



**September 2025 New Product Introduction**



**3CH + PTZ Camera**  
**PNM-C19183RVTP**





PNM-C19183RVTP

# 3CH PTZ AI, IR Multi-directional Camera

## AI Features

### Business Intelligence



People and Vehicle Counting



BestShot



Colour Attribute Per Object

### Advanced Handover



Smart Zoom

## Device Features

### All-in-one Design

3CH PTZ AI, IR Multi-directional camera



IR Module

49.2ft (15m)

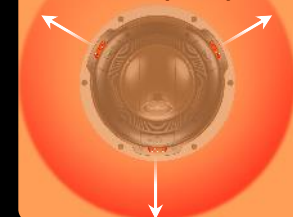
3CH x 5MP  
CAMERAS

Lenses : 2.4mm fixed focal  
HFOV: 123°, VFOV: 91°

4MP 18x PTZ  
CAMERA

Lens: 5.42~98.29mm(18x) zoom

IR Viewable Length  
49.2ft (15m)



Support  
2 microSD Slot



IP66/IK10



Auto Calibration



# Introduction

- 3CH PTZ AI, IR Multi-directional camera
- Compact Solution
- New Design
- Applications



# 3CH PTZ AI, IR Multi-directional Camera

Conventional

Three Cameras + PTZ



3CH PTZ AI, IR Multi-directional Camera

All-in-one Design



# Compact Solution



PNM-C34404RQPZ

ø14.95 x 11.89" (ø379.8 x 301.9mm)  
17.42lb (7,900g)



PNM-C19183RVTP

ø9.9 x 8.35" (ø251.4 x 212mm)  
10.58lb (4,800g)

# New Design

## 3 x 5MP Fixed Lenses

Lenses: 2.4mm fixed focal  
HFoV: 123°, VFoV: 91°



## IR Module

49.2 ft (15m)

## 4MP 18x Zoom Lens

Lens: 5.42~98.29mm(18x) zoom

# High Resolution, Powerful Zoom

**3 x 5MP Fixed  
Lenses**



# High Resolution, Powerful Zoom



# Applications

Casino



Building Corner



Parking Area



Retail



Logistics Hub



Arena



Shopping Mall

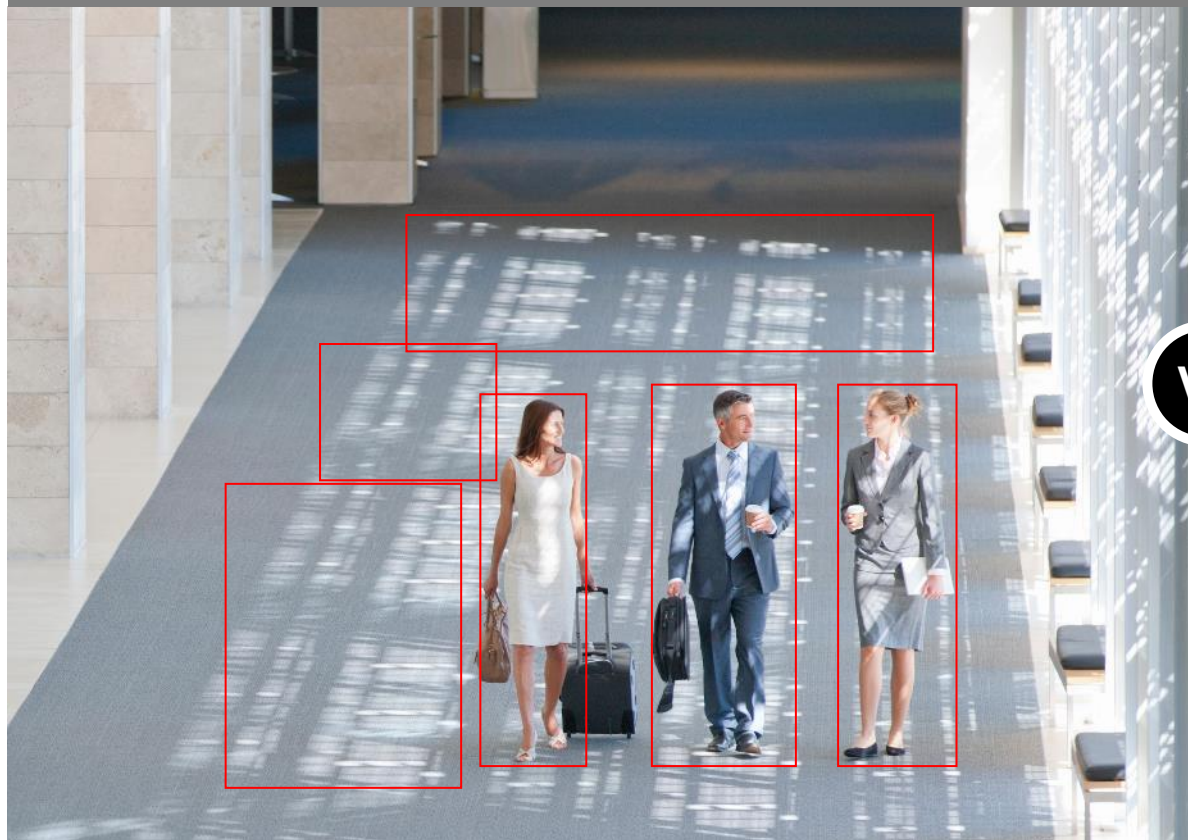


Border



# AI-powered Motion Detection

Pixel-based Motion Detection



Vs.






AI-based Motion Detection



# Object Classification, Powered By AI

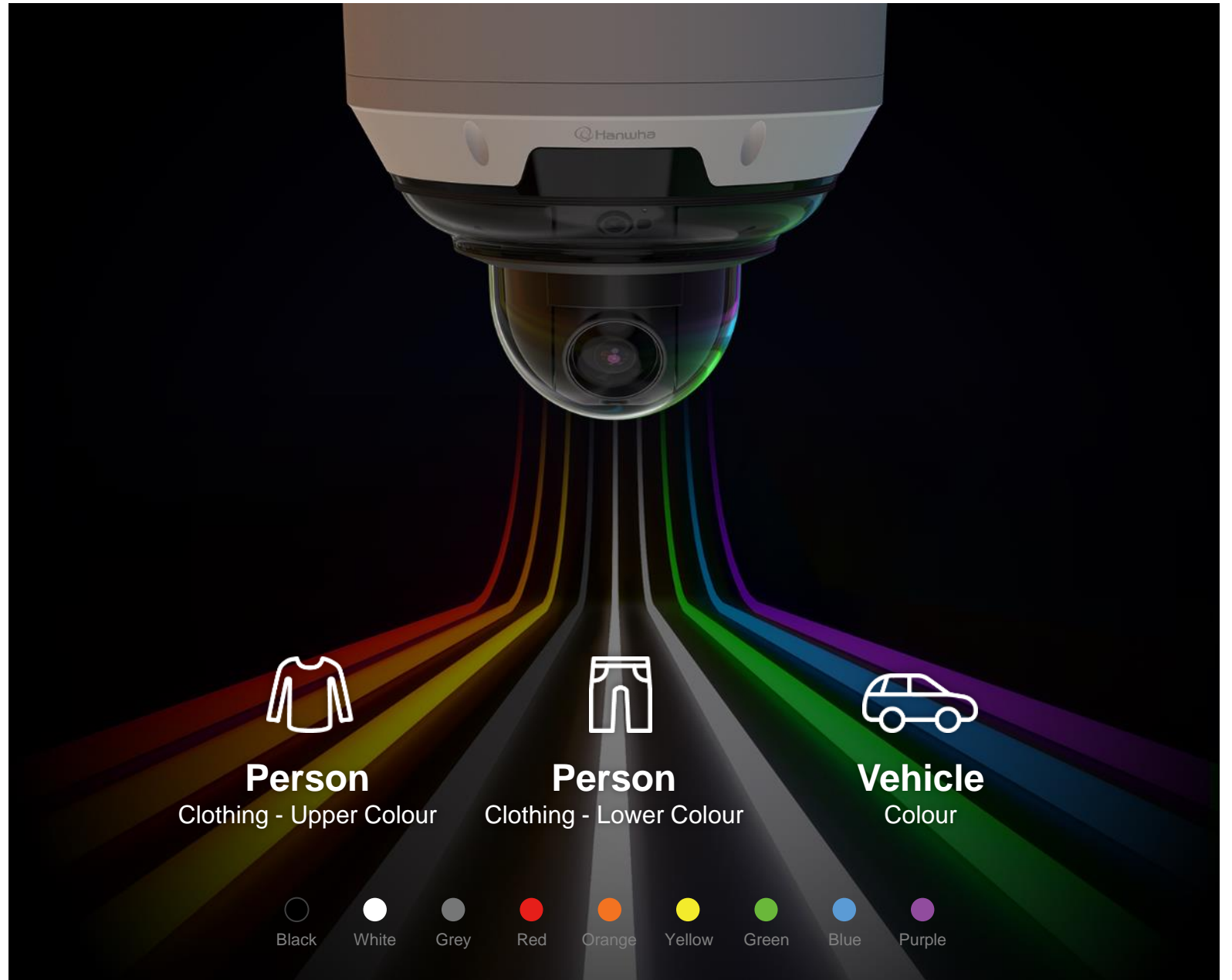


## Object Classification Items

-  Person
-  Face
-  License Plate
-  Car
-  Bus
-  Truck
-  Motorcycle
-  Bicycle

