HEAD OFFICE

6, Pangyo-ro 319 beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 13488 South KOREA Tel: 1588-5772 For more information, please visit our website hanwha-security.com

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Marine Electronics & Satellite Communications

www.mackaymarine.com

Mackay Marine – High Seas

+1 281 479 1515 marinesales@mackaymarine.com

Mackay Communications, Satellite Solutions

+1 919 850 3100 satserv@mackaycomm.com

Mackay Marine Canada

+1 902 469 8480 sales.canada@mackaymarine.com

Mackay Marine Alaska & Pacific Northwest NWsales@mackaymarine.com Ballard/SEA, WA +1 206 282 8080 Dutch Harbor, AK +1 253 922 6260





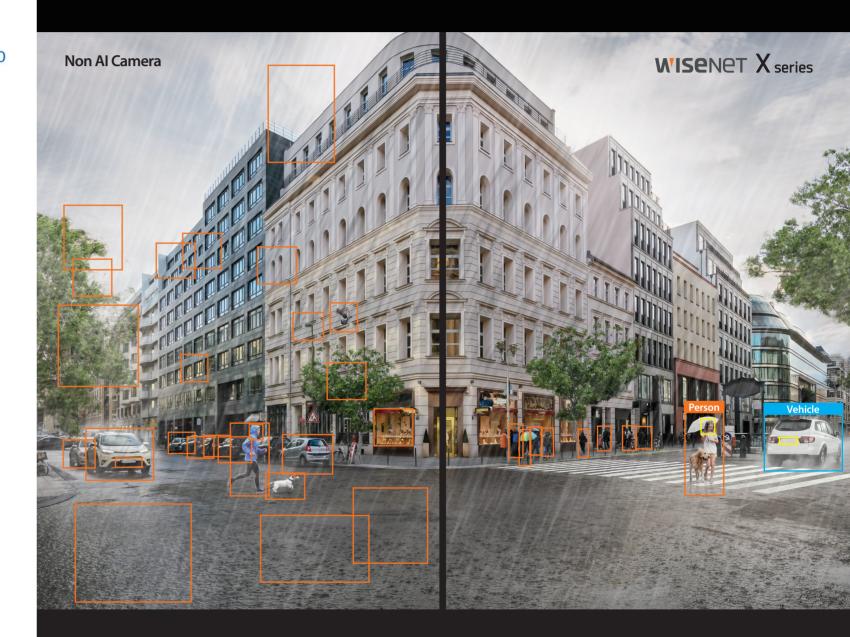
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Hanwha Techwin



Reduce false alarms with the new X series AI cameras.



- Al based object detection for your operational efficiency (Person, Face, Vehicle, License Plate)
- $\bullet \ AI \ based \ Enhanced \ Features \ \ WiseNRII, WiseStream III, More \ accurate \ BI (Business \ Intelligence)$
- Plug-in Al search support for Milestone, Genetec integration
- From 2MP to 4K resolution products
- Next level cybersecurity UL CAP, FIPS 2.0



WISENET New X series

Reducing False alarms based on Al

The new X series cameras utilize AI to detect and classify people, vehicles, faces, license plates and more in real-time. With a range of available resolutions fro m 2MP to 4K, the cameras 'deep-learnin g algorithms can reliably identify multiple objects in distance. They can reduce false alarms caused by non-interesting motion such as wind-blown trees, shadows, or animals. Analytics become a reliable second pair of eyes to operators helping them know where to look for important real-time e vents, while ma king post-event forensic searches highly efficient.





Al-based object detection for operational efficiency

Metadata including information (person, face, vehicle, license plate) is sent to the back-end server and used to extract information on specific events. Operators are able to search Al events on the back-end server. This greatly enhances the search efficiency and reduces the time spent on searching events. It can also reduce false alarms while operators are monitoring scenes.



Al-based WiseNRII and Prefer Shutter Control

Al can also play an important role in image quality. WiseNRII is a new enhancement which utilizes Al to identify movement and reduce blur in noisy, low light environments. Al-based Preferred Shutter technology automatically adjusts the shutter speed based on classified objects in motion and the lighting conditions in a scene to reduce motion blur and deliver the clearest images.

Filmed in 130 lux



Filmed in 80 lux



Al-based Image Optimization, WiseStream **Ⅲ**

By utilizing Al-based object detection, WiseStreamIII technology adjusts the video encoder to focus maximum video quality on the detected objects in a scene while scaling back encoding on the rest of the scene.





