>Horizontal 10°, vertical 10°                                      | Dual Linear:<br>Horizontal 90°, vertical 90°                                       | Dual Linear:<br>Horizontal 90°, vertical 90°  | Dual Linear:<br>Horizontal 90°, vertical 90°  |
| Tx Power Max          | 30dBm   | 31dBm  | 29dBm   | 30dBm   |
| Proprietary Protocol  | TDMA  | TDMA   | TDMA  | TDMA  |
| Network Security      | WPA/WPA2 Personal,<br>WPA/WPA2 Enterprise, WACL, User Isolation                   | WPA/WPA2 Personal,<br>WPA/WPA2 Enterprise, WACL, User Isolation                    | WPA/WPA2 Personal,<br>WPA/WPA2 Enterprise, WACL, User Isolation                     | WPA/WPA2 Personal,<br>WPA/WPA2 Enterprise, WACL, User Isolation                     |
| Management            | Web/WNMS Platform   | Web/WNMS Platform  | Web/WNMS Platform   | Web/WNMS Platform   |
| Lightning Protection  | Common Mode 3KV<br>Differential Mode 1KV  | Common Mode 3KV<br>Differential Mode 1KV   | Common Mode 3KV<br>Differential Mode 1KV  | Common Mode 3KV<br>Differential Mode 1KV  |
| Ingress Protection    | IP66  | IP66   | IP66  | IP66  |
| Working Temperature   | -30°C ~ + 70°C<br>(-22°F ~ +158°F)  | -30°C ~ + 70°C<br>(-22°F ~ +158°F)   | -30°C ~ + 70°C<br>(-22°F ~ +158°F)  | -30°C ~ + 70°C<br>(-22°F ~ +158°F)  |
| Dimension             | 185mmx185mmx81mm<br>(7.3"x7.3"x3.2")  | 383 mmx100mmx98mm<br>(15.1"x3.9"x3.9")   | 383mmx100mmx98mm<br>(15.1"x3.9"x3.9")   | 383mmx100mmx98mm<br>(15.1"x3.9"x3.9")   |
| Power                 | 12- 24 VDC passive PoE  | 12- 24 VDC passive PoE   | 12- 24 VDC passive PoE  | 12- 24 VDC passive PoE  |

## Accessories

|                        | PoE Midspan   |   |  | PoE Extender  | Ethernet Media Converter  |   |
|------------------------|---|---|--|---|---|---|
| Model                  | PFT1200   | TAM01GT01GT-75  | TAM1GT1GT-30   | PFT1300   | OTE103  | PFS3102-1T  |
| Appearance             |  |  |  |  |  |  |
| Fast/Gigabit Ethernet  | 2GE   | 2GE   | 2GE  | 3FE   | 1FE   | 1GE   |
| SFP Slots              | --  | --  | --   | --  | 1FE FC  | 1GE SFP   |
| Switching Capacity     | --  | --  | --   | 1.4Gbps   | 1.4Gbps   | 6.8Gbps   |
| Packet Forwarding Rate | --  | --  | -  | 0.47Mpps  | 0.3Mpps   | 2.98Mpps  |
| Packet Buffer Memory   | --  | --  | --   | 512Kb   | 512Kb   | 1Mb   |
| MAC Table Size         | --  | --  | --   | 1K  | 1K  | 8K  |
| PoE Standard           | PoE (802.3af),PoE+ (802.3at),Hi-PoE   | PoE (802.3af),PoE+ (802.3at),Hi-PoE   | PoE(802.3af),PoE+(802.3at)   | PoE (802.3af),PoE+ (802.3at)  | --  | --  |
| PoE Budget             | 60W   | 75W   | 30W  | -   | --  | --  |
| Lightning Protection   | Common Mode 4KV<br>Differential Mode 2KV  |   | Common Mode 4KV<br>Differential Mode 2KV   | Common Mode 4KV<br>Differential Mode 2KV  | Common Mode 4KV<br>Differential Mode 2KV  | Common Mode 4KV<br>Differential Mode 2KV  |
| Working Temperature    | -30°C ~ +60°C<br>(-22°F ~ +140°F)   | -30°C ~ +65°C<br>(-22°F ~ +149°F)   | -10°C ~ 55°C<br>(14°F ~ +131°F)  | -30°C ~ +60°C<br>(-22°F ~ +140°F)   | -40°C ~ +75°C<br>(-40°F ~ +167°F)   | -40°C ~ +70°C<br>(-40°F ~ +158°F)   |
| Dimensions(WxDxH)      | 150mm x70mm x39mm<br>(5.9"x2.8"x1.5")   | 210mm x75mm x38.5mm<br>(8.3"x2.9"x1.5")   | 132.3mm x60mm x33mm<br>(5.2"x2.4"x1.3")  | 79mm x52mm x23mm<br>(3.1"x2.0"x0.9")  | 105mm x96mm x30mm<br>(4.1"x3.8"x1.2")   | 150mm x100mm x30mm<br>(5.9"x3.9"x1.2")  |

# DISPLAY & CONTROL





# Monitor

Adopting industrial panels, Dahua's monitor provides great performance and supports continuous 24/7 operation. In addition, these monitors offer HD or UHD resolution, abundant interfaces, ultra-narrow bezel design, elegant appearance, short response time, cost-effective performance, etc., which are respectively present in different series.



## 4K Series

- 3840x2160 Ultra-HD resolution
- 1.07G colors, for a realistic and immersive visual experience








## Light Series

- Lightweight
- Cost-effective



# DISPLAY & CONTROL

## Monitors

| Model               | LM43-F200   | LM32-F200   | DHL22-F600-S  | LM43-S400   | LM27-F410   |
|---------------------|---|---|---|---|---|
| Appearance          |  |  |  |  |  |
| Screen Size         | 42.5" (16:9)  | 31.5" (16:9)  | 21.5" (16:9)  | 43" (16:9)  | 27" (16:9)  |
| Resolution          | 1920x1080   | 1920x1080   | 1920x1080   | 3840x2160   | 3840x2160   |
| Brightness          | 330 cd/m <sup>2</sup>   | 240 cd/m <sup>2</sup>   | 200cd/m <sup>2</sup>  | 450cd/m <sup>2</sup>  | 300cd/m <sup>2</sup>  |
| Contrast Ratio      | 1200:1  | 1400:1  | 1000:1  | 1000:1  | 1000:1  |
| Viewing Angle       | H 178°, V 178°  | H 178°, V 178°  | H 178°, V 178°  | H 178°, V 178°  | H 178°, V 178°  |
| Response Time       | 8ms   | 8ms   | 5ms   | 8ms   | 14ms  |
| Display Color       | 8bit  | 8bit  | 8bit  | 10bit   | 10bit   |
| Input               | 1 VGA, 1 HDMI, 1 USB  | 1 VGA, 1 HDMI, 1 USB  | 1 VGA, 1 HDMI, 1 Audio  | 1 DP, 2 HDMI, 1 VGA, 1 USB, 1 Audio, 1 RJ45(RS232)                                  | 1 DP, 2 HDMI  |
| Output              | 2 Speaks  | 2 Speaks  | 2 Speakers  | 1 RJ45 (RS232), 2 Speakers  | 1 Audio, 2 Speakers   |
| Control             | Physical Button<br>Remote Cotrol  | Physical Button<br>Remote Cotrol  | Physical Button   | RS232, Infrared Remote  | Physical Button   |
| Working Temperature | 0°C~+40°C(+32°F~+104°F)   | 0°C~+40°C(+32°F~+104°F)   | 0°C~+40°C(+32°F~+104°F)   | 0°C~+40°C(+32°F~+104°F)   | 0°C~40°C (+32°F~+104°F)   |
| Working Humidity    | 20%~85%   | 20%~85%   | 10%~85%   | 10%~85%   | 10%~85%   |
| Power & Consumption | AC100~240V, 75W   | AC100~240V, 55W   | AC110~240V, 25W   | AC110~240V, 70W   | DC 12V  |
| Bezel Width         | 12.8mm (U/R/L), 22mm (B)  | 13.9mm (U/R/L), 20.5mm (B)  | 13.5mm (U/R/L), 19mm (B)  | 8mm (U/L/R/B)   | 11.5mm(U/R/L), 17.5mm(B)  |
| VESA                | 400x200mm   | 75x75mm   | 75x75mm   | 400x400mm   | 75x75mm   |
| Dimensions          | 969.1x566.8x82.4mm<br>(38.2"x22.3"x3.2")  | 731.4x432.6x67.5mm<br>(28.8"x17"x2.7")  | 502.8x299.8x47.6mm<br>(19.8"x11.5"x1.9")  | 960.7x550.7x65.0mm<br>(37.8"x21.7"x2.6")  | 622.9x367.3x48mm<br>(24.5"x14.5"x1.9")  |
| Weight              | 7.4kg (16.3lb)  | 3.9kg (8.6lb)   | 3.2kg(7.1lb)  | 16.6kg(36.6lb)  | 5kg (11.0lb)  |

## LCD Video Wall

Provides excellent visual experience with a variety of options for panel size, bezel width, resolution and brightness.