# Colour Detection

Add a forensic search filter



# AI-based Analytics

## Line Crossing



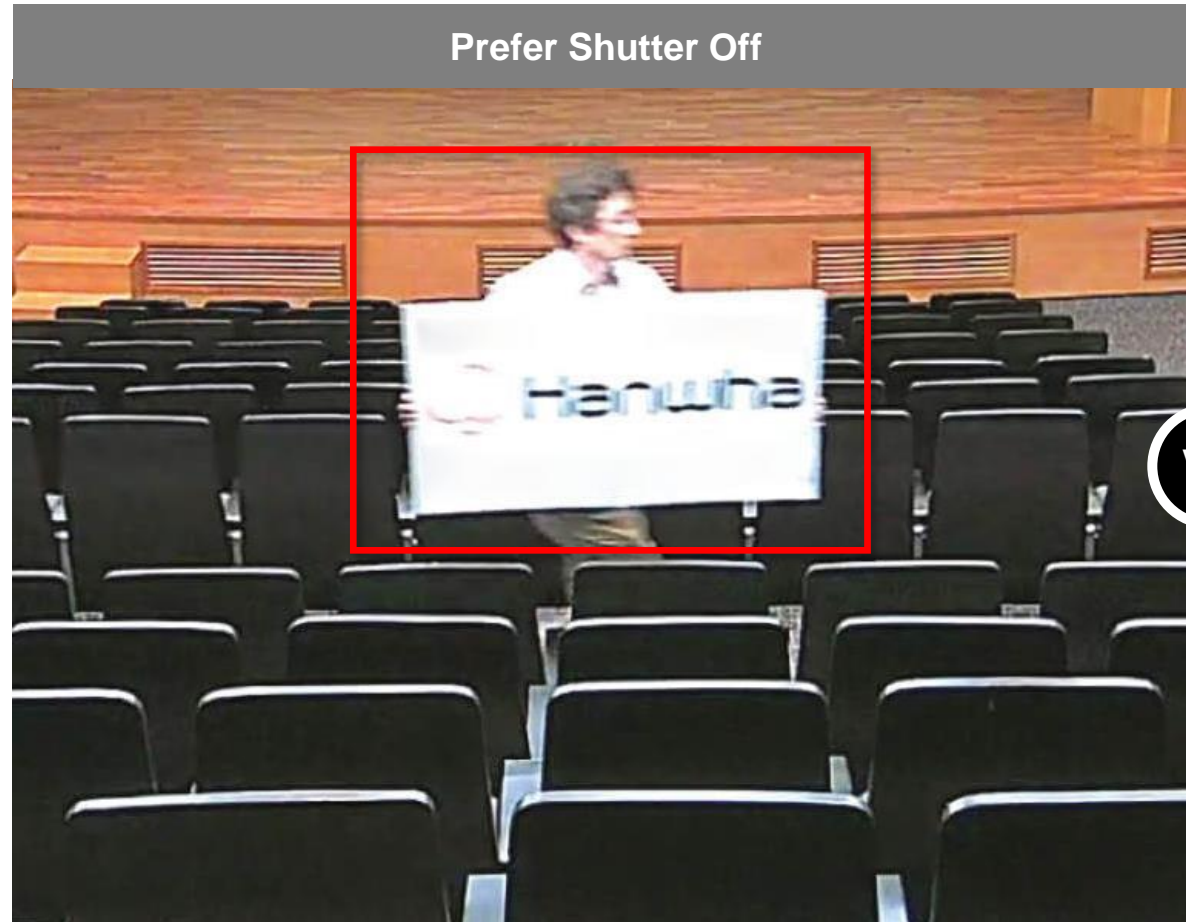
# AI-based Analytics

## Loitering Detection

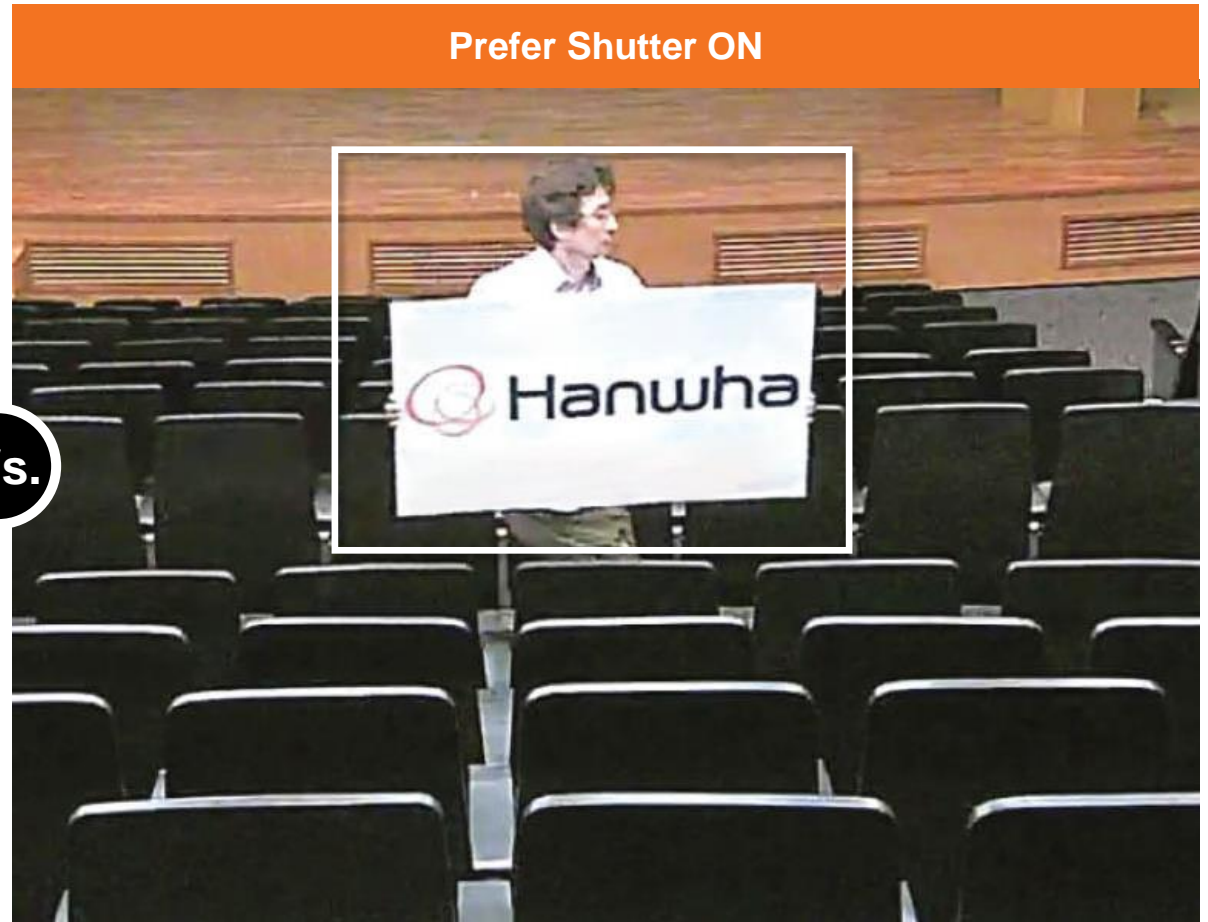


# Improved Noise And Motion Blur Reduction

Prefer Shutter Control



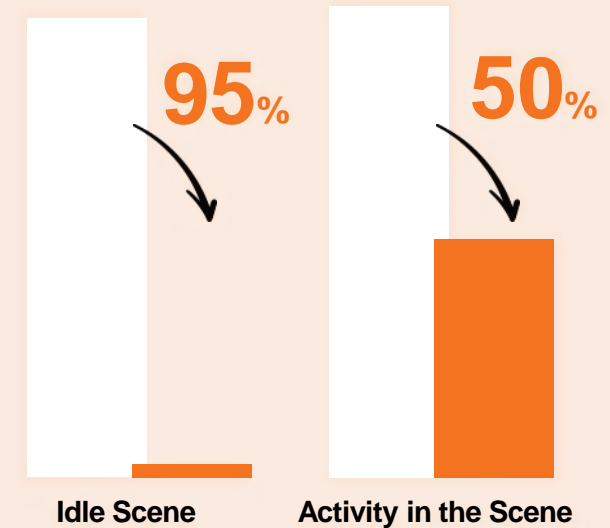
Vs.



# AI-based Bandwidth Reduction, WiseStreamIII



## WiseStream III Performance Based on Scene Activity



\* Actual performance depends on the individual scene and conditions. The above results are based on internal testing.

# AI-based Advanced Lens Distortion Correction (LDC)

Conventional



Vs.

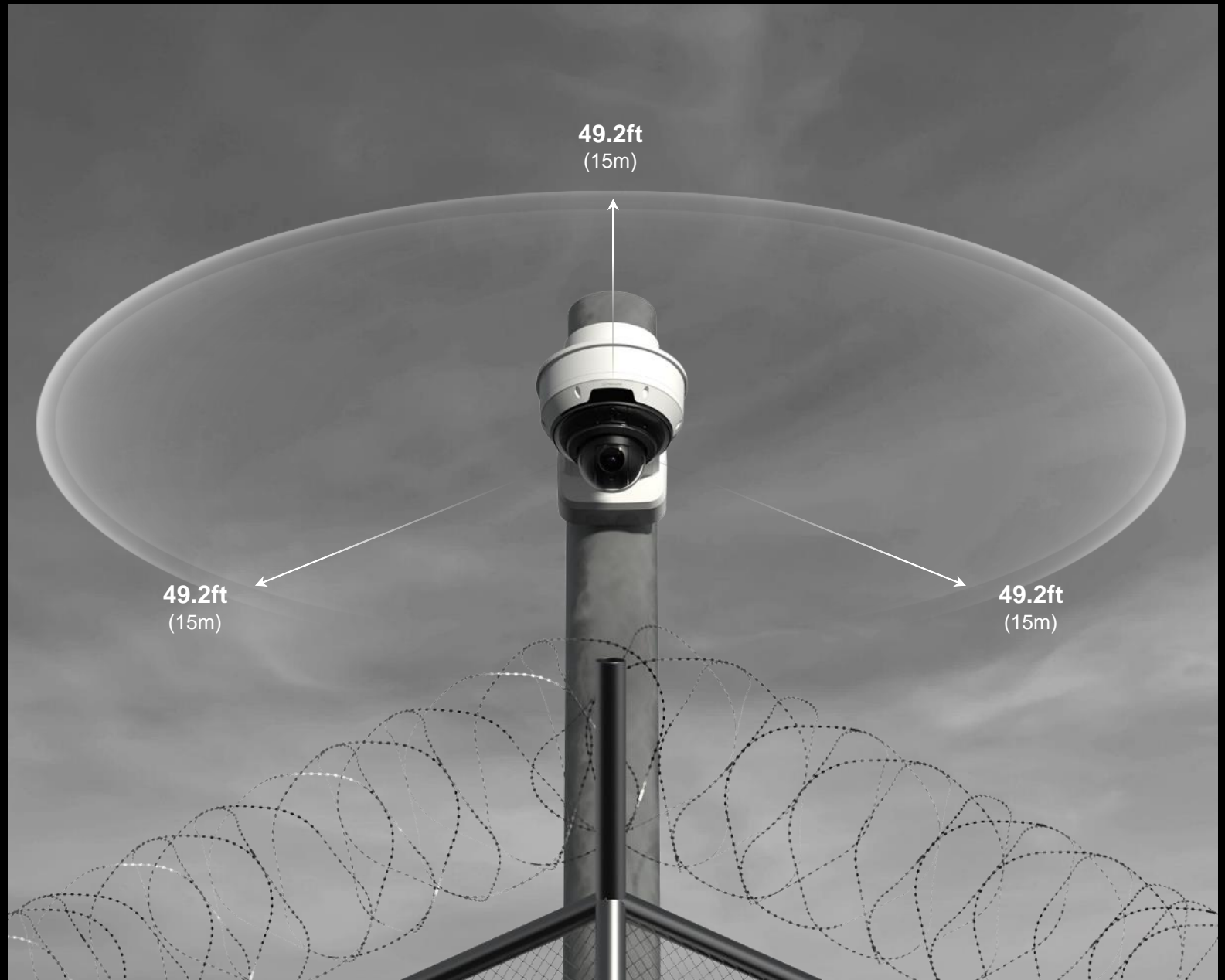
3CH PTZ AI, IR Multi-directional Camera



\* This image is a simulated image for illustrative purposes.