No object in the scene

Object in the scene

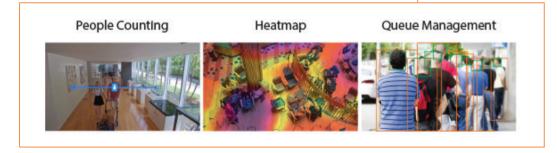
WISENET New X series

More accurate business intelligence

The new X Al cameras overcome the inconvenience of conventional cameras and save the installation expenses. Users had to install additional cameras for Business Intelligence (People counting and Heatmap). However, X Al cameras can detect and classify people at any angle without additional camera installation.

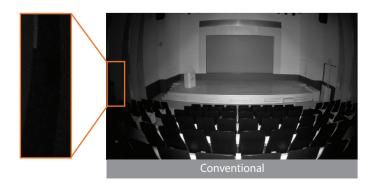






WiselR

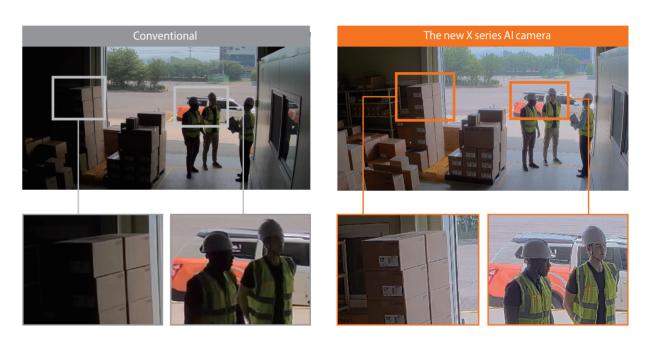
WiselR technology adjusts the output of IR LEDs according to the cameras' zoom magnification. In a wide field of view, it minimizes dark areas on the outside of the image using the IR LEDs uniformly. When the lens is focused more narrowly (telephoto), the IR LEDs are more concentrated to illuminate distant objects.





Extreme WDR

The New X series Al camera's Extreme WDR uses scene analysis technology to optimize differences such as tone and contrast during frame synthesis to minimize motion artifacts. In addition, local contrast enhancement technology, which emphasizes high frequency areas step by step, improves the detail and clarity of images.



Realistic image without image distortion

Wisenet X Al cameras perfectly corrected wide-angle lens distortion to overcome the limitations of conventional cameras. It generates advanced images as seen by the human eye, without lens distortion, despite being equipped with a wide-angle lens.





W'ISENET New X series

Hard coated dome cover to reinforce durability

Hard coated dome bubble provides better resistance to scratches from external stimuli (sand, worker's hand, etc.). The degradation of resolution due to scratches can be minimized.



Next Level Cybersecurity

The cybersecurity of new X series Al camera validates the boot process, securely stores key information, and preempts hacking risks by blocking unauthorized access. The cameras have been certified UL-CAP and Secure by default certification including device certificate Root CA.

X Plus camera has especially applied FIPS 140-2 certified TPM. The United states Federal Information Process Standards (FIPS) is a security standard for cryptographic modules the federal governments in the US, UK, Canada used to approve whether TPM is securely designed and implemented. With this certified TPM, users can utilize cameras more securely.



Easier installation with semi-modular and modular structure

The new X series Al cameras apply the mount plate to provide intuitive installation and screw hole for corresponding an electric box (gangbox). For easier installation of bullet cameras, a single screw can be used to secure it in the desired direction instead of three screws needed for installing conventional bullet cameras.



X Plus cameras can be combined using magnets in modular design. Special packaging is applied for easy and fast pre-configuration for installers. These features save installation time and reduce cost.



WISENET New X series

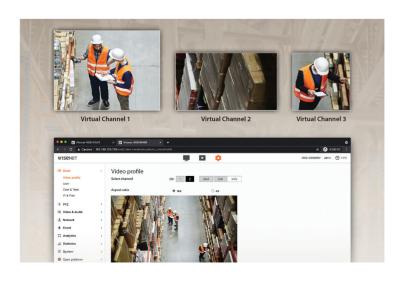
Wisenet Installation app for easy set-up

Wisenet installation app and Wi-Fi dongles can connect cameras directly. Installers can check the monitoring positions and configure the zoom in/out, simple focus, screen capture, and flip/mirror/hallway view.



Up to three virtual channels

Operators can create up to three virtual channels in a different angle of view with a single camera. It provides simultaneous monitoring to a separate channel on the back-end equipment.



Long focal-length(29mm) for casinos

XND-8093RV and XNV-8093R cameras have added long tele focal-length to see more details of distant objects. They are ideal for monitoring casinos or hotel lobbies where operators want close monitoring of objects.



Extended tilting angle up to 85°

The wider tilt angle allows you to monitor areas that have not seen on conventional cameras. Extended tilting angle helps eliminating blind spots.



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