Panasonic
BUSINESS

**Security Systems
Intelligent Network Surveillance
Solutions**

i-PRO

November 2021

i·PRO
The Power of Truth

Panasonic Security is provided
by Panasonic i-PRO Sensing Solutions

Panasonic

In October 2019, Panasonic i-PRO Sensing Solutions Co., Ltd., was established as a global leader of advanced sensing technologies in the fields of Intelligent Surveillance, Public Safety, and Industrial/Medical Imaging, building on a legacy of over 60 years of Panasonic innovation.

Panasonic's LEGACY

Over 60 years of innovation
A global sales network
The leader in quality

+

i-PRO ORIGINALITY

Open partnerships
Fast and reliable
A specialist in sensing solutions

SOLUTIONS

- Intelligent Surveillance Solutions Business
- Industrial Medical Vision Solutions Business
- Law Enforcement Solutions Business

DEVICES / SERVICES

- Surveillance Camera Systems
- Medical & Industrial Cameras
- Evidence & Investigation Support Systems
- Image Analyzing Software
- Facial Recognition Systems
- Cloud Imaging Services

TECHNOLOGIES

- Video Capturing Technology
- AI Video Analysis Technology
- Sensing Technology
- Data Security Technology

◘ Panasonic Security

Panasonic Security provides industry-leading solutions to capture, record, manage and analyze surveillance video.

We offer a complete and comprehensive lineup of video surveillance products and solutions with the industry's highest image quality, mission-critical reliability and lowest total cost.

Our goal at Panasonic Security is simple: to make your life easier.

We've reengineered our