# IR Zones

**IR Viewable Length**  
**49.2ft (15m)**

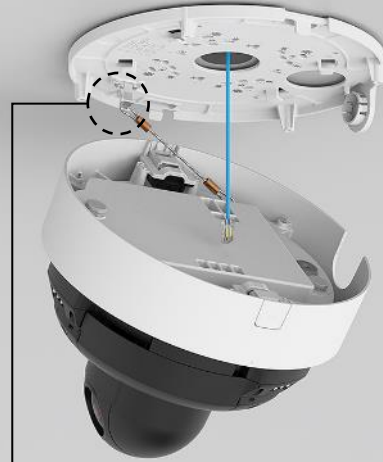


# Easy Installation

**Step 1.**  
Install the mount plate



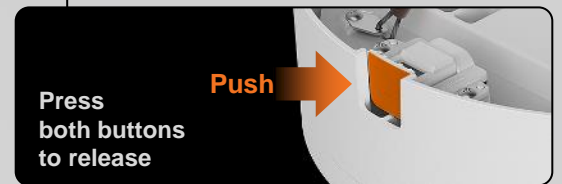
**Step 2.**  
Connect the safety cable to the  
mount plate



**Step 3.**  
Connect the network cable and  
lift the camera body



**Step 4.**  
Slide the retaining clip in until it  
clicks



# Reinforced Durability



## Metal Shielded RJ-45

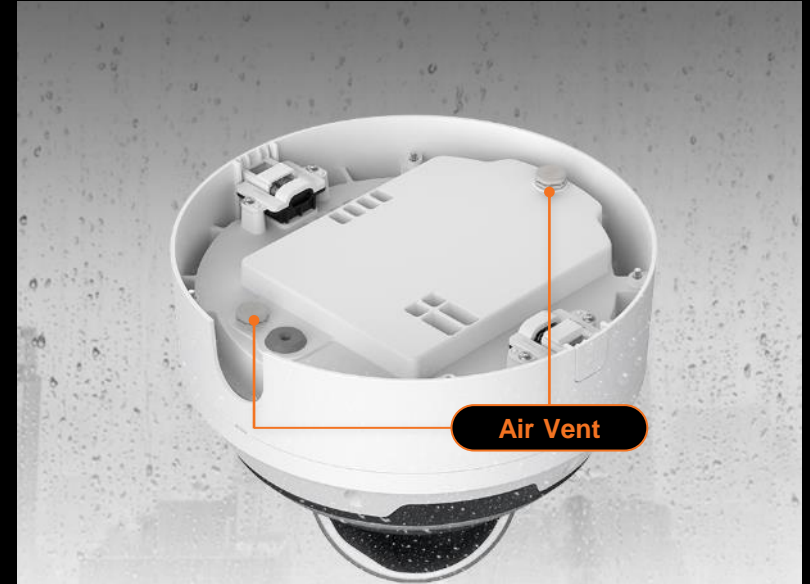
Metal-shielded RJ-45 terminal and improved grounding frame structure provides enhanced protection from transient voltage (lightning, static electricity).

\* Using STP (shielded twisted pair) cabling is recommended.



## IK10 Impact Protection

Protects the camera from impacts up to 20 joules making it robust and vandal resistant.



Blocking Dust



Blocking Liquid



Flowing Air



Venting Hot Air

## IP66 Enhanced Ingress Protection

IP66 rating allows the camera to withstand the most challenging weather conditions. The air vent equalises pressure in the camera housing to prevent leaks and manage condensation.

# Expansion Of Alarm/Audio Features

Camera is compatible with Network I/O Box : SPM-4210, which adds I/O and audio functionality.

\* Network I/O Box to be purchased separately.

## Network I/O Box (SPM-4210)

### Alarm/Audio

- ① RJ45 1 port (Power : PoE only)
- ② Selectable 4 I/O configurable ports
- ③ Audio I/O 1 port each

Network Switch

HPoE Injector

Power



# Advanced Handover

## Smart Zoom And Preset Mode



# Auto Calibration

Conventional

## Manual Calibration



Time spent specifying coordinates – typically four for each channel - for a total of 12 coordinates



PNM-C19183RVTP

## No Manual Calibration Needed



Automatically calibrates when the camera boots up.

# Event Rule

## Boolean Logic

### Event Trigger Settings



IVA Area + Person



+



Line Crossing



+



Object Detection

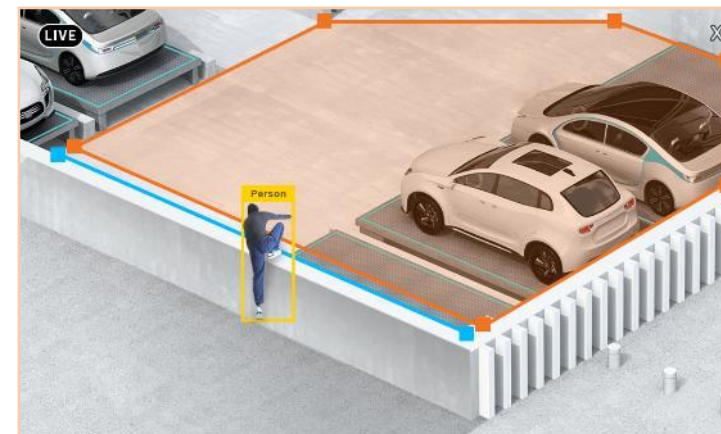


- IVA Area + Car ✓
- Line Crossing
- Object Detection ✓



No Alarm

Vs.



- IVA Area + Car ✓
- Line Crossing ✓
- Object Detection ✓



Alarm

# Event Notification

## Variety Event Action

### When event occurs



Line Crossing



IVA Area



Motion Detection

#### Analytic Events



Alarm In



Day/Night  
Action



Storage  
Disruption



### Event notification



Record



Alarm Out



FTP Image



E-mail  
Notification/Image

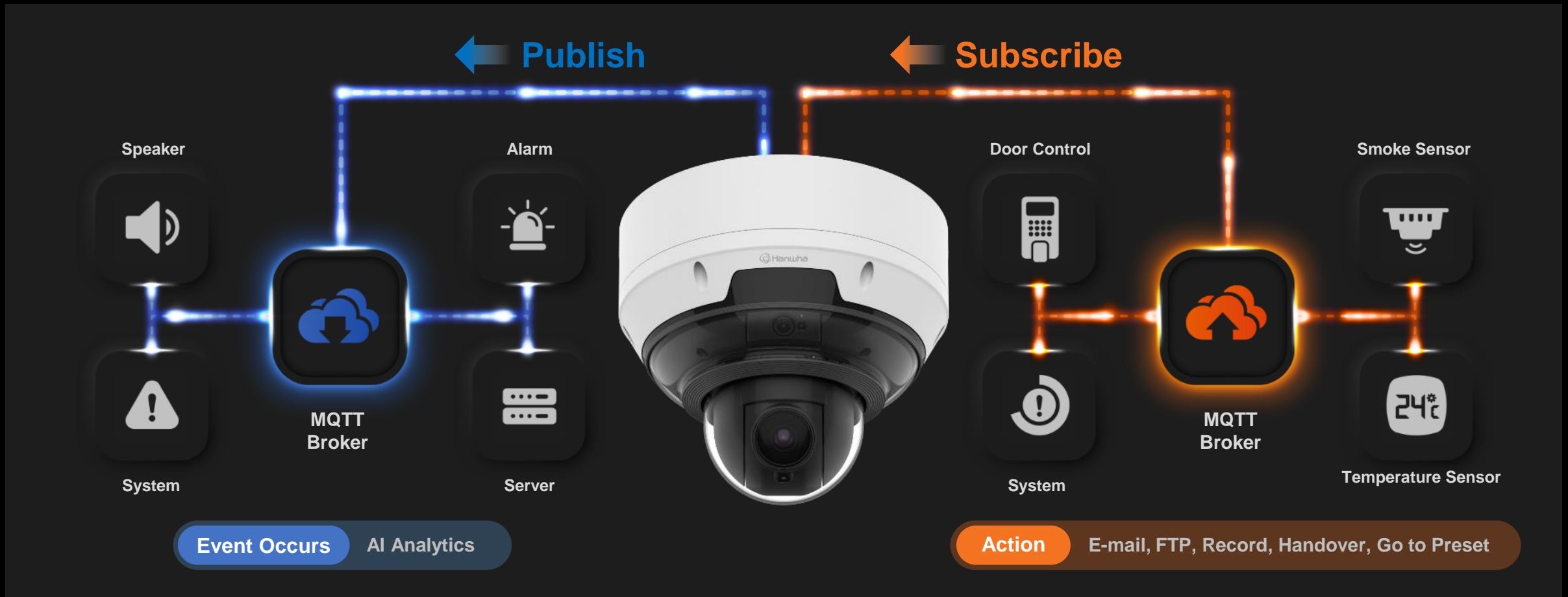


HTTP, HTTPS,  
TCP Notification



MQTT  
Notification

# MQTT Protocol



# Next-Level Cybersecurity

## FIPS 140-3 Level 3



### Security Certificate

- Secure element  
(with FIPS 140-3, CC EAL6+)



### OS/Firmware Protect

- Secure boot
- Signed firmware
- Firmware encryption



### User Authentication

- Digest Authentication
- Prevent brute-force attack



### Network Authentication

- 802.1X Authentication  
(EAP-TLS, EAP-LEAP,  
EAP-PEAP, MSCHAPv2)



### Secure Communication

- HTTPS
- SRTP
- WSS(WebSocket secure)



### Access Control

- IP filtering



### Data Protect

- Encryption Credentials
- Encrypt compress for live recording file export



### Audit

- User Access/System/  
Event log management



### Device ID

- Device Certificate  
(Hanwha Vision Root CA)



### Secure Storage

- Secure element
- SD card partition encrypt



### Supply Chain Security

- SBOM

# Compatible VMS

## Compatible Software



## Hanwha Vision Plug-in

◆ milestone Genetec

◆ milestone Genetec Wisenet WAVE NVR














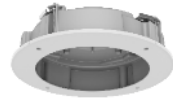




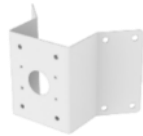












\* Supports receiving real-time events and searching for events.