- 24/7
- 3.5mm narrow bezel
- Abundant interfaces with daisy chain function
- Fast response time and no image ghosting
- Fast stacking installation



### LCD Video Wall

| Model               | LS550UCM-EF   | LS490UCM-EF   | LS460UCM-EF   |
|---------------------|---|---|---|
| Appearance          |  |  |  |
| Screen Size         | 55"(16:9)   | 49"(16:9)   | 46"(16:9)   |
| LCD Technology      | ADS   | ADS   | ADS   |
| Resolution          | 1920x1080   | 1920x1080   | 1920x1080   |
| Backlight           | Direct LED  | Direct LED  | Direct LED  |
| Bezel Width         | 2.3mm(U/L), 1.2mm(R/B)  | 2.3mm(U/L), 1.2mm(R/B)  | 2.3mm(U/L), 1.2mm(R/B)  |
| Pixel Density       | 40dpi   | 46dpi   | 48dpi   |
| Brightness          | 500cd/m <sup>2</sup>  | 500cd/m <sup>2</sup>  | 500cd/m <sup>2</sup>  |
| Contrast Ratio      | 1400:1  | 1400:1  | 1200:1  |
| Viewing Angle       | H 178°, V 178°  | H 178°, V 178°  | H 178°, V 178°  |
| Response Time       | 8ms   | 8ms   | 8ms   |
| Display Color       | 8bit  | 8bit  | 8bit  |
| Color Temperature   | 10,000K   | 10,000K   | 10,000K   |
| MTBF                | 50,000h   | 50,000h   | 50,000h   |
| Input               | 1 CVBS, 1 VGA, 1 DVI-D, 1 HDMI, 1 RS232, 2 USB, 1 Audio in, 1 IR                    | 1 CVBS, 1 VGA, 1 DVI-D, 1 HDMI, 1 RS232, 2 USB, 1 Audio in, 1 IR                    | 1 CVBS, 1 VGA, 1 DVI-D, 1 HDMI, 1 RS232, 2 USB, 1 Audio in, 1 IR                    |
| Output              | 1 CVBS, 1 RS232, 2 HDMI, 1 VGA, 1 Audio out   | 1 CVBS, 1 RS232, 2 HDMI, 1 VGA, 1 Audio out   | 1 CVBS, 1 RS232, 2 HDMI, 1 VGA, 1 Audio out   |
| Control             | RS232, Infrared Remote  | RS232, Infrared Remote  | RS232, Infrared Remote  |
| Working Temperature | 0°C~+50°C (+32°F~+122°F)  | 0~+50°C (+32°F~+122°F)  | 0°C~+50°C (+32°F~+122°F)  |
| Working Humidity    | 10%~80%   | 10%~80%   | 10%~80%   |
| Power & Consumption | AC100~240V, 150W  | AC100~240V, 120W  | AC100~240V, 110W  |
| Dimensions          | 1213.7×684.5×106.5mm<br>(47.8"×26.9"×4.2")  | 1078.4×608.4×106.6mm<br>(42.5"×24.0"×4.2")  | 1022.0×576.6×107.3mm<br>(40.2"×22.7"×4.2")  |
| Installation        | Floor-standing, Wall-mounted(Optional)  | Floor-standing, Wall-mounted(Optional)  | Floor-standing, Wall-mounted(Optional)  |

# Decoder

Supports 4K/8K signal decoding and 4K output to ensure an ultra-high definition viewing experience using monitors or video walls.

- Local signal collection
- Flexible image display
- Powerful collection and decoding capability
- Excellent compatibility with devices from top brands



# DISPLAY & CONTROL

## Decoder

| Model                  | NVD0905DH-4I-4K   | NVD0405DH-2I-4K   | NVD0105DH-4K   |
|------------------------|---|---|--|
| Appearance             |  |  |                   |
| Screen Quantity        | 9 Screens   | 4 Screens   | 1 Screen   |
| Splicing Control Modes | Zoom/Merge/Roam/Overlay   | Zoom/Merge/Roam/Overlay   | Zoom/Roam/Overlay  |
| Split Mode             | 1/4/9/16  | 1/4/9/16/25/36  | 1/4/9/16/25/36/64  |
| Max Decoding           | 3CH@32MP(30fps)/<br>9CH@12MP(25fps)/12CH@4K<br>48CH@1080P/108CH@720P/192CH@D1       | 2CH@8K/8CH@4K/36CH@1080P<br>80CH@720P/144CH@D1                                      | 1CH@32MP(30fps)/<br>3CH@12MP(25fps)/4CH@4K/<br>16CH@1080P/36CH@720P/64CH@D1                          |
| Local Video Input      | 2CH HDMI, 2CH DVI-I   | 2CH HDMI  | —  |
| Network Video Input    | IPC/DVR/NVR, etc.   | IPC/DVR/NVR, etc.   | IPC/DVR/NVR, etc.  |
| Video Output           | HDMI(DVI with convertor)  | HDMI/BNC  | HDMI/VGA   |
| Audio Out              | HDMI  | 4HDMI, 2 BNC (Vp-p 1V, 75Ω)   | HDMI   |
| Alarm In/Out           | 4/4, (30VDC 1A, 125VAC 0.5A,<br>Relay output)                                       | 8/8, (30VDC 1A, 125VAC 0.5A,<br>Relay output)                                       | 4/4, (30VDC 1A, 125VAC 0.5A,<br>Relay output)  |
| Intercom               | 1 Pair 3.5mm Jack   | 1 Pair 3.5mm jack   | 1 Pair RCA   |
| Processor              | Intel x86 processor   | Quad-core embedded processor  | Intel x86 processor  |
| Case                   | 1.5U 19"  | 1U 19"  | 1U 19"   |
| Ethernet               | 2 RJ-45 port, (10/100/1000M)  | 1 RJ-45 port, (10/100/1000M)  | 1 RJ-45 port,(10/100/1000M)  |
| USB                    | 1 USB2.0, 1 USB3.0  | 2 USB2.0  | 2 USB2.0   |
| Power                  | AC100~240V, 50Hz~60Hz   | DC12V/5A  | DC12V/3.3A   |
| Control Modes          | WEB/Video Platform/Network keyboard/<br>iPad  | WEB/Local GUI/Video Platform/ Network<br>keyboard/iPad                              | WEB/Local GUI/Video Platform/Network<br>keyboard/iPad  |
| Highlights             | 4K & H.265 & H.265+ decoding, Fisheye<br>dewarp, PC signal collection               | 8K & H.265 & H.265+ decoding, Fisheye<br>dewarp, PC signal collection               | 4K & H.265 & H.265+ decoding, Fisheye<br>dewarp, Supports the display of intelligent<br>regular line |

DISPLAY & CONTROL


## Keyboard

A network keyboard is a control device with joystick that can conveniently control PTZ operation, video wall, etc.

- Powerful control capability
- Easy connection
- Flexible joystick
- Multiple combination key



### Keyboard

|                          |   |
|--------------------------|---|
| Model                    | NKB1000   |
| Appearance               |                                |
| Control Mode(s)          | Direct mode, Network mode, USB mode   |
| Control Interface        | 1 RJ-45 port (10/100/1000M), RS232, RS485, RS422, USB   |
| DVR/NVR Protocol         | DH2   |
| Dome Protocol            | DH-SD1/PELCO-D/PELCO-P, etc.  |
| Max. Users               | 64 (including "admin")  |
| Screen                   | Monochrome LCD screen (128x64)  |
| Local Split Display Mode | —   |
| Video Output             | —   |
| Local Decoding           | —   |
| Intercom                 | —   |
| Joystick                 | 3-axis (zoom, focus, iris)  |
| Main Processor           | Industrial embedded microprocessor  |
| Operating System         | Embedded LINUX  |
| USB                      | 1 USB2.0  |
| Power                    | DC12V/2A  |
| Highlights               | Multi-user access control; Controls DVR, NVR, EVS, Decoder, Matrix; Works with SmartPSS or DSSClient via USB port |

# ACCESSORIES



# Accessories

Accessory products offer a series of supporting equipment for CCTV monitoring devices promoted by Dahua to enhance product integrity and user experience, and supplement the insufficiencies of traditional products and solutions.



## Camera Mount

Provides a series of solutions for the installation of cameras.



## Power Supply

Provides different power supply type for devices with different specifications.



## Audio




Collects live sound signals for the camera.






## Cabling

Provides different cable products to meet the transmission requirements of different equipment.

# ACCESSORIES

| HFWxxT/T1 Series  |   |   | HFWxxS,HFWXXE-AS/SA Series   |   |   | HFWxxM Series   |   |   |   |
|---|---|---|--|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |  |
| <b>Model</b>  | PFA130-E  | PFA130-E+PFA152-E   | <b>Model</b>   | PFA134  | PFA134+PFA152-E   | <b>Model</b>  | PFB110W   | PFB110C-E   | PFB121W   |
| <b>Mount</b>  | Junction box  | Pole mount  | <b>Mount</b>   | Junction box  | Pole mount  | <b>Mount</b>  | Ceiling mount   | Ceiling mount (extensible)  | Wall mount  |

| HDBWxxR Series  |   |   |  |   |   |   |  |
|---|---|---|--|---|---|---|--|
|  |  |  |  |  |  |  |  |
| <b>Model</b>  | PFA137  | PFB203W   | PFB203W+PFA152-E   | PFA106+PFB220C  | PFB200C   | PFA137+PFA200W  |  |
| <b>Mount</b>  | Junction box  | Wall mount  | Pole mount   | Ceiling mount (extensible)  | In-ceiling mount  | Rain shade  |  |

| TPC-BF2xx-T Series   |   |   |
|--|---|---|
|  |  |  |
| <b>Model</b>   | PFA121  | PFA121+PFA152-E   |
| <b>Mount</b>   | Junction box  | Pole mount  |

| HDBWxxE-S/AS Series   |   |   |   |   |
|---|---|---|---|---|
|  |  |  |  |  |
| <b>Model</b>  | PFA136  | PFB203W   | PFB203W+PFA152-E  | PFA136+PFA200W  |
| <b>Mount</b>  | Junction box  | Wall mount  | Pole mount  | Rain shade  |

| HDBWxxF Series  |   |   |   |
|---|---|---|---|
|  |  |  |  |
| <b>Model</b>  | PFA139  | PFB204W   | PFB204W+PFA152-E  |
| <b>Mount</b>  | Junction box  | Wall mount  | Pole mount  |

| HDWxxT-ZS/AS/ZAS, HDWxxH, HDW2/3xxTM,TPC-DF1xx Series                                |   |   |   |   |
|--|---|---|---|---|
|  |  |  |  |  |
| <b>Model</b>   | PFA137  | PFB203W   | PFB203W+PFA152-E  | PFA106+PFB220C  |
| <b>Mount</b>   | Junction box  | Wall mount  | Pole mount  | Ceiling mount   |

