



## Al 360-degree fisheye cameras

Model: WV-S4156, WV-S4556L, WV-S4556LM WV-S4176, WV-S4576L, WV-S4576LM

Ver. 1.00

Panasonic i-PRO Sensing Solutions Co., Ltd.







# AI-360 degree fisheye cameras



Edge AI 360-degree fisheye camera that provides video surveillance without any blind spots, and business intelligence.

#### **Key features**

360 deg. in all directions with high-performance fisheye lens

Al processor for edge Al application

Supporting Industry standard protocols

Smart coding compatible with H.264 and H.265

## Models: AI-360 degree fisheye cameras



#### 5MP model



Indoor WV-S4156



Outdoor **WV-\$4556L** 



Outdoor (M12 connector) WV-S4556LM





Indoor WV-S4176



Outdoor WV-S4576L



Outdoor (M12 connector) WV-S4576LM

## All directions with high-performance fisheye lens



With high-performance fish eye lens, the camera provides superior images up to;

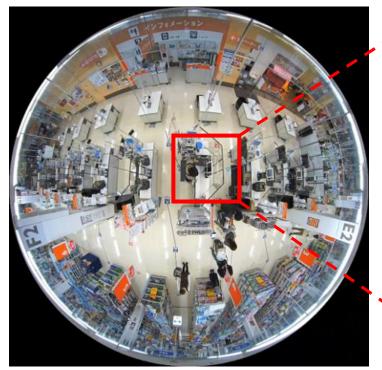
- 2992 x 2992 pixels at 30 fps by 12MP models
- 2192 x 2192 pixels at 30 fps by 5MP models



# Sample footage: Fisheye mode

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2192x2192 pix (5MP model)

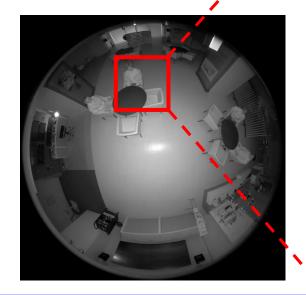




# Sample footage: Fisheye mode with IR LED

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Outdoor models provides excellent image quality even in no-lighting scene by embedded IR LED



**Actual size footage** 

Sample: Fisheye mode in 2192x2192 pixels (5MP model)

# Sample footage: Double Panorama mode

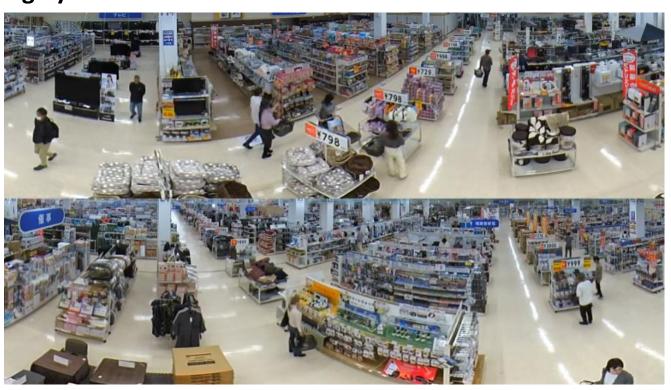


#### Processing de-warping by the camera

De-warping in below modes

- Double Panorama
- Panorama
- Quad PTZ
- Single PTZ
- Quad streams

Sample: Double Panorama mode in 1920x1080 pix (5MP model)

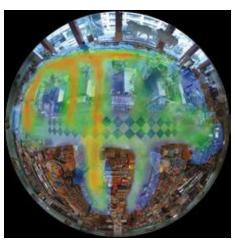


## Al processor for edge Al application

- **!!i**·PRO
- Build-in AI processor enables the camera run applications on the device edge
- Pre-installed AI-VMD / AI People Counting, and AI Privacy Guard















Yell

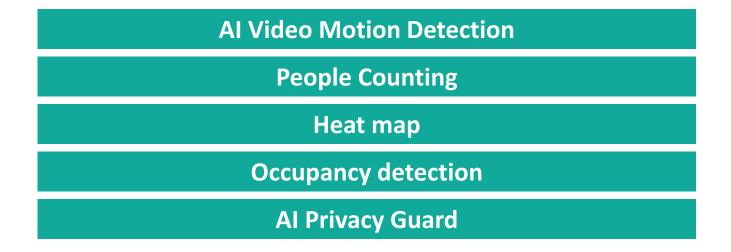


Glass break

# **Pre-installed AI applications**



#### The camera has pre-installed applications to offer following functions



### **Pre-installed applications: Al Video Motion Detection**



#### 3 functions in detecting motion objects

#### 1. Intruder detection:

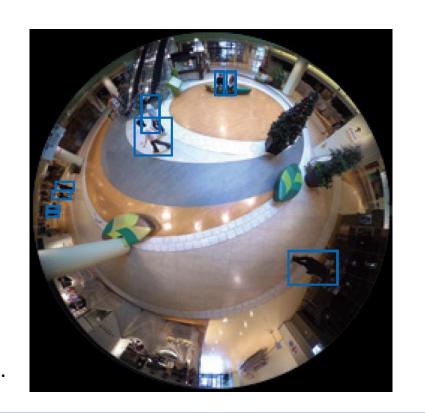
Issuing an alarm when a moving object enters a specified area.