# Specification



Category			
		3CH	PTZ
Resolution		2592x1944, 2560x1440, 1920x1080, 1280x960, 1280x720, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	2592x1520, 2560x1440, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate		<ul style="list-style-type: none"> <li>H.265/H.264: Max. 30fps/25fps(60Hz/50Hz)</li> <li>MJPEG: Max. 30fps/25fps(@5MP Max. 5fp)</li> </ul>	<ul style="list-style-type: none"> <li>H.265/H.264: Max. 30fps/25fps(60Hz/50Hz)</li> <li>Max. 30fps/25fps(60Hz/50Hz)</li> <li>MJPEG: Max. 30fps(@4MP Max. 5fps)</li> </ul>
Lenses		2.4mm fixed focal	5.42~98.29mm(18x) zoom
Audio In/Out		Support Audio via optional SPM-4210 I/O box	
AI-based Features		WiseNR II, Auto Prefer shutter control, WiseStream III	
Analytics Based on AI Engine	Classified object type	<ul style="list-style-type: none"> <li>Person</li> <li>Face</li> <li>Vehicle</li> <li>License plate</li> </ul>	
	Attributes	<ul style="list-style-type: none"> <li>Person(Top/bottom clothing color)</li> <li>Vehicle(Type: Car/Bus/Truck/Motorcycle/Bicycle and Color)</li> </ul>	<ul style="list-style-type: none"> <li>Vehicle(Type: Car/Bus/Truck/Motorcycle/Bicycle)</li> </ul>
	Bestshot/ Detection shot	<ul style="list-style-type: none"> <li>Supports Bestshot</li> </ul>	<ul style="list-style-type: none"> <li>Supports Detection Shot</li> </ul>
	Analytics events based on AI engine	<ul style="list-style-type: none"> <li>Motion detection</li> <li>Object detection</li> <li>Virtual line*(Crossing/Direction)</li> <li>Virtual area(Loitering/Intrusion/Enter/Exit)</li> </ul>	
Input Voltage		PoE++(IEEE802.3bt type3, Class6) (injector included)	
Operating Temperature / Humidity		'-40°C~+55°C(-40°F~+131°F) / 0~95% RH(non-condensing), Humidity control with AIR vent	
Product Dimensions / Weight		ø9.9x8.35"(ø251.4x212mm), 10.58lb(4,800g)	
Security		Secure element with FIPS 140-3 level 3	

# Installation

 Hanging Adaptor SBP-250HMW	 Ceiling Mount Base SBP-140CMB	 Ceiling Mount Base SBP-180CMB	 <b>Ball Head</b> Ceiling Mount Base SBP-180CMS	 Ceiling Mount Pipe SBP-150CMP/300CMP/900CMP	 Ceiling Thread Converter SBP-C15H	 Ceiling Mount Coupler SBP-C15P	 Ceiling Thread Converter SBP-C15NP	 Ceiling Pipe Converter SBP-C35H	 Ceiling Mount (Assembly) SBP-150CMI / 300CMI
 Ceiling Mount (Assembly) SBP-300CMW1 / 900CMW	 Ceiling Mount (Assembly) SBP-300CMTW	 <b>Ball Head</b> Ceiling Mount (Assembly) SBP-300CMTS	 In-Ceiling Mount SHD-2501FPW	 Wall & Pole Mount SBP-250WMW	 Wall & Pole Mount SBP-400WMW	 Wall & Pole Adaptor SBP-115PFA	 Pole Mount SBP-150PMW	 Corner Mount SBP-156KMW	 Parapet Mount (Telescopic) SBP-156LMW1
 Cabinet SBP-150NBW	 Mounting Hole Cover SBP-250C	 Smoked Dome SPB-MDC41V	 I/O Box SPM-4210						
 Wall Mount SBP-300WMW	 Wall Mount SBP-300WMW1	 Wall Mount Base SBP-300BW1	 Pole Mount SBP-300PMW2	 Corner Mount SBP-300KMW1	 Parapet Mount SBP-300LMW	 Cabinet SBP-300NBW			



**AUDIO BEACON**  
SPS-A100M





SPS-A100M

# Hear the unseen, Audio Beacon

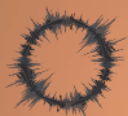
Sound classification is the process of automatically classifying sound waves into predefined classes or categories based on acoustic characteristics. It involves the application of deep-learning algorithms to analyse and interpret complex patterns in sound data.



## AI Features

### AI-based Sound Classification

These analytics can help administrators quickly assess the situation and take immediate action.



Extreme Decibel Detection



Gunshot Detection Beta



Scream Detection



Breaking Glass Detection

## Device Features

### Sound Direction with Direction Finding Algorithm



Audio Beacon has been developed with AI sound classification and direction finding algorithms to help users detect the direction and type of audio event.

Provide  
Best Sound



FTP/e-mail/VMS

Built-in  
90dB Speaker

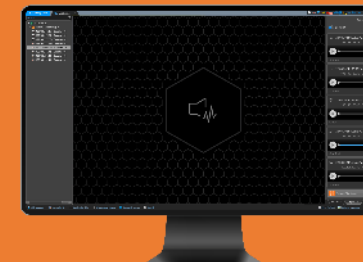


Audio Notifications

LED Ring  
Notification



## Software Solutions



### Hanwha's Plugin

◆ milestone Genetec

\* Displays AI-based sound classification, plays audio clips and receives event metadata.

◆ milestone Genetec Wisenet WAVE NVR

\* Supports receiving real-time events and searching for events.

# Audio Beacon

- Two Configurable Digital I/O Ports

- Indication LED Ring



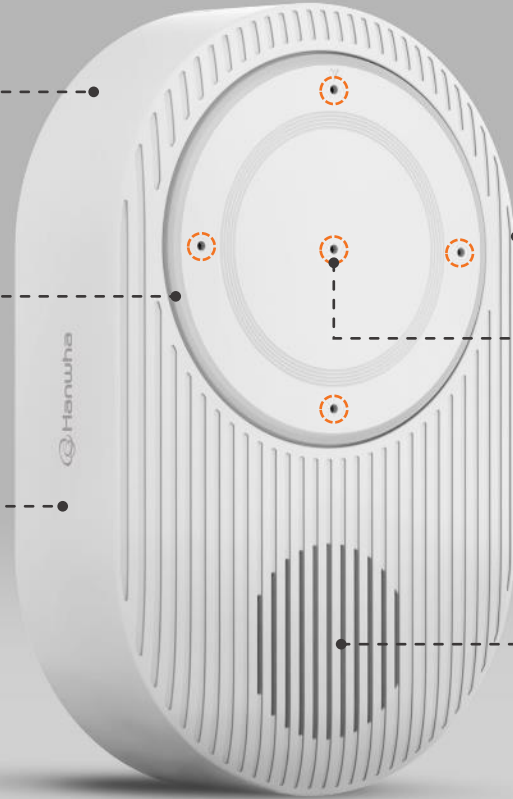
- AI Sound Classification

#### Currently available classifications

Extreme decibel, Gunshot <sup>Beta</sup>, Screaming, Breaking glass

#### Event metadata

Sound type, sound direction, confidence, timestamp, audio clip, dB(±10dB) Sound direction