# ACCESSORIES

| HDW2/3xxEM Series   |   |  |   |   |
|---|---|--|---|---|
|  |  |  |  |  |
| Model   | PFA130-E  | PFB204W  | PFB203W+PFA152-E  | PFA106+PFB220C  |
| Mount   | Junction box  | Wall mount   | Pole mount  | Ceiling mount (extensible)  |

| SD6CE/5A/49xx Series  |   |   |  |   |   |   |   |   |
|---|---|---|--|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |
| Model   | PFB305W   | PFB310W   | PFB305W+PFA120   | PFA111+PFB300C  | PFA150  | PFA151  | PFA140  | PFA111+PFB303S  |
| Mount   | Wall mount  |   | Junction box   | Ceiling mount   | Pole mount  | Corner mount  | Power box   | Parapet mount   |

| SD60/TPC-SD8xx Series  |   |   |  |  |   |  |  |  |
|--|---|---|--|--|---|--|--|--|
|  |  |  |  |  |  |  |  |  |
| Model  | PFA111+PFB303W  | PFB310W   | PFA111+PFB303W+PFA120  | PFA111+PFB300C   | PFA150  | PFA151   | PFA140   | PFA111+PFB303S   |
| Mount  | Wall mount  |   | Junction box   | Ceiling mount  | Pole mount  | Corner mount   | Power box  | Parapet mount  |

| SD59/50/40xx Series   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| Model   | PFA110+PFB300S  | PFA110+PFB300S+PFA120   | PFA110+PFB300C  | PFA150  | PFA151  | PFA140  | PFA110+PFB303S  |
| Mount   | Wall mount  | Junction box  | Ceiling mount   | Pole mount  | Corner mount  | Power box   | Parapet mount   |



# ACCESSORIES

| SD42xx Series   |   |  |  |  |   |  |   |  |
|---|---|--|--|--|---|--|---|--|
|  |  |  |  |  |  |  |  |  |
| <b>Model</b>  | PFA102+PFB302S  |  | PFA102+PFB302S+PFA150  |  | PFA102+PFB302S+PFA151   |  | PFA102+PFB300C  |  |
| <b>Mount</b>  | Wall mount  |  | Pole mount   |  | Corner mount  |  | Ceiling mount   |  |

| SD29xx Series   |   |  |  |  |   |  |   |  |
|---|---|--|--|--|---|--|---|--|
|   |  |  |  |  |  |  |  |  |
| <b>Model</b>  | PFA103+PFB302S  |  | PFA103+PFB302S+PFA150  |  | PFA103+PFB302S+PFA151   |  | PFA103+PFB300C  |  |
| <b>Mount</b>  | Wall mount  |  | Pole mount   |  | Corner mount  |  | Ceiling mount   |  |

| SD22xx Series  |   |   |   |  | SD1A/12 Series  |  |   |   |  |
|--|---|---|---|--|---|--|---|---|--|
|  |  |  |  |  |  |  |  |  |  |
| <b>Model</b>   | PFA137  | PFB203W   | PFB203W+PFA152-E  |  | PFB200C   | <b>Model</b>   | PFA13F  | PFA107+PFB305W  | PFA107+PFB220C   |
| <b>Mount</b>   | Junction box  | Wall mount  | Pole mount  |  | In-ceiling mount  | <b>Mount</b>   | Junction box  | Wall mount  | Ceiling mount (extensible)   |

| TPC-SD2xx Series  |   |  |   |  |  |   |   |   |   |   |
|---|---|--|---|--|--|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |  |  |
| <b>Model</b>  | PFA111+PFB303W  |  | PFB305W   | PFA111+PFB303W+PFA120  |  | PFA111+PFB300C  | PFA150  | PFA151  | PFA140  | PFA111+PFB303S  |
| <b>Mount</b>  | Wall mount  |  | Wall mount  | Junction box   |  | Ceiling mount   | Pole mount  | Corner mount  | Power box   | Parapet mount   |

## Housings

Provides a multi-functional shield for the box camera.

- Aesthetic design
- All weather protection, suitable for different scenes
- IP66/67, IK10 ingress protection
- Supports remote RS485 control of IR lights and wiper function



## Housings

| Model                 | PFH610N-IR-W  | PFH610V   | PFH610V-H  | PFH610V-H-POE  |
|-----------------------|---|---|--|--|
| Appearance            |    |  |   |   |
| Inside Dimension      | 255mmx90mmx70.5mm<br>(10.04"x3.54"x2.78")<br>215mmx90mmx83mm<br>(8.46"x3.54"x3.27")   | 255x90x83mm<br>(10.04"x3.54"x3.27")   | 255x90x70.5mm<br>(10.04"x3.54"x2.78")<br>215x90x83mm<br>(8.46"x3.54"x3.27")  | 255x90x70.5mm<br>(10.04"x3.54"x2.78")<br>215x90x83mm(8.46"x3.54"x3.27")  |
| Window Dimension      | φ60mm (φ2.36")  | φ60mm (φ2.36")  | φ60mm (φ2.36")   | φ60mm (φ2.36")   |
| Wiper                 | Supported   | --  | --   | --   |
| Vandal-proof          | --  | Supported   | Supported  | Supported  |
| Anti-corrosion        | --  | --  | --   | --   |
| Compatibility         | HFxxE, HFxxF  | HFxxE, HFxxF  | HFxxE, HFxxF   | HFxxE, HFxxF   |
| IR Distance           | 0~100m (0~328.08ft)   | --  | --   | --   |
| RS485 Control         | Use RS485 to control IR light & wiper   | --  | --   | --   |
| Power Supply          | AC24V/5A  | DC12V, AC24V  | AC24V/3A   | POE+   |
| Power Consumption     | Max. 70W  | --  | 30W  | 12W  |
| Operating Temperature | Set:<br>-40°C~+60°C (-40°F~+140°F)<br>Heater:<br>ON: 5±5 °C/OFF: 15±5 °C<br>Cooler:<br>ON: 37±5°C/OFF: 20±5°C<br>ON: 5±5 °C/OFF: 15±5°C | Set:<br>-30°C~+60°C (-22°F~+140°F)<br>Heater:<br>N/A<br>Cooler:<br>N/A              | Set:<br>-40°C~+60°C (-40°F~+140°F)<br>Heater:<br>ON: 5±5 °C/OFF: 15±5 °C<br>Cooler:<br>ON: 37±5 °C/OFF: 20±5 °C<br>ON: 5±5 °C/OFF: 15±5 °C | Set:<br>-40°C~+60°C (-40°F~+140°F)<br>Heater:<br>ON: 5±5 °C/OFF: 15±5 °C<br>Cooler:<br>ON: 37±5 °C/OFF: 20±5 °C<br>ON: 5±5 °C/OFF: 15±5 °C |
| Ingress Protection    | IP66  | IP67  | IP67   | IP67   |
| Vandal Resistance     | --  | IK10  | IK10   | IK10   |
| Material              | Aluminum (case) &PC (others)  | Aluminum (case) &PC (others)  | Aluminum (case) &PC (others)   | Aluminum (case) &PC (others)   |
| Dimension (LxWxH)     | 404mmx164mmx175mm<br>(15.91"x6.46"x6.89")   | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")  | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")   | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")   |
| Certification         | CE, FCC, ICES   | CE, FCC, ICES   | CE, FCC, UL, EAC, ICES   | CE, FCC  |