#### 2. Cross Line detection:

Issuing an alarm when an object moving in the specified direction crosses a specified threshold.

#### 3. Loitering detection:

Issuing an alarm when a moving object enters a specified area and stays there for a specified amount of time.

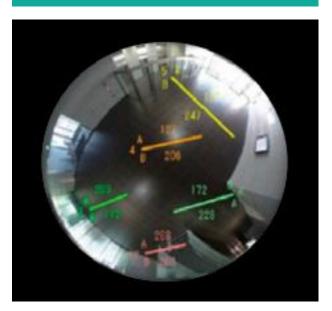


## **Pre-installed applications: People Counting**

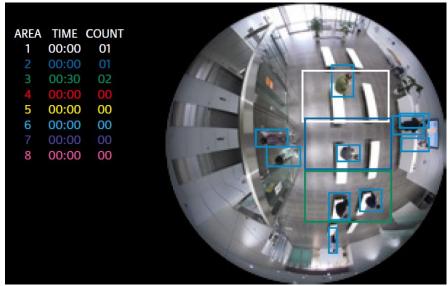


#### People Counting offers 2 modes to count up number of people.

#### **Cross line counting**



#### **Area counting**



## **Pre-installed applications: Heat map**



Heap map counts up both passing and loitering people.

**Passing** 



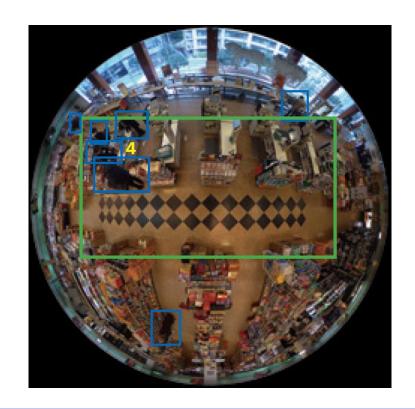
#### Loitering



## Pre-installed applications: Occupancy detection

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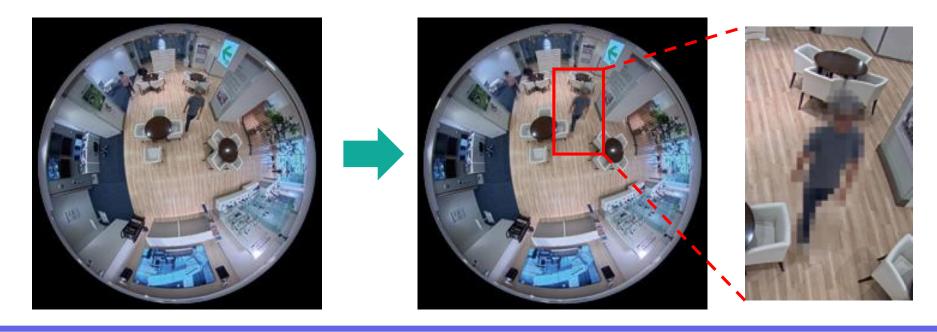
Detecting congestions by counting number of people in specific area in specific period of time.



## **Pre-installed applications: AI Privacy Guard**



Automatically pixelates the entire face or the figure of a person captured by the camera in real time.



# Detecting and classifying suspicious sound

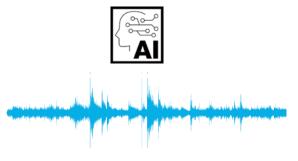


Detecting and classifying suspicious sound as Gunshot, Yell, Vehicle horn, and Glass break.

#### **Example: Gunshot sound**



Gunshot sound comes to microphone (cameras built-in or external one)\*



Al software (in Al network camera) detects and classifies the specific sound among other noises.



Sends alarms to VMS and/or operators etc..

<sup>\*</sup> Upon camera models

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# Supporting industry standard protocols



Supporting industry standard protocols such as ONVIF, MQTT\*, and H.265/H.264 for integrating/connecting with other devices and systems.



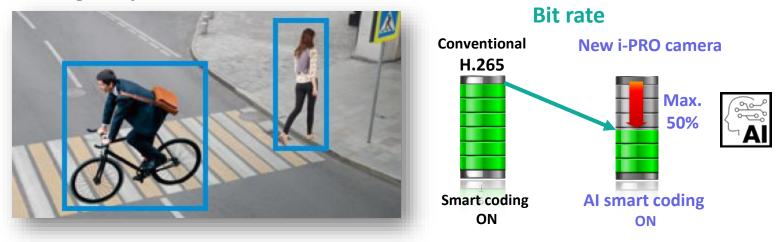
ONVIF is a trademark of ONVIF, Inc.

\*May require updating firmware into the latest version.

## Smart coding compatible with H.264 and H.265 :::PRO

## **AI Smart Coding**

Optimizing video compression to conserve network bandwidth and server storage capacities.



Reduces bit rate by controlling the image quality of still areas, moving areas, and faces with AI engine.

# **HPRO**