- USB for Easy Installation

- Microphones

Five built-in digital MEMS microphones

- Two-way Audio

Two-way/one-way selectable, full duplex

- Speaker

Max. sound pressure level 90dB,  
Frequency range: 144Hz~20kHz

# Use Cases

Classroom



Hallway



Changing Room



Bathroom



Hospital Room



Office



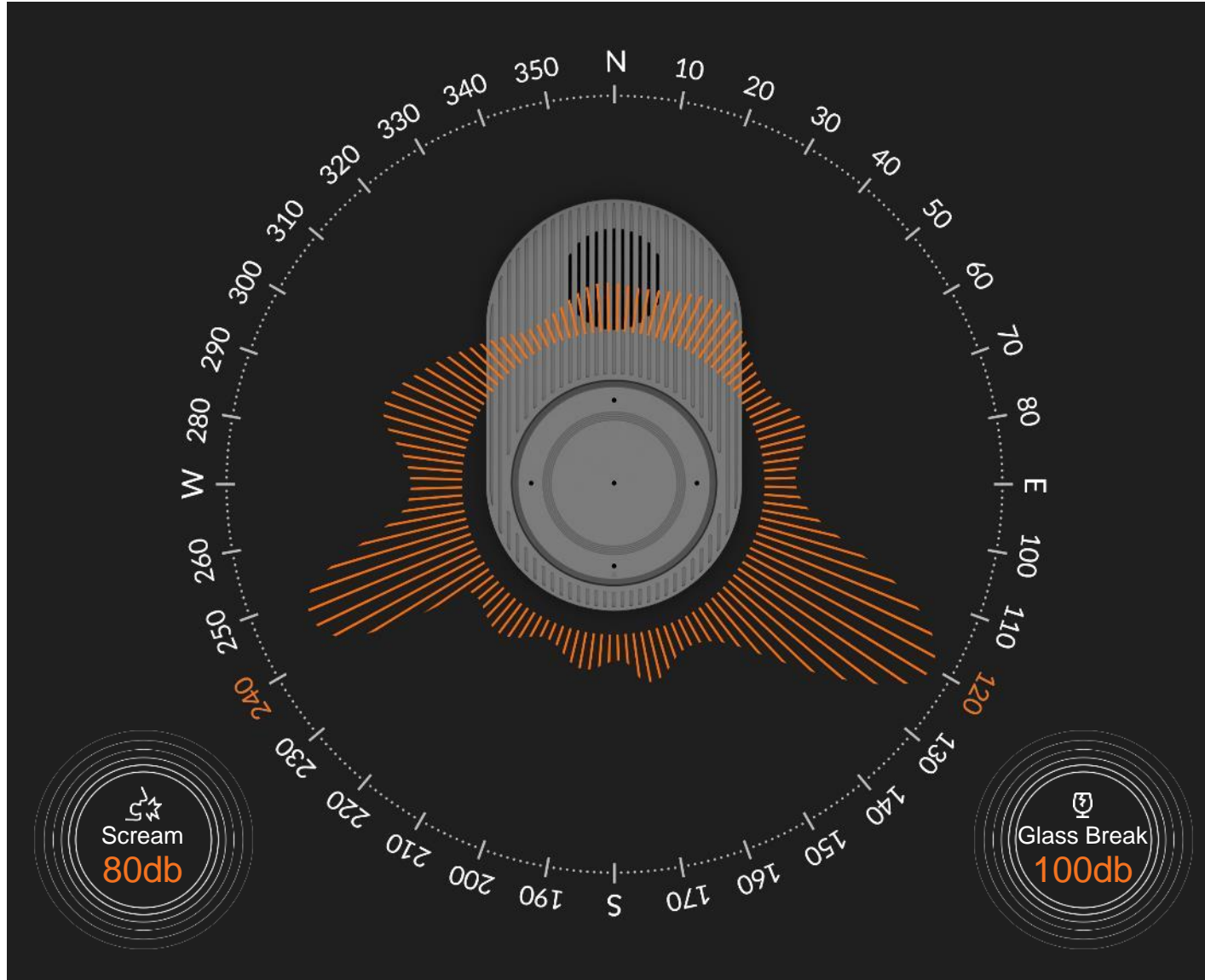
# Consider a forest



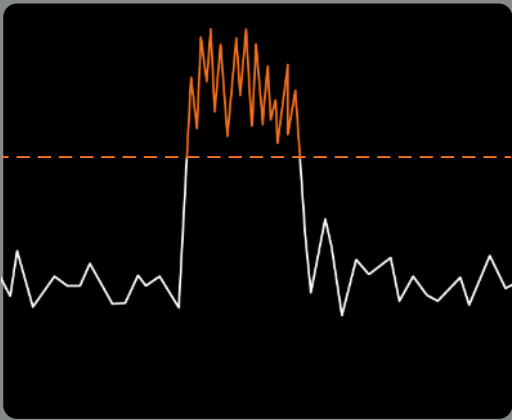
# Possible Use cases



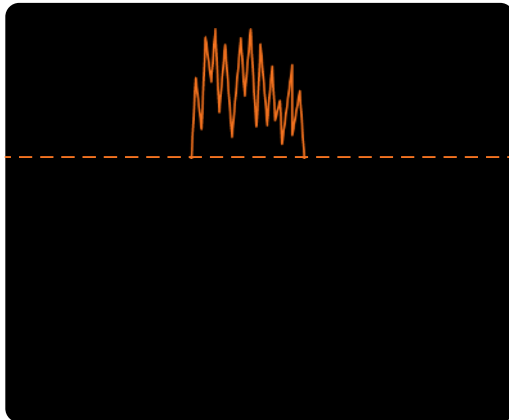
# Sound Direction with Direction Finding Algorithm



## Sound Detected



## Audio Clip Generated



**FTP**  
Audio Clip



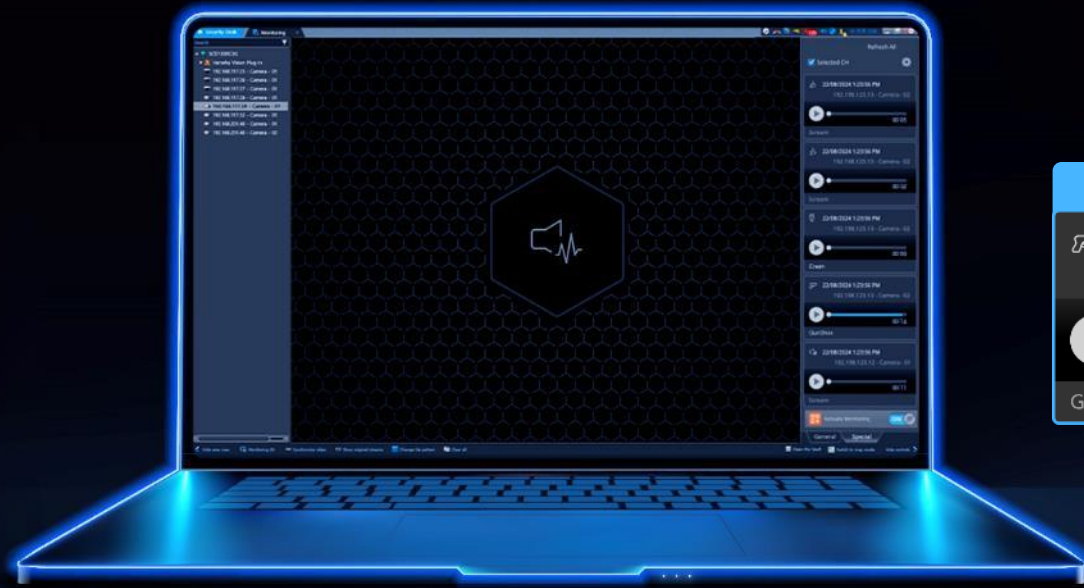
**E-mail**  
Notification/Audio Clip



**VMS**  
Notification/Audio Clip

# Genetec

With the dedicated live view plug-in, the sound can be checked directly via audio clips for immediate response.



**Gunshot Beta**

22/08/2024 1:23:56 PM  
192.198.123.13 - Camera - 02

00:14

GunShot

**Scream**

22/08/2024 1:23:56 PM  
192.198.123.13 - Camera - 02

00:05

Scream

**Glass Break**

22/08/2024 1:23:56 PM  
192.198.123.13 - Camera - 02

00:09

GlassBreaking

# Event Rules Engine

## Boolean Logic

Breaking Glass Detected

Event rule configuration window:

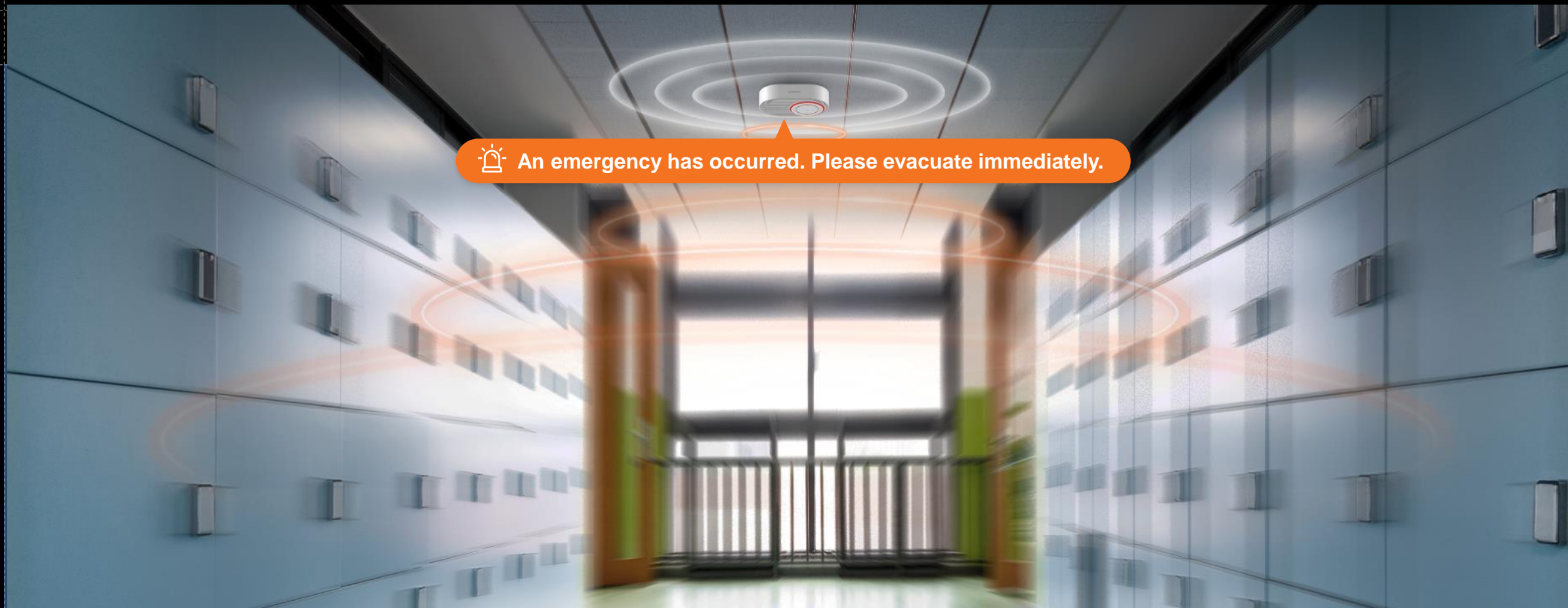
- Rule name: Rule 01
- Event trigger: CH 1, Sound classification (WiseAI), V Glass break
- Event action settings: E-mail (Enable), Audio clip (On), LED preset (1: Scenario 1)
- Duration: 30
- Activation time: Always