# ACCESSORIES

## Housings

| Model                 | PFH610V-IR  | PFH610V-IR-POE  | PFH610A  | PFH610A-H  | PFH610A-H-POE   | PFH610A-IR   | PFH610A-IR-POE   |
|-----------------------|---|---|--|--|---|--|--|
| Appearance            |    |    |  |   |    |   |   |
| Inside Dimension      | 255x90x70.5mm<br>(10.04"x3.54"x2.78")<br>215x90x83mm<br>(8.46"x3.54"x3.27")   | 255x90x70.5mm<br>(10.04"x3.54"x2.78")<br>215x90x83mm<br>(8.46"x3.54"x3.27")   | 255x90x83mm<br>(10.04"x3.54"x3.27")  | 255x90x70.5mm<br>(10.04"x3.54"x2.78")<br>215x90x83mm<br>(8.46"x3.54"x3.27")  | 255x90x70.5mm<br>(10.04"x3.54"x2.78")<br>215x90x83mm<br>(8.46"x3.54"x3.27")   | 255x90x70.5mm<br>(10.04"x3.54"x2.78")<br>215x90x83mm<br>(8.46"x3.54"x3.27")  | 255x90x70.5mm<br>(10.04"x3.54"x2.78")<br>215x90x83mm<br>(8.46"x3.54"x3.27")  |
| Window Dimension      | φ60mm (φ2.36")  | φ60mm (φ2.36")  | φ60mm (φ2.36")   | φ60mm (φ2.36")   | φ60mm (φ2.36")  | φ60mm (φ2.36")   | φ60mm (φ2.36")   |
| Wiper                 | --  | --  | --   | --   | --  | --   | --   |
| Vandal-proof          | Supported   | Supported   | --   | --   | --  | --   | --   |
| Anti-corrosion        | --  | --  | Supported  | Supported  | Supported   | Supported  | Supported  |
| Compatibility         | HFxxE, HFxxF  | HFxxE, HFxxF  | HFxxE, HFxxF   | HFxxE, HFxxF   | HFxxE, HFxxF  | HFxxE, HFxxF   | HFxxE, HFxxF   |
| IR Distance           | 0~100m (0~328.08ft)   | 0~100m (0~328.08ft)   | --   | --   | --  | 0~100m(0~328.08ft)   | 0~100m(0~328.08ft)   |
| RS485 Control         | Use RS484 to control IR light   | Use RS484 to control IR light   | --   | --   | --  | --   | --   |
| Power Supply          | AC24V/5A  | POE+  | DC12V, AC24V   | AC24V/3A   | POE+  | AC24V/5A,  | POE+   |
| Power Consumption     | 55W   | 12.5W   | N/A  | 30W  | 12W   | 55W  | 12.5W  |
| Operating Temperature | Set:<br>-40°C ~+60°C* (-40°F~+140°F)<br>Heater:<br>ON: 5±5°C /OFF: 15±5°C<br>Cooler:<br>ON: 37±5°C /OFF: 20±5°C<br>ON: 5±5°C /OFF: 15±5°C | Set:<br>-40°C ~+60°C (-40°F~+140°F)<br>Heater:<br>ON: <+5°C(+41°C)<br>OFF: ≥+5°C(+41°C)<br>Cooler: ON: ≥37°C(98.6°C)/<br>OFF: <20°C(68°C) | Set:<br>-30°C ~+60°C (-22°F~+140°F)<br>Heater:<br>ON: N/A<br>Cooler:<br>ON: N/A    | Set:<br>-40°C ~+60°C (-40°F~+140°F)<br>Heater:<br>ON: ON: 5±5°C /OFF: 15±5°C<br>Cooler:<br>ON: 37±5°C /OFF: 20±5°C<br>ON: 5±5°C /OFF: 15±5°C | Set:<br>-40°C ~+60°C (-40°F~+140°F)<br>Heater:<br>ON:5±5°C /OFF: 15±5°C<br>Cooler:<br>ON: 37±5°C /OFF: 20±5°C<br>ON: 5±5°C /OFF: 15±5°C | Set:<br>-40°C ~+60°C (-40°F~+140°F)<br>Heater:<br>ON: 5±5°C /OFF: 15±5°C<br>Cooler:<br>ON: 37±5°C /OFF: 20±5°C<br>ON: 5±5°C /OFF: 15±5°C | Set:<br>-40°C ~+60°C (-40°F~+140°F)<br>Heater:<br>ON: <+5°C (+41°C)<br>OFF: +5°C (+41°C)<br>Cooler:<br>ON: ≥37°C (98.6°C)<br>OFF: <20°C (68°C) |
| Ingress Protection    | IP67  | IP67  | IP67   | IP67   | IP67  | IP67   | IP67   |
| Vandal Resistance     | IK10  | IK10  | IK10   | IK10   | IK10  | IK10   | IK10   |
| Material              | Aluminum (case) &PC (others)  | Aluminum (case) &PC (others)  | Aluminum (case) &PC (others)   | Aluminum (case) &PC (others)   | Aluminum (case) &PC (others)  | Aluminum (case) &PC (others)   | Aluminum (case) &PC (others)   |
| Dimension (LxWxH)     | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")  | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")  | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")   | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")   | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")  | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")   | 404mmx164mmx132mm<br>(15.91"x6.46"x5.2")   |
| Certification         | CE, FCC, UL, EAC, ICES  | CE, FCC, ICES   | CE, FCC, ICES  | CE, FCC, UL, EAC, ICES   | CE, FCC   | CE, FCC, UL, EAC, ICEzS  | CE, FCC, ICES  |

## Lens

A wide range of multi-functional lenses for the box camera.

- Super edge resolution
- Great highlight performance
- Outstanding starlight technology
- Better temperature performance



| Lens                  |   |   |   |   |   |
|-----------------------|---|---|---|---|---|
| Model                 | PFL2712-E6D   | PFL0550-E6D   | PLZ20C0-D   | PLZ21C0-D   | PFL1575-A12D  |
| Appearance            |  |  |  |  |  |
| Image Format          | 1/2.7"  | 1/2.7"  | 1/1.7"  | 1/1.7"  | 1/1.7"  |
| Focal Length          | 2.7-12mm  | 5-50mm  | 3.7-16mm  | 10.5-42mm   | 15-75mm   |
| Lens Pixel            | 6MP   | 6MP   | 12MP  | 12MP  | 12MP  |
| Aperture              | F1.6  | F1.6  | F1.5  | F1.5  | F1.5  |
| Mount                 | CS  | CS  | CS  | CS  | C   |
| Focus Control         | Manual  | Manual  | Manual  | Manual  | Manual  |
| Zoom Control          | Manual  | Manual  | Manual  | Manual  | Manual  |
| Iris Control          | DC-iris   | DC-iris   | DC-iris   | DC-iris   | DC-iris   |
| IR Correction         | Supported(420~850nm)  | Supported   | Supported   | Supported   | Supported   |
| M.O.D.                | 0.3m (0.98ft)   | 0.5m (1.64ft)   | 0.5m (1.64ft)   | 0.3m (0.98ft)   | 1.5m (4.92ft)   |
| Operating Temperature | -30°C~+70°C<br>(-22°F~+158°F)   | -30°C~+70°C<br>(-22°F~+158°F)   | -30°C~+70°C<br>(-22°F~+158°F)   | -30°C~+70°C<br>(-22°F~+158°F)   | -30°C~+70°C<br>(-22°F~+158°F)   |

| Lens                  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|
| Model                 | PLZ20C0-P  | PLZ21C0-P  | PFL2070-J12M   | PFL1040-K9PE   | PFL1040-K9M  |
| Appearance            |  |  |  |  |  |
| Image Format          | 1/1.7"   | 1/1.7"   | 4/3"   | 1"   | 1"   |
| Focal Length          | 3.7-16mm   | 10.5-42mm  | 20-70mm  | 10-40mm  | 10-40mm  |
| Lens Pixel            | 12MP   | 12MP   | 12MP   | 9MP  | 9MP  |
| Aperture              | F1.5   | F1.5   | F1.5   | F1.5   | F1.5   |
| Mount                 | CS   | CS   | M43  | C  | C  |
| Focus Control         | Manual   | Manual   | Manual   | Motorized  | Manual   |
| Zoom Control          | Manual   | Manual   | Manual   | Motorized  | Manual   |
| Iris Control          | P-iris   | P-iris   | Manual   | P-Iris   | Manual   |
| IR Correction         | Supported  | Supported  | --   | --   | --   |
| M.O.D.                | 0.5m (1.64ft)  | 0.3m (0.98ft)  | 3m (9.84ft)  | 2.5m (8.2ft)   | 2.5m (8.2ft)   |
| Operating Temperature | -30°C~+70°C<br>(-22°F~+158°F)  | -30°C~+70°C<br>(-22°F~+158°F)  | -30°C~+70°C<br>(-22°F~+158°F)  | -30°C~+70°C<br>(-22°F~+158°F)  | -30°C~+70°C<br>(-22°F~+158°F)  |


# Power Supply

Safe and reliable power supply for our products.


- DC power adapter: Wide temperature operation from -30°C~+70°C and lightning protection up to 4KV
- Distributed Power: wall mount, convenient for powering multiple devices
- Switch power: High quality and reliability, widely used, flexible
- UPS: Temporary power discharge equipment between utility and equipment

# ACCESSORIES

## DC Power Adapter

| Model               | PFM321D-EN/BS/US  | PFM320D-EN/BS/US  | PFM321-EN/BS/US   | PFM320D-015   | PFM300  |
|---------------------|---|---|---|---|---|
| Appearance          |  |  |  |  |  |
| Input               | 100~240V, 50/60Hz, 0.5A   | 100~240V, 50/60Hz, 0.6A   | 90~264V   | AC100~240V, 50/60Hz, 0.6A   | AC180~264V, 50/60Hz, 0.6A   |
| Output              | 12V(+7%, -3%), 1A<br>-30°C~+70°C  | 12V(+7%, -3%), 2A<br>-30°C~+70°C  | 12V(+7%, -3%), 1A<br>-10°C~+55°C  | DC12V (+7%, -3%), 1.5A<br>-30°C~+70°C   | DC12V (±5%), 2A<br>-30°C~+70°C  |
| Working Temperature | (-22°F~+158°F)<br>Common Mode ±4KV<br>(12 ohms)                                     | (-22°F~+158°F)<br>Common Mode ±4KV<br>(12 ohms)                                     | (+14°F~+131°F)<br>Common Mode ±4KV<br>(12 ohms)                                     | (-22°F~+158°F)<br>Common Mode ±4KV<br>(12 ohms)                                     | (-22°F~+158°F)<br>Common Mode ±4KV<br>(12 ohms)                                     |
| Surge Protection    | Differential Mode ±2kV<br>(2 ohms)  | Differential Mode ±2kV<br>(2 ohms)  | Differential Mode ±2kV<br>(2 ohms)  | Differential Mode ±2kV<br>(2 ohms)  | Differential Mode ±2kV<br>(2 ohms)  |

## Distributed Power Box

| Model               | PFM340-5CH  | PFM341-9CH  | PFM342-9CH  | PFM343-19CH   |
|---------------------|---|---|---|---|
| Appearance          |  |  |  |  |
| Input               | AC90~264V   | AC90~264V   | AC90~264V   | AC90~264V   |
| Output              | 5 x 12VDC (-3%~+7%), 4A   | 9 x 12VDC (-3%~+7%), 5A   | 9 x 12VDC (-3%~+7%), 10A  | 19 x 12VDC (-3%~+7%), 20A   |
| Working Temperature | -20°C~+45°C<br>(-4°F~+113°F)  | -20°C~+45°C<br>(-4°F~+113°F)  | -20°C~+45°C<br>(-4°F~+113°F)  | -20°C~+45°C<br>(-4°F~+113°F)  |
| Surge Protection    | Line to ground: 4000V<br>Line to line: 2000V  | Line to ground: 4000V<br>Line to line: 2000V  | Line to ground: 4000V<br>Line to line: 2000V  | Line to ground: 4000V<br>Line to line: 2000V  |

## Switching Power&UPS

| Model                  | PFM320S-150   | PFM320S-50  | PFM350-360  | PFM350-900  | PFM351-900  |
|------------------------|---|---|---|---|---|
| Appearance             |  |  |  |  |  |
| Input                  | 88~132Vac/176~264Vac  | 90~264Vac   | 600VA/360W  | 1500VA/900W   | 1000VA/900W   |
| Output                 | 12Vdc, 12.5A  | 12Vdc, 4.2A   | 220Vac~240Vac<br>(US 110Vac~120Vac)   | 220Vac~240Vac<br>(US 110Vac~120Vac)   | 220Vac~240Vac<br>(US 110Vac~120Vac)   |
| Working Temperature    | 20°C~+50°C<br>(60% output at +70°C)   | -20°C~+50°C<br>(60% output at +70°C)  | 50Hz or 60Hz  | 50Hz or 60Hz  | 40Hz~70Hz   |
| Surge Protection       | Line to ground: ±2000V<br>Line to line: ±1000V  | Line to ground: ±2000V<br>Line to line: ±1000V  | 220/230/240 VAC<br>(US 110/120 VAC)   | 220/230/240 VAC<br>(US 110/120 VAC)   | 200/208/220/230/240 VAC<br>(US 100/110/115/120/127 VAC)                               |
| Output Rated Frequency | --  | --  | 50Hz or 60Hz ±1Hz   | 50Hz or 60Hz ±1Hz   | 50Hz or 60Hz  |
| Operating Temperature  | --  | --  | 0°C ~ +40°C<br>(+32°F ~ +104°F)   | 0°C ~ +40°C<br>(+32°F ~ +104°F)   | 0°C ~ +40°C<br>(+32°F ~ +104°F)   |

## Pickups

Choose from a variety of pickup products to effectively capture live sounds.

- High-sensitivity microphone
- Intelligent noise reduction
- Smart audio crack protection
- Wide dynamic range processing technology
- Automatic supplement function



### Pickups

| Model                           | HAP100  | HAP201  | HAP301  | HAP120  |
|---------------------------------|---|---|---|---|
| Appearance                      |  |  |  |  |
| Scope                           | 5-40m <sup>2</sup>  | 1-150m <sup>2</sup>   | 1-150m <sup>2</sup>   | 10-70m <sup>2</sup>   |
| Sensitivity                     | -40dB   | -38 dB  | -38 dB  | -34dB   |
| Frequency response              | 20Hz~20kHz  | 20 Hz~20 kHz  | 20 Hz~20 kHz  | 80Hz~16kHz  |
| Directional characteristic      | Omni-directional  | Omni-directional  | Omni-directional  | Omni-directional  |
| SNR                             | 70dB  | 85 dB   | 85 dB   | 58dB  |
| Dynamic range                   | 104dB   | 106 dB  | 106 dB  | 74dB  |
| Max. sustainable sound pressure | 120dB SPL(1kHz, THD 1%)   | 120 dB SPL (1 kHz,THD 1%)   | 120 dB SPL (1 kHz,THD 1%)   | 110dB SPL (1kHz, THD 1%)  |
| Output impedance                | 600Ω (non-equilibrium)  | 25 Ω non-balanced   | 25 Ω non-balanced   | 600Ω (non-equilibrium)  |
| Output signal amplitude         | 2.5Vpp/-25dB  | 2.5 VPP/-25 dB  | 2.5 VPP/-25 Db  | 2.5Vpp/88dB SPL   |
| M.O.D.                          | 0.3m (0.98ft)   | 0.5m (1.64ft)   | 0.5m (1.64ft)   | 0.3m (0.98ft)   |
| Working temperature             | -30°C ~ +70°C<br>(-22°F ~+158°F)  | -20 °C ~ +60 °C<br>(-4 °F ~+140 °F)   | -20°C ~ +60°C<br>(-4 °F ~+140 °F)   | -30°C ~+70°C<br>(-22°F ~+158°F)   |

### Pickups

| Model                           | HAP320   | HAP120-V   | HAP320-V   |
|---------------------------------|--|--|--|
| Appearance                      |  |  |  |
| Scope                           | 10-150m <sup>2</sup>   | 5m   | 5-100m <sup>2</sup>  |
| Sensitivity                     | -35dB  | -43dB  | -24dB  |
| Frequency response              | 20Hz~20kHz   | 20Hz~20kHz   | 20Hz~20kHz   |
| Directional characteristic      | Omni-directional   | Omni-directional   | Omni-directional   |
| SNR                             | 65dB   | 58dB   | 68dB   |
| Dynamic range                   | 86dB   | 74dB   | 84dB   |
| Max. sustainable sound pressure | 115dB SPL (1kHz, THD 1%)   | 110dB SPL (1kHz, THD1%)  | 110dB SPL (1kHz, THD 1%)   |
| Output impedance                | 100Ω (non-equilibrium)   | 100Ω (non-equilibrium)   | 100Ω (non-equilibrium)   |
| Output signal amplitude         | 2.5Vpp/92dB SPL  | 2.5Vpp/101dB SPL   | 2.5Vpp/90dB SPL  |
| M.O.D.                          | 0.3m (0.98ft)  | 0.5m (1.64ft)  | 0.5m (1.64ft)  |
| Working temperature             | 0°C~+50°C (32°F~+122°F)  | -30°C~+70°C (-22°F~+158°F)   | -30°C~+70°C (-22°F~+158°F)   |

# Camera Testers

It allows easier testing of cameras that only requires a single person to operate, saving significant amount of time and labor costs.

- Camera video testers
- Small tools: DMM/Wfif test/OPM/Data monitor
- Cable tester: TDR/ Analog video generator
- Power supply: PoE+/ DC12V2A/ USB5V2A output



# ACCESSORIES

## Camera Testers

| Model               | PFM900-E  | PFM906  | PFM907   |
|---------------------|---|---|--|
| Appearance          |                |                |                       |
| Operation System    | Linux   | Android   | Linux  |
| Language            | Multi-language interface  | Multi-language interface  | Multi-language interface   |
| Operation Mode      | Keyboard  | Touch screen and keyboard   | Touch screen and keyboard  |
| Screen              | 4.0" TFT screen, 800 x 480 resolution   | 7 inch capacitive touch screen display, 1920x1200 resolution                                      | 7 inch capacitive touch screen display, 1920x1200 resolution   |
| Update              | Online and local update   | Online and local update   | Online and local update  |
| Analog Video Test   | HDCVI: 2MP, 4MP, 5MP, 6MP, 4K<br>HDTVI: 2MP, 4MP, 5MP<br>AHD: 2MP, 4MP<br>CVBS: NTSC, PAL         | HDCVI: 1MP, 2MP, 4MP, 4K<br>HDTVI: 1MP, 2MP, 4MP, 5MP<br>AHD: 1MP, 2MP, 4MP<br>CVBS: NTSC, PAL    | HDCVI: 1MP, 2MP, 4MP, 5MP, 6MP, 4K<br>HDTVI: 1MP, 2MP, 4MP, 5MP<br>AHD: 1MP, 2MP, 4MP<br>CVBS: NTSC, PAL |
| IPC Test            | Discovering the device, real-time video, camera configuration, PTZ test, discovering ONFIV device | Discovering the device, real-time video, camera configuration, PTZ test, discovering ONFIV device | Discovering the device, real-time video, camera configuration, PTZ test, discovering ONFIV device        |
| Camera Power Supply | DC12V/2A output   | DC48V PoE+ power out, Max. DC12V 2A out, Max. DC5V 2A out   | DC12V/2A output  |
| RS485               | Receive and display protocol data with a RS485 cable  | Captures and analyzes the command data from controlling device via RS485                          | Captures and analyzes the command data from controlling device via RS485                                 |
| PTZ Control test    | OSD menu display and PTZ control  | OSD menu display and PTZ control  | OSD menu display and PTZ control   |
| Accessibility       | Audio Test, TDR Test, Digital Multimeter, POE Test  | Audio Test, TDR Test, Digital Multimeter, Optical Power Meter, HDMI Output, POE Test              | Audio Test, TDR Test, Digital Multimeter, Optical Power Meter, HDMI Output, POE Test, WiFi Test          |
| Charger             | PoE 48V/0.32A   | DC 12V/2A   | DC 12V/1.5A  |
| Working Temperature | -10°C~+55°C (+14°F~+131°F)  | -10°C~+55°C (+14°F~+131°F)  | -10°C~+55°C (+14°F~+131°F)   |



## Video Extension

Allows video signal extension and branching.

- Real-time transmission of HDMI signals
- Real-time transmission of VGA signal
- No need to install drivers
- Excellent anti-thunder, anti-static and anti-interference capabilities



### Video Extension

| Model                        | PFM700-E  | PFM701-4K   | PFM710  |
|------------------------------|---|---|---|
| Appearance                   |  |  |  |
| Transmission Signal          | 1channel HDMI   | 1channel HDMI ~ 2 channel HDMI  | 1channel VGA  |
| Transmission Distance        | 50m   | --  | 35m   |
| Video Signal Input Interface | HDMI interface  | HDMI interface  | Female 15, VGA port   |
| Video Input Port             | HDMI interface  | HDMI interface  | Female 15, VGA port   |
| Transmission Port            | RJ45 port   | --  | RJ45 port   |
| Resolution                   | 1080P/1080I/720P/576P/<br>576I/480P/480I  | 4K/1080P/1080I/720P/576P/<br>576I/480P/480I   | 640*480/800*600/1600*1050/<br>1600*1200/1920*1200/1920*1080                         |
| Working Temperature          | -10°C~55°C (14°F~131°F)   | -10°C~55°C (14°F~131°F)   | 0°C~+55°C (+32°F~+131°F)  |



# Cables

New network cables with higher quality and higher cost-performance ratio.