Event Action  
E-mail, Audio clip, LED notification

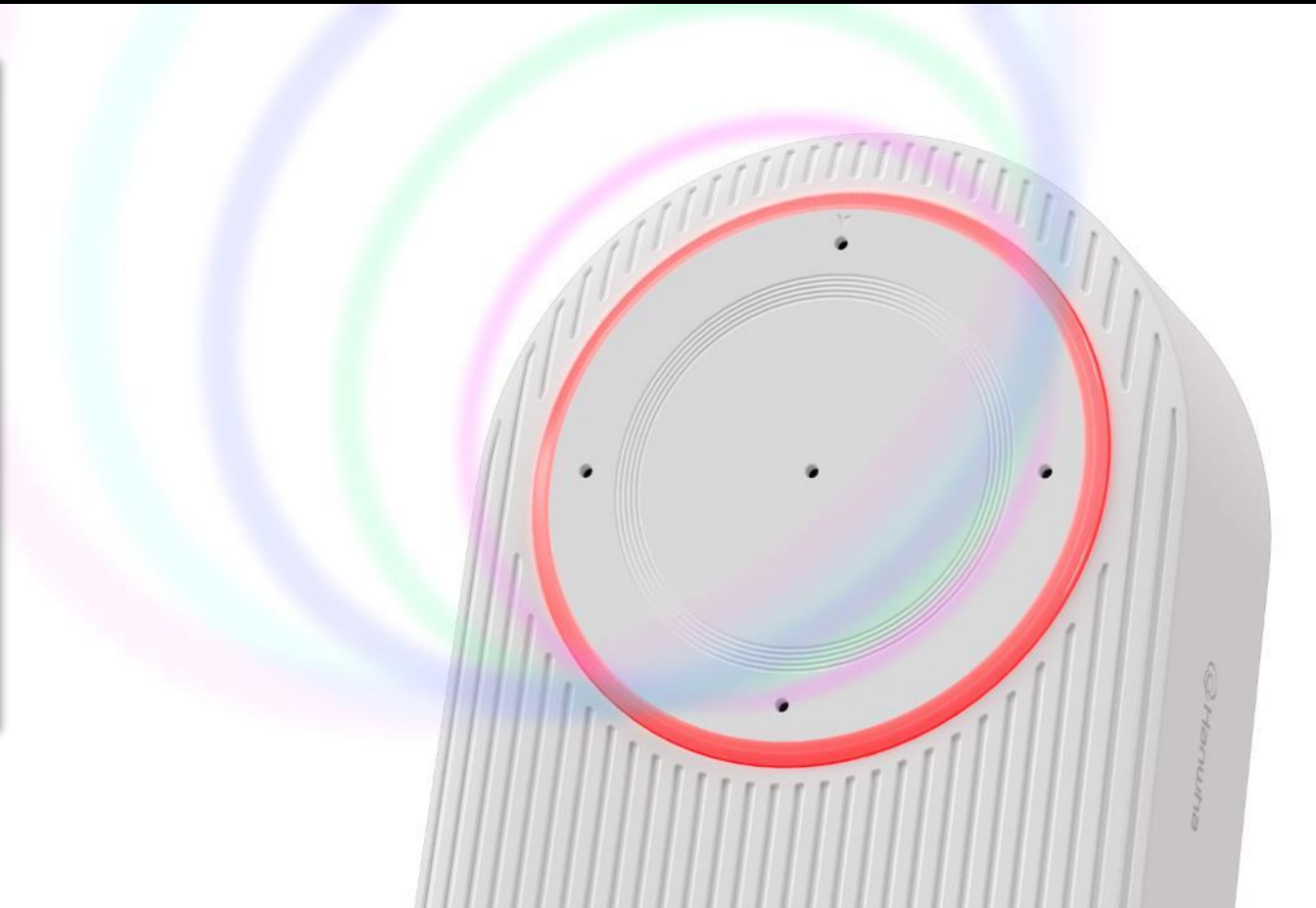
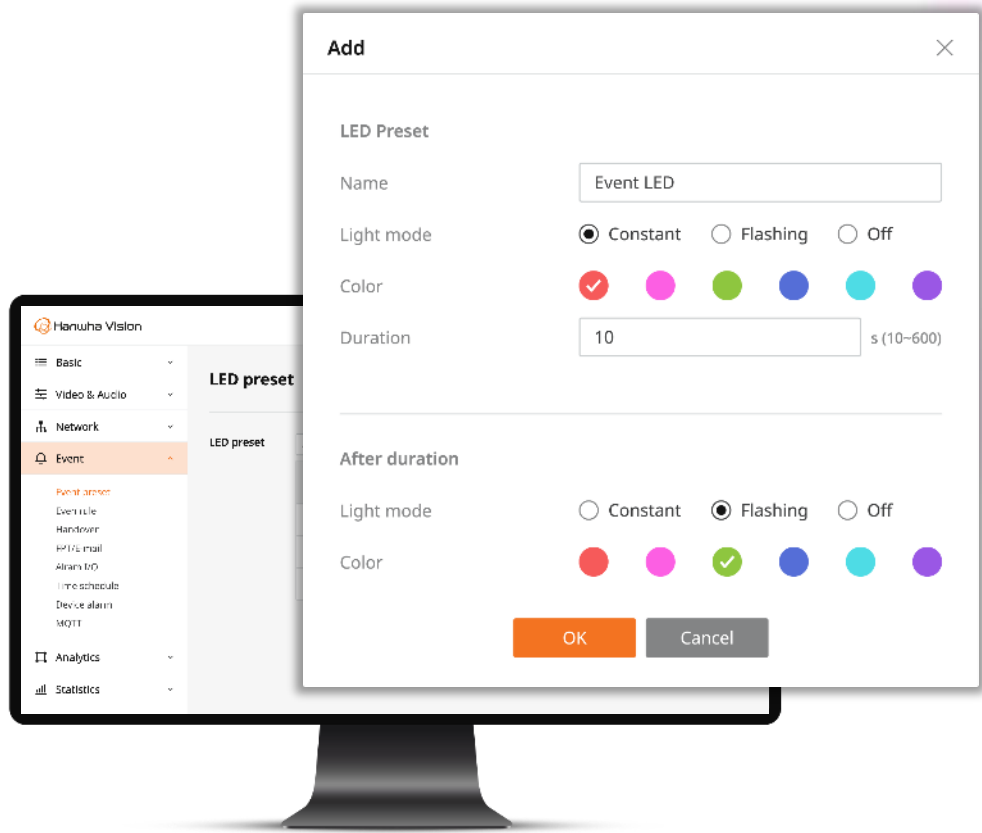


Leave the area immediately

# Audio File Playback Using Built-in Speaker

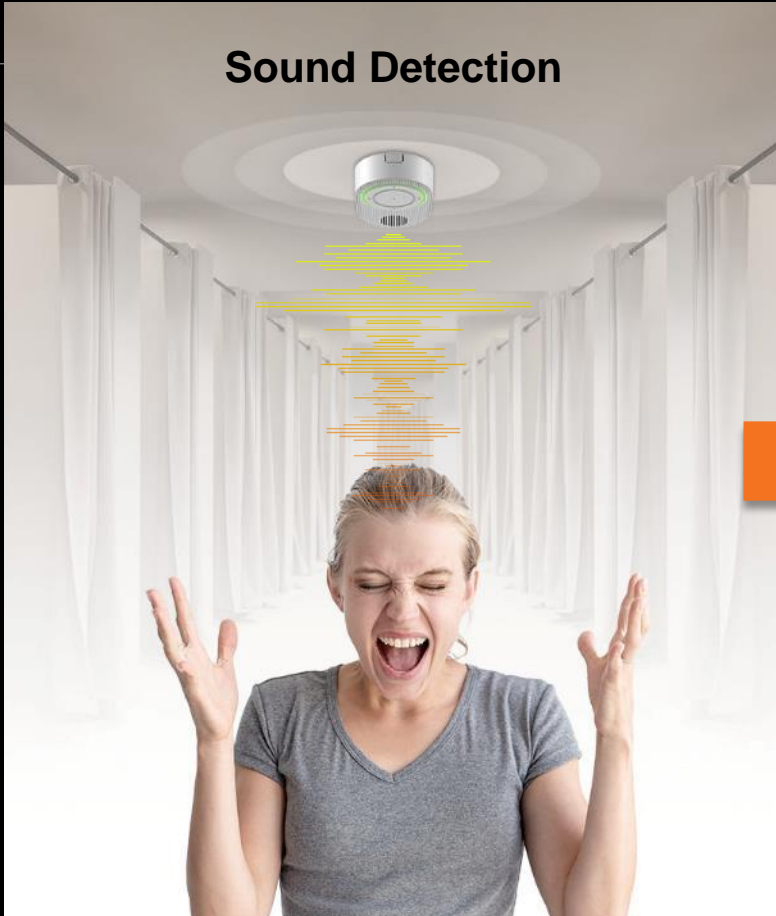


# LED Notification

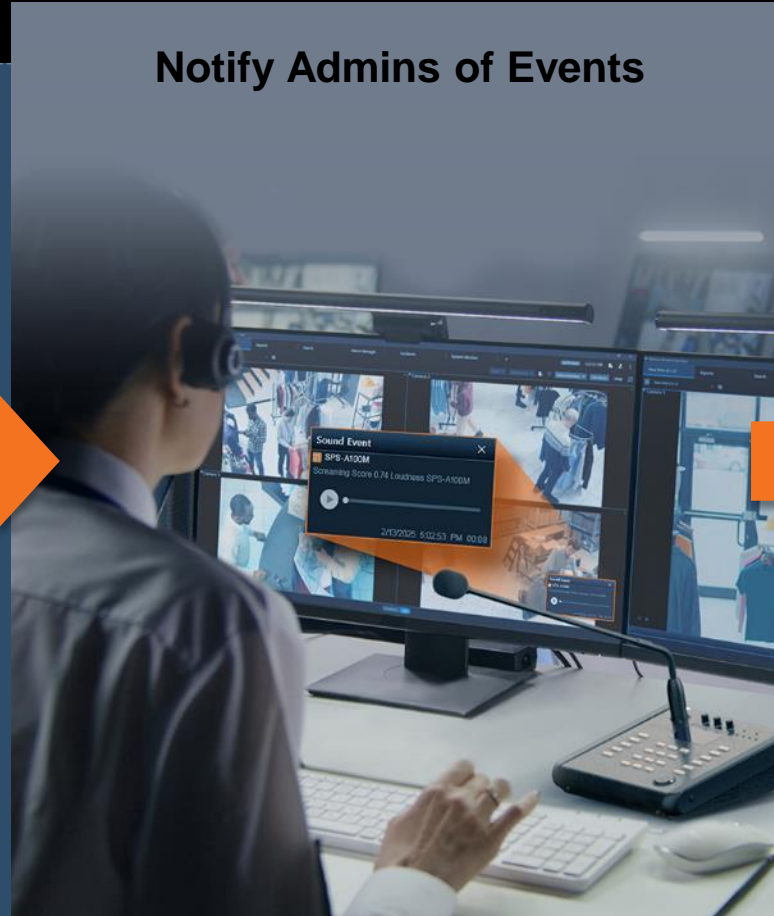


# Two-way Audio

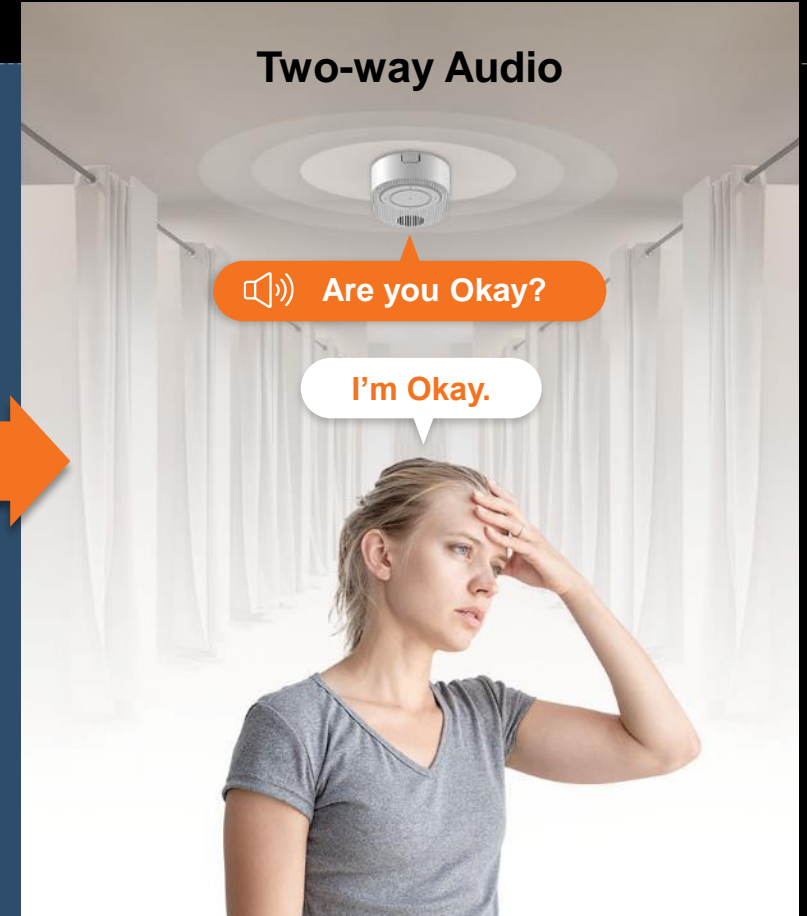
## Sound Detection



## Notify Admins of Events



## Two-way Audio



# Event Notification

## Variety Event Actions



**Speaker  
Notification**



**Alarm Out**



**FTP**  
Audio Clip



**E-mail**  
Notification/Audio Clip



**HTTP, HTTPS, TCP**  
Notification



**MQTT**  
Notification

# MQTT Protocol



# Case Tampering Alarm



# Next-level Cybersecurity

## FIPS 140-3 Level 3



### Security Certificate

- Secure element  
(with FIPS 140-3, CC EAL6+)



### OS/Firmware Protect

- Encrypted Firmware
- Secure boot
- Signed Firmware



### User Authentication

- Digest Authentication
- Prevent brute-force attack



### Network Authentication

- 802.1X Authentication  
(EAP-TLS, EAP-LEAP,  
EAP-PEAP, MSCHAPv2)



### Secure Communication

- HTTPS
- SRTP
- WSS(WebSocket secure)



### Access Control

- IP-based access control
- MAC-based access control



### Data Protect

- Encryption Credentials
- Encrypt compress for live recording file export

(H)12.16 x (W)31.7 cm



### Audit

- Access / System /  
Event Log management



### Device ID

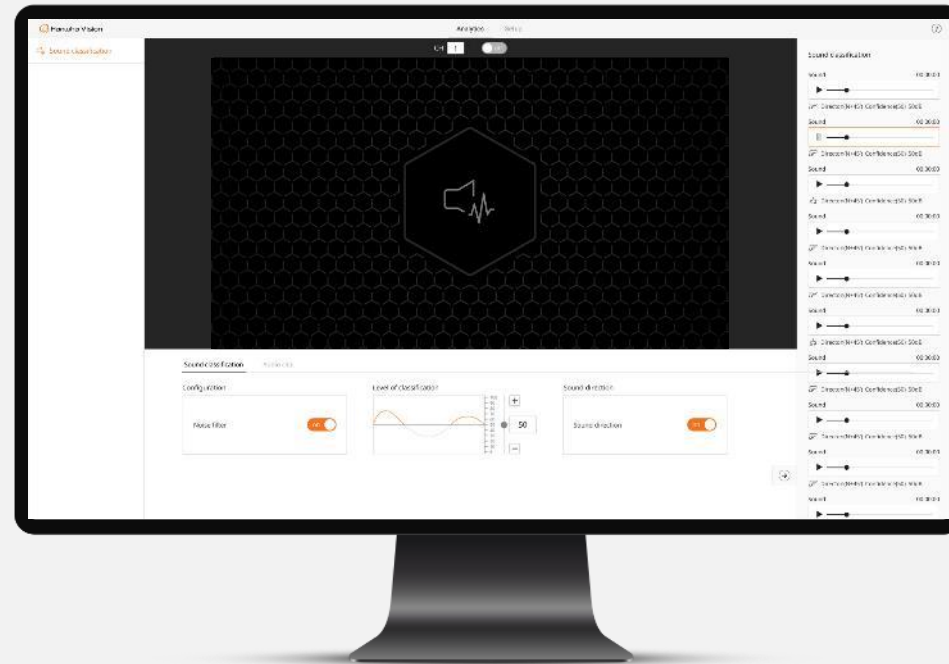
- Device Certificate  
(Hanwha Vision Root CA)



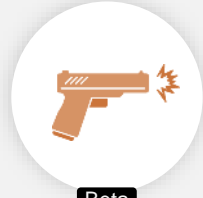
### Secure Storage

- TPM (Trusted platform module)