- 305m/carton UTP CAT5e, Power over Ethernet compatible with one cable
- High-purity and oxygen-free copper conductor material
- Customized PVC sheath, CE CPR Eca or ANSI UL CM flame retardant class certified
- Top-notch quality commitment for 10 years



# ACCESSORIES

## Cables

| Model              | PFM920I-5EUN                       | PFM920I-6UN-C                      | PFM922I-6UN-C              | PFM923I-6UN-C                      |
|--------------------|------------------------------------|------------------------------------|----------------------------|------------------------------------|
| Appearance         |                                    |                                    |                            |                                    |
| Category           | CAT5e                              | CAT6                               | CAT6                       | CAT6                               |
| Conductor Material | Oxygen free copper (99.97% purity) | Oxygen free copper (99.97% purity) | CCA(Copper content 8%~12%) | Oxygen free copper (99.97% purity) |
| Conductor Diameter | 0.45 mm ± 0.01 mm                  | 0.53 mm ± 0.005 mm                 | 0.57 mm ± 0.01 mm, 23AWG   | 0.53 mm ± 0.005 mm                 |
| Sheath             | PVC                                | PVC                                | PVC                        | LSZH                               |
| Certification      | CPR Eca                            | CPR Eca                            | CPR Eca                    | CPR Eca                            |
| Length             | 305m (1000ft)                      | 305m (1000ft)                      | 305m (1000ft)              | 305m (1000ft)                      |
| Color              | White                              | White, Orange, Blue                | Orange                     | White                              |

## Cables

| Model              | PFM920I-5EU-U                      | PFM920I-6U-U                       | PFM920I-6U-C                       |
|--------------------|------------------------------------|------------------------------------|------------------------------------|
| Appearance         |                                    |                                    |                                    |
| Category           | CAT5e                              | CAT6                               | CAT6                               |
| Conductor Material | Oxygen free copper (99.97% purity) | Oxygen free copper (99.97% purity) | Oxygen free copper (99.97% purity) |
| Conductor Diameter | 0.5 mm ± 0.01 mm, 24AWG            | 0.57 mm ± 0.01 mm, 23AWG           | 0.57 mm ± 0.01 mm, 23AWG           |
| Sheath             | PVC                                | PVC                                | PVC                                |
| Certification      | UL CM                              | UL CM                              | CPR Eca                            |
| Length             | 305m (1000ft)                      | 305m (1000ft)                      | 305m (1000ft)                      |
| Color              | White                              | White                              | White                              |

## Cabinets

Cabinets provide protection and stable working environment for storage devices. It also serves as shield against electromagnetic interference.

- Aesthetic design
- Standard 19" rack
- Supports wall mount and plane mount
- Cable entry on the top cover and bottom panel
- The four sides (around) the cabinet can be opened



### Cabinets





| Model             | PFC200D-6U4D  | PFC200D-9U4D  | PFC200D-12U4D   | PFC200D-18U6D   |
|-------------------|---|---|---|---|
| Appearance        |  |  |  |  |
| Material          | SPCC  | SPCC  | SPCC  | SPCC  |
| Dimension (WxDxH) | 600mmx450mmx372mm<br>(23.62"x17.72"x14.57")   | 600mmx450mmx505mm<br>(23.62"x17.72"x19.88")   | 600mmx450mmx638mm<br>(23.62"x17.72"x25.12")   | 600mmx600mmx990mm<br>(23.62"x23.62"x38.98")   |
| Weight            | 13kg(28.66lb)   | 15.6kg(34.39lb)   | 18.1kg(39.9lb)  | 39.5kg(87.08lb)   |
| Load Bearing      | 40kg(88.18lb)   | 40kg(88.18lb)   | 40kg(88.18lb)   | 300kg(661.39lb)   |
| Color             | Black   | Black   | Black   | Black   |

### Cabinets

| Model             | PFC200D-42U8D   | PFC610-4D   | PFC610-6D   | PFC610-8D   |
|-------------------|---|---|---|---|
| Appearance        |  |  |  |  |
| Material          | SPCC  | SPCC  | SPCC  | SPCC  |
| Dimension (WxDxH) | 600mmx800mmx2055mm<br>(23.62"x31.5"x80.91")   | 489mmx275mmx47.6mm<br>(19.25"x10.83"x1.87")   | 472mmx350mmx48mm<br>(18.56"x13.78"x1.87")   | 472mmx550mmx48mm<br>(18.56"x21.65"x1.87")   |
| Weight            | 89kg (196.21lb)   | 1.6kg (3.53lb)  | 1.9kg (4.19lb)  | 2.8kg (6.17lb)  |
| Load Bearing      | 300kg (661.39lb)  | 40kg (88.18lb)  | 40kg (88.18lb)  | 40kg (88.18lb)  |
| Color             | Black   | Black   | Black   | Black   |

# VIDEO MANAGEMENT SOFTWARE

## DSS Products

|             | Model   | DSS Express<br>V1.00.003.2  | DSS Pro<br>V7.02.005.1  | DSS4004-S2<br>V1.01.000.1   | DSS7016D(R)-S2<br>V1.01.001.1   |
|-------------|---|---|---|---|---|
|             | Appearance  |  |  |  |  |
| Deployment  | OS  | Windows   | Windows   | Linux   | Linux   |
|             | Form  | Software  | Software  | ALL-IN-ONE  | ALL-IN-ONE  |
|             | Hot standby   | --  | Supported   | Supported   | Supported   |
|             | Distribute  | --  | Supported   | --  | Supported   |
|             | N+M   | --  | Supported   | --  | Supported   |
|             | Cascade As Superior Level                                   | --  | Supported   | --  | --  |
|             | Cascade As Subordinate Level                                | Supported   | Supported   | Supported   | Supported   |
| Performance | Camera  | 256   | 1000 IP, 2000 CH  | 256   | 500 IP, 1000 CH   |
|             | Face Recognition  | 8   | 100   | 32  | 100   |
|             | ANPR  | 8   | 64  | 32  | 64  |
|             | Maximum Video Input Bandwidth Per Server                    | 350Mbps   | 600Mbps   | 350Mbps   | 600Mbps   |
|             | Maximum Storage Bandwidth Per Server                        | 150Mbps   | 600Mbps   | 150Mbps   | 600Mbps   |
|             |   |   |   |   |   |
| Features    | Onvif   | Supported   | Supported   | Supported   | Supported   |
|             | Auto Register   | --  | Supported   | --  | Supported   |
|             | P2P   | Supported   | --  | --  | --  |
|             | Microsoft Active Directory                                  | --  | Supported   | --  | Supported   |
|             | Disk Group  | --  | Supported   | --  | Supported   |
|             | ISCSI   | Supported   | Supported   | Supported   | Supported   |
|             | Records backup from device by time or wifi                  | --  | Supported   | --  | Supported   |
|             | GIS Map   | --  | Supported   | --  | Supported   |
|             | Thumbnail search  | --  | Supported   | --  | Supported   |
|             | Access Control,Video Intercom, Visitor Management, Entrance | Supported   | Supported   | Supported   | Supported   |
|             | Attendance  | --  | Supported   | --  | --  |
|             | Perimeter Protection  | Supported   | Supported   | Supported   | Supported   |
|             | Thermal Alarm   | Supported   | Supported   | Supported   | Supported   |
| AI          | Face Recognition  | Supported   | Supported   | Supported   | Supported   |
|             | Flow Analysis   | Supported   | Supported   | Supported   | Supported   |
|             | ANPR  | Supported   | Supported   | Supported   | Supported   |
|             | Object detection  | --  | Supported   | --  | Supported   |
| Add on      | Add-ons   | --  | Supported   | --  | --  |

# VIDEO MANAGEMENT SOFTWARE

DMSS



Digital Mobile Surveillance System  
Monitor Anything with Your SmartPhone or Tablet Anytime, Anywhere



|              |  |  |
|--------------|--|--|
| Devices      | Supported Devices                            | DVR, NVR, IPC, VTO, DoorBell, Alarm Hub  |
|              | Add Device Method                            | IP/domain, SN, Import form cloud, Soft AP  |
|              | Features                                     | Remote config, Alarm config, HDD info, Share device list   |
| Video        | Compression Format                           | H.265/H.264/MPEG-4/JPEG  |
|              | Display Resolution                           | Up to 1920--1080   |
| Live Preview | Max. Channels Can Be Opened at The Same Time | 256  |
|              | Features                                     | Snapshot, Record, Instant playback, PTZ, Stream control, Talk, Audio, Alarm, Color, Favorites, Remember channels   |
| Playback     | Video Playback Duration                      | 24 hours   |
|              | Features                                     | Snapshot, Record, Speed up / slow down, Frame-by-frame, Cut  |
| Alarm Push   | Alarm Type                                   | Motion Detectin, Camera Masking, Local Alarm, Disk alarm (no disk, low space, disk error), Face Detection, IVS Alarm, Thermal Imaging Alarm, Defocus, Audio Detect, HDD Alarm, Sensor Alarm, Network Alarm |
|              | Push Type                                    | Video, Preview   |