# Classify & Detect



**Extreme Decibel  
Detection**



Beta

**Gunshot  
Detection**



**Scream  
Detection**



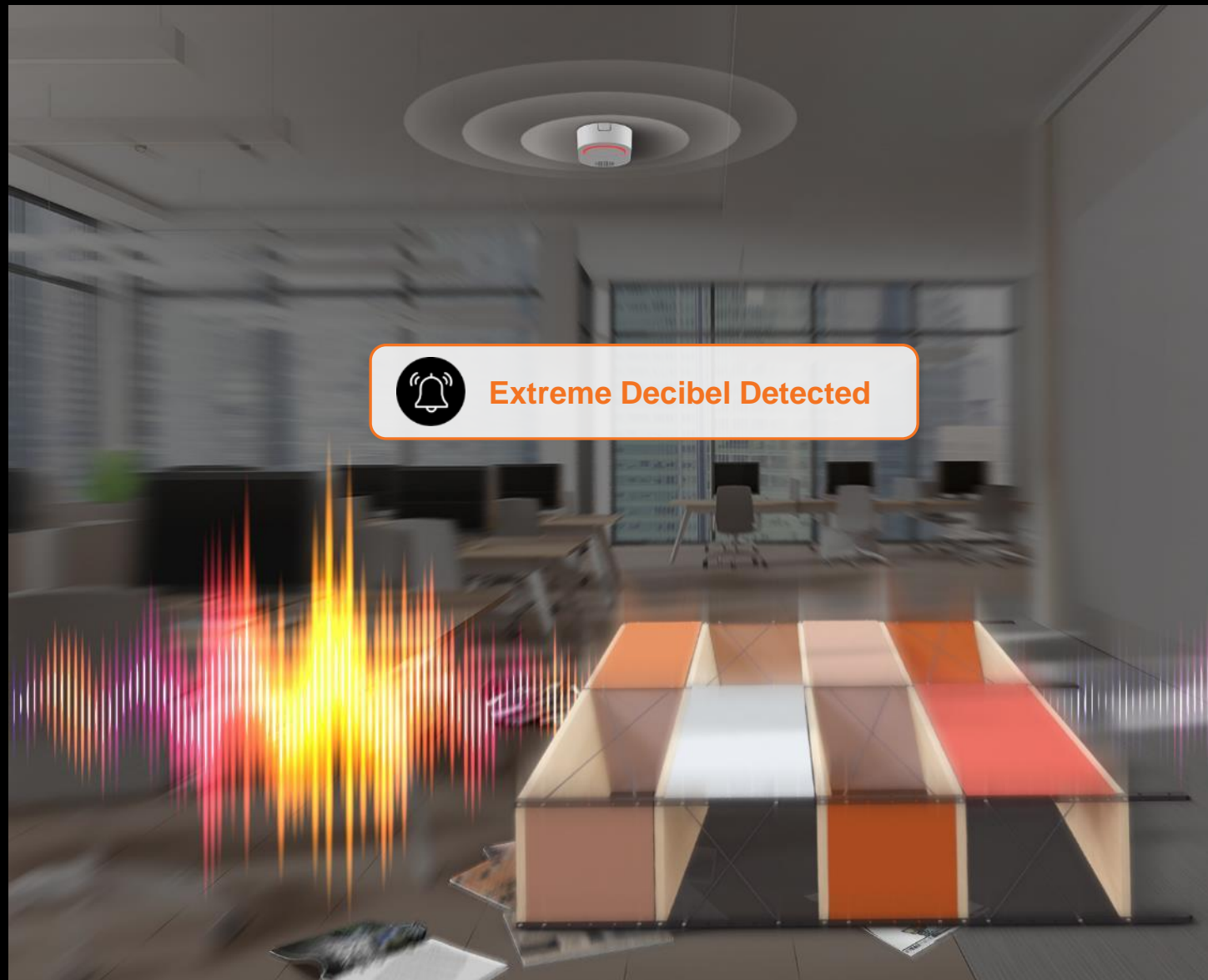
**Breaking Glass  
Detection**

## Extreme Decibel Detection

### Notes

The feature is coming in June

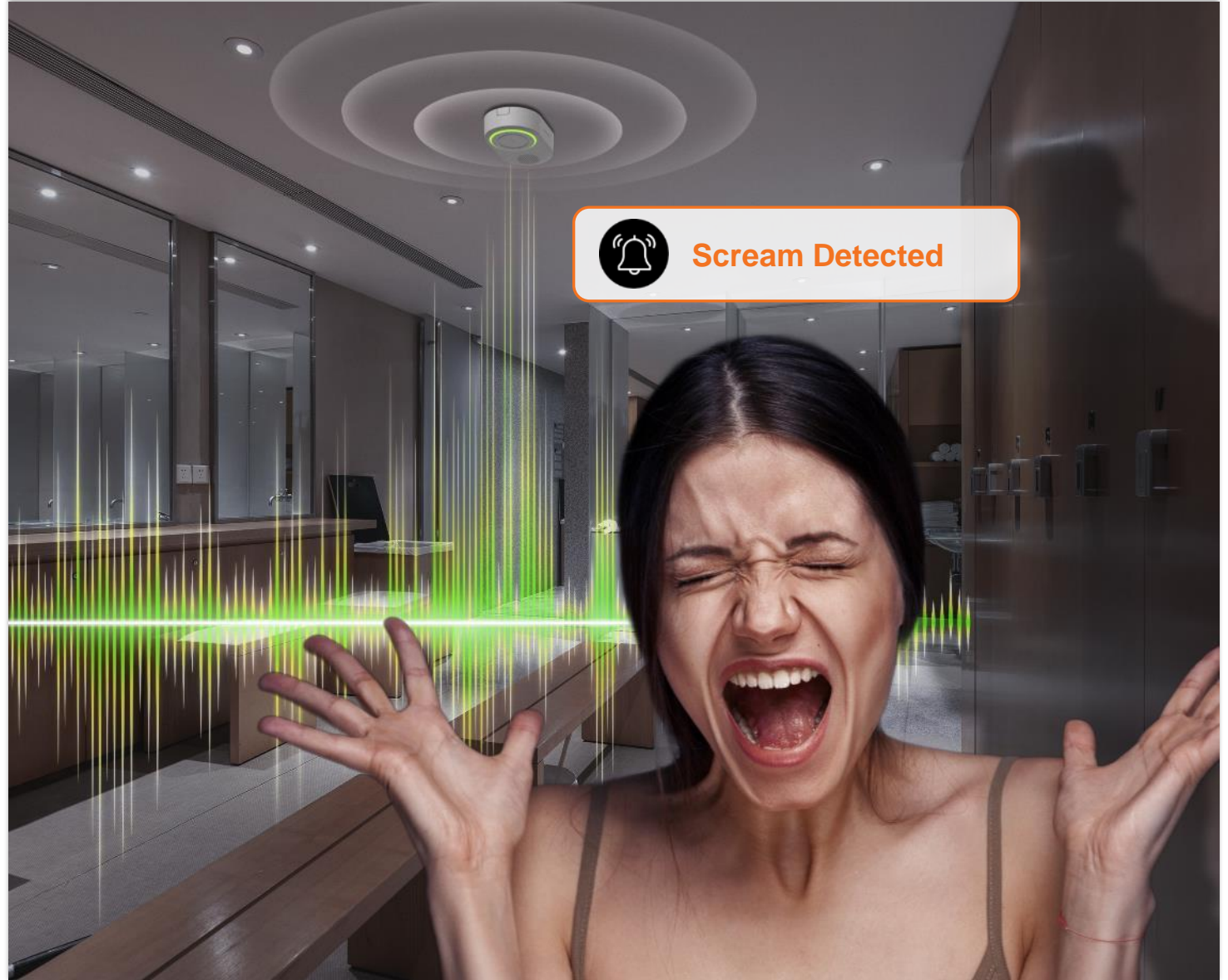
Type	Minimum Required dB	Detection Range
Extreme Decibel	>120dB	TBD



# AI-based Sound Classification

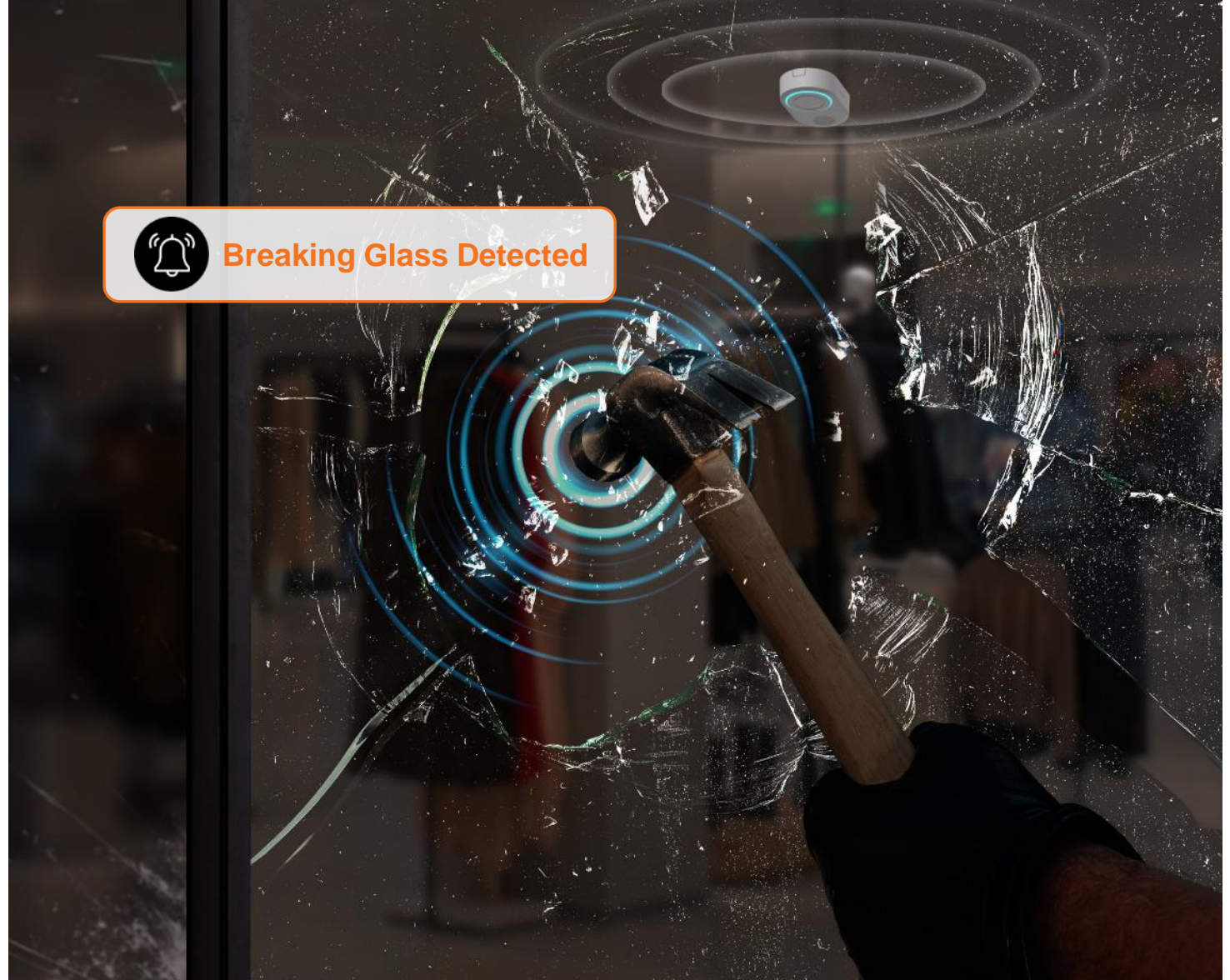
## Scream Detection

Type	Minimum Required dB	Detection Range
Screaming	>70dB	6.5 ~ 98.4ft (2 ~ 20m)



# AI-based Sound Classification

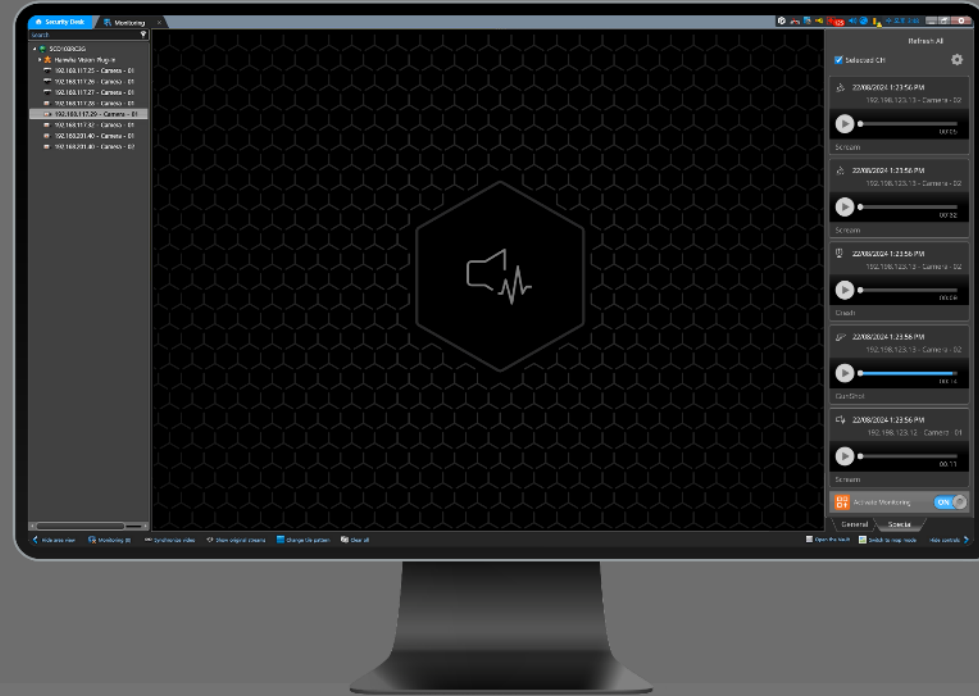
## Breaking glass detection



Type	Minimum Required dB	Detection Range
Glass break	>80dB	6.5 ~ 52.5ft (2 ~ 16m)

# VMS Integrations

## Compatible Software



## Hanwha's Plugin

◆ milestone Genetec

\* Displays AI-based sound classification, plays audio clips and receives event metadata.

◆ milestone Genetec Wisenet WAVE NVR

\* Supports receiving real-time events and searching for events.

# SPS-A100M



Category	Specification	
Audio Compression	G.711 u-law /G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC: 48Kbps at 16KHz	
Audio Streaming	Two-way/one-way selectable, Full duplex, Echo cancellation and noise reduction	
Audio In	Five built-in digital MEMS mics	
Audio Out	Built-in Speaker	<ul style="list-style-type: none"> <li>• Max. Sound Pressure Level 90dB at 1m(3.28ft)</li> <li>• Frequency Range: 144Hz~20kHz</li> </ul>
Analytics	Sound Classification	<ul style="list-style-type: none"> <li>• Classified sound type: Extreme decibel(TBD), Gunshot <span style="border: 1px solid black; padding: 0 2px;">Beta</span>, Glass break, Scream</li> <li>• Event metadata: sound type, sound direction, confidence, timestamp, audio clip, dB(±10dB))</li> </ul>
	Sound Direction	<ul style="list-style-type: none"> <li>• Ceiling: ±15 degree</li> </ul>
Alarm Events	When Alarm Trigger Occurred	<ul style="list-style-type: none"> <li>• File upload(Audio): e-mail/FTP</li> <li>• Notification: e-mail</li> <li>• Alarm output</li> <li>• Handover: PTZ preset, send message by HTTP/HTTPS/TCP</li> <li>• Audio clip playback(6MB, WAV in mono/stereo from 64 kbps to 320 kbps.</li> <li>• MQTT: publication</li> <li>• LED</li> <li>• Speaker</li> </ul>
USB	USB: Micro USB-C, for true north setting using Wisenet installation mobile app	
Alarm I/O	2 configurable I/O ports	
Power Consumption	PoE+: Max 18.5W, typical 8.2W	
Product Dimensions / Weight	215.1x135.1x52.8mm(8.47x5.32x2.08"), 973g(2.15 lb)	



Thank you