# DORI DISTANCE (D/O/R/I)

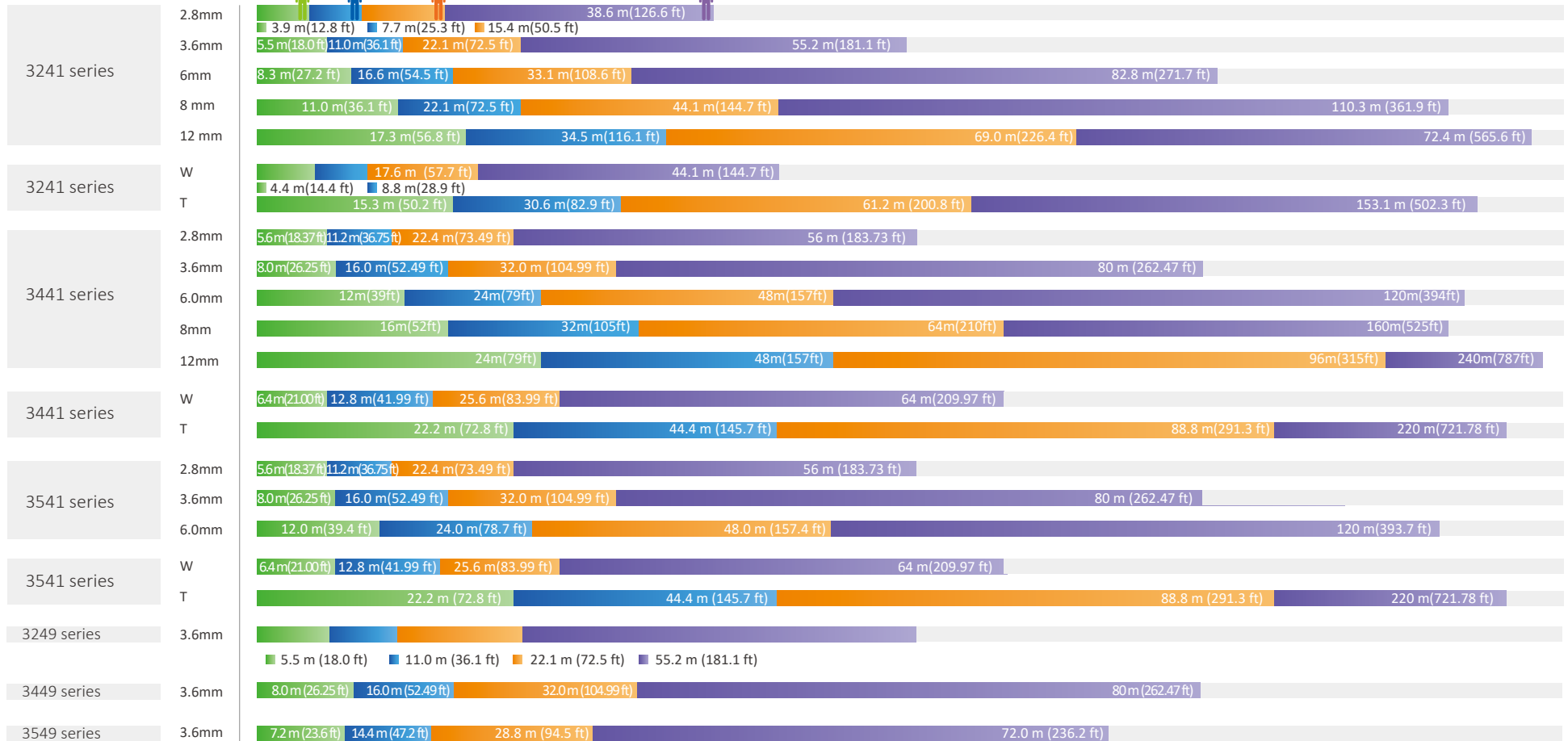
Find the Optimal Camera for Your Customized Surveillance Needs

The DORI distance is a “general proximity” of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test results according to EN 62676-4 that defines the criteria for Detect, Observe, Recognize, and Identify, respectively.

- Detect: 25ppm
- Observe: 63ppm
- Recognize: 125ppm
- Identify: 250ppm

## NETWORK CAMERAS

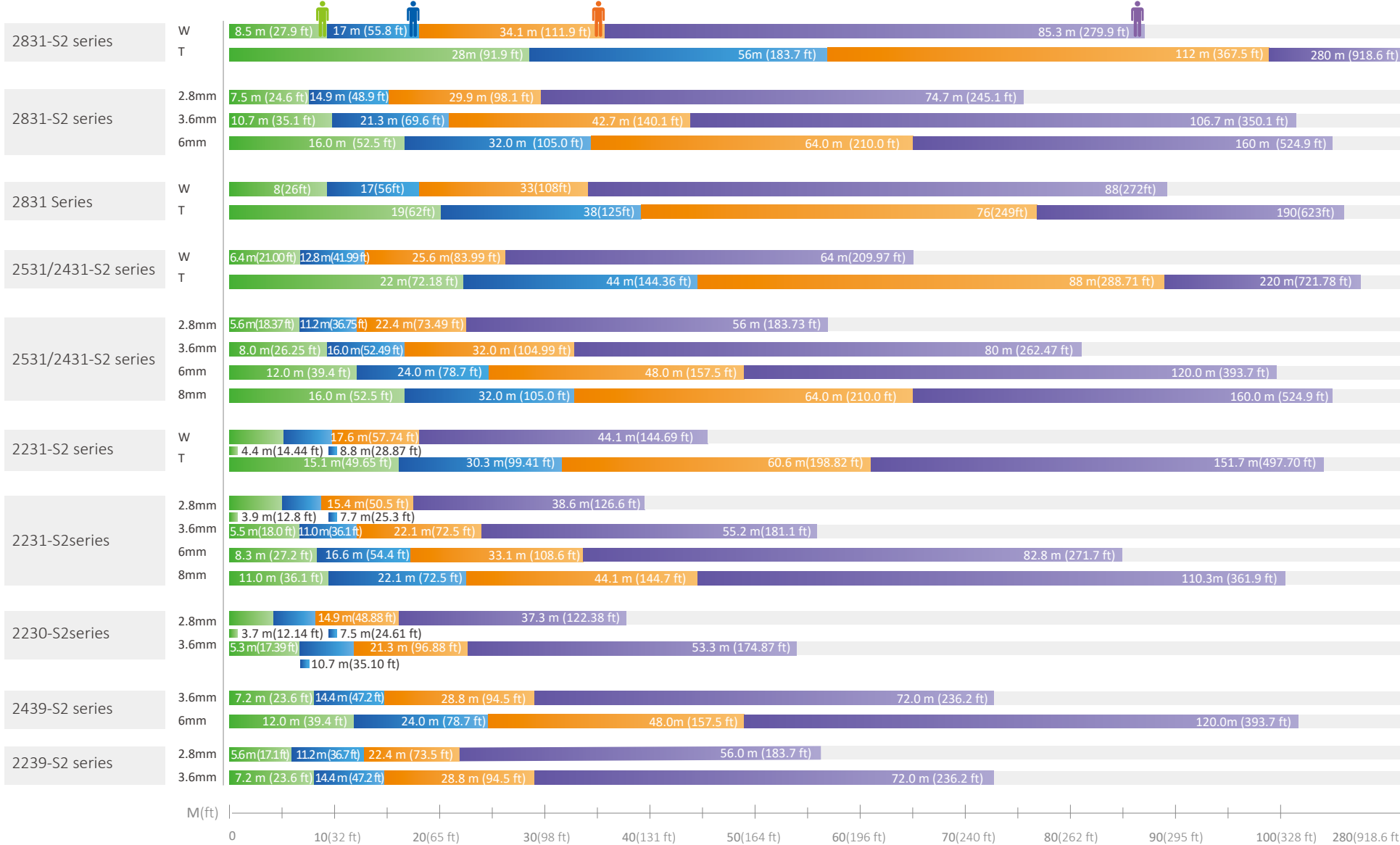
### WizSense 3 Series



# DORI DISTANCE (D/O/R/I)

## NETWORK CAMERAS

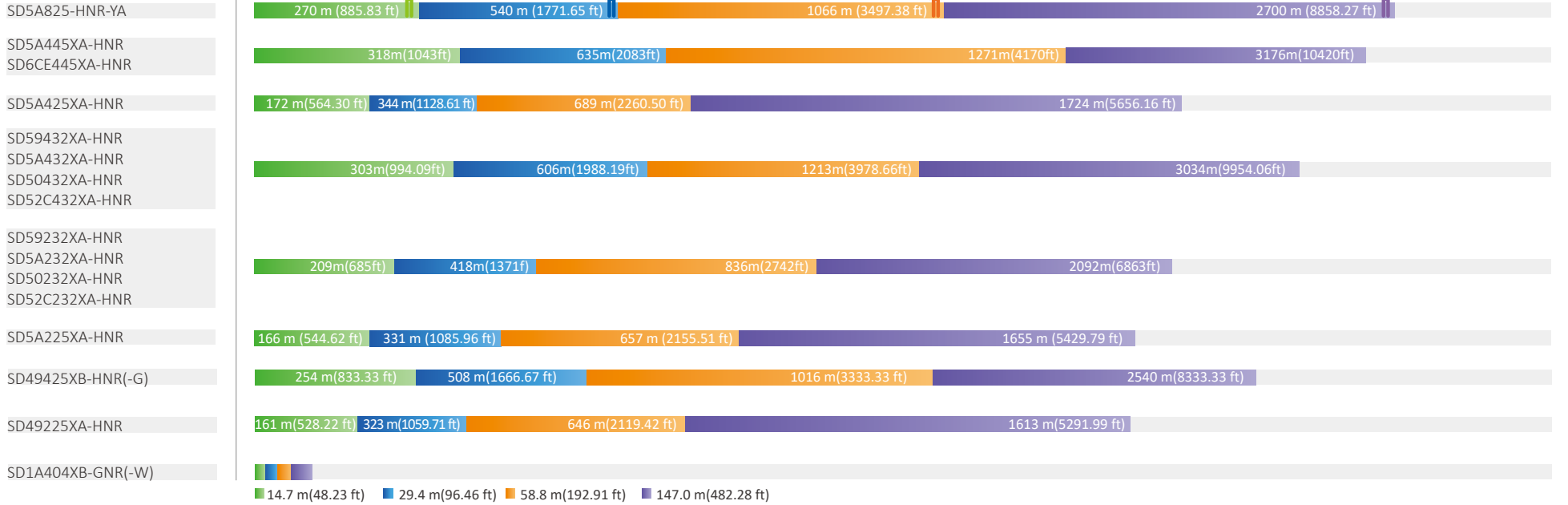
### Lite Series



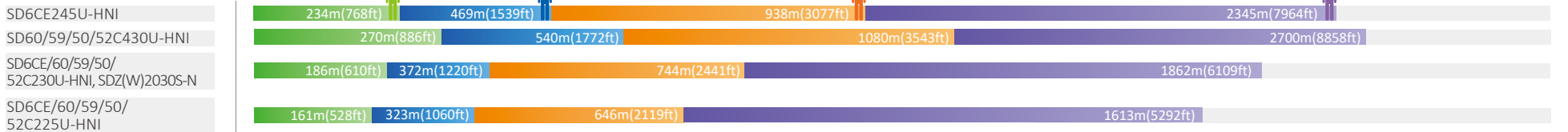
# DORI DISTANCE (D/O/R/I)

## NETWORK PTZ CAMERAS

### WizSense Series



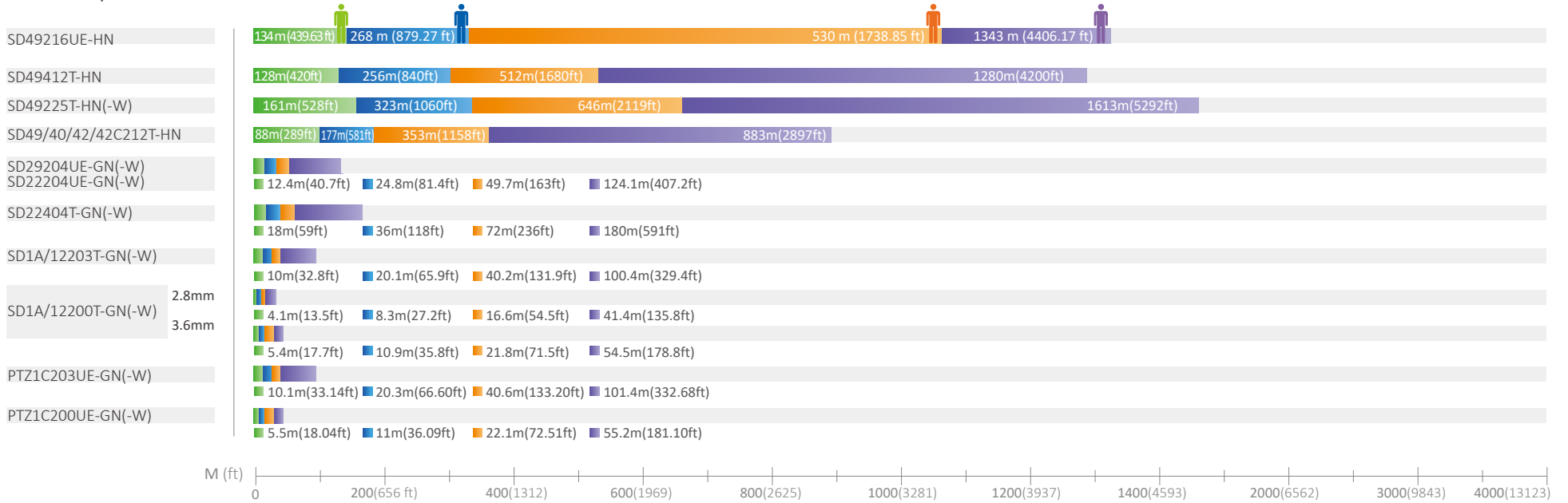
### Pro Series



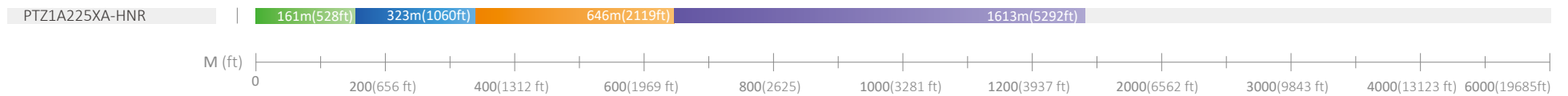
# DORI DISTANCE (D/O/R/I)

## NETWORK PTZ CAMERAS

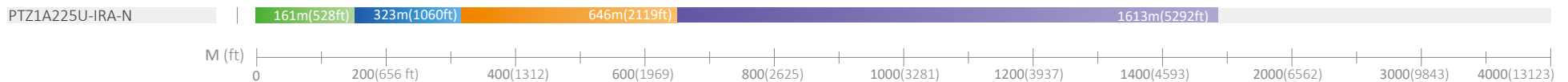
### Lite Series / Wi-Fi Series



### All-environment Series (AI)



### All-environment Series (Non-AI)





# DORI DISTANCE (D/R/I)

## NETWORK THERMAL CAMERAS

■ Detection distance ■ Recognition distance ■ Identification distance

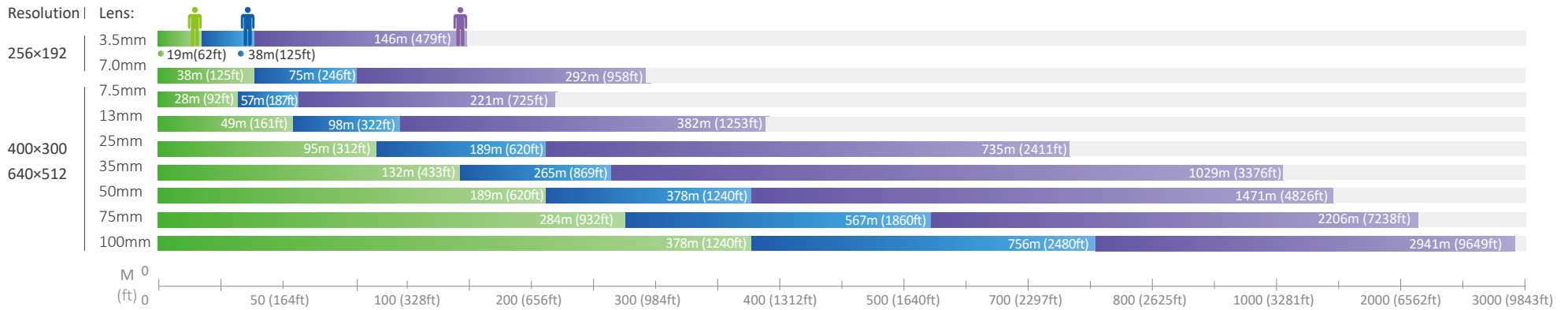
The DRI (Detection Recognition Identification) is defined in terms of the number of pixels on the object depend on a common standard, Johnson's criteria [[http://en.wikipedia.org/wiki/Johnson's\\_criteria](http://en.wikipedia.org/wiki/Johnson's_criteria)].

Detection: Distinguish objects from backgrounds [Something is there]  
Required minimum pixels: Human 3.6 pixels, Vehicle 3 pixels

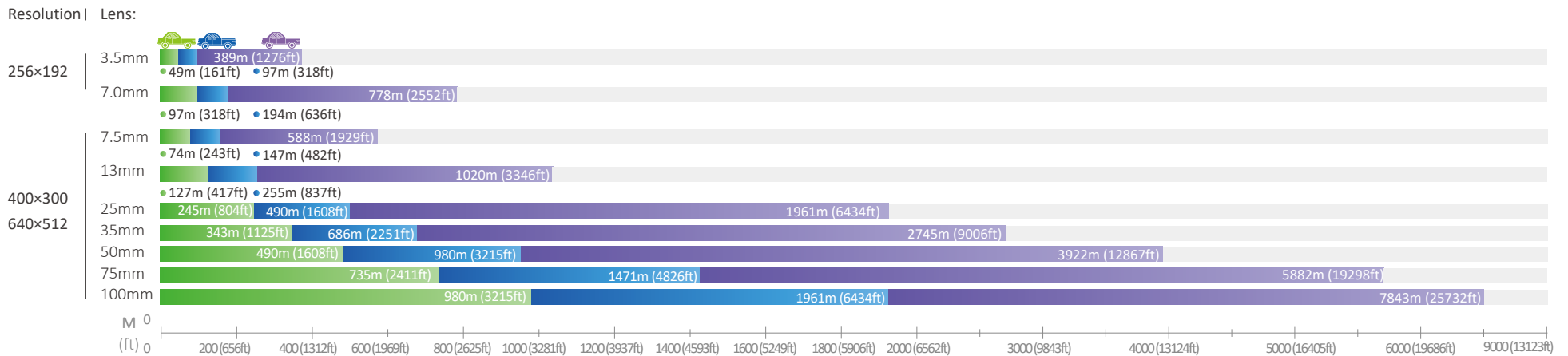
Recognition: Distinguish classification of objects [Human, Vehicle or Building]  
Required minimum pixels: Human 14 pixels, Vehicle 12 pixels

Identification: Identify characteristic of objects [Soldier, Pickup truck or Hospital]  
Required minimum pixels: Human 28 pixels, Vehicle 24 pixels

### People (1.8m×0.5m)



### Vehicle (4.0m×1.4m)



# ENABLING A SAFER SOCIETY AND SMARTER LIVING

|  |  |  |  |  |
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\* Design and specifications are subject to change without notice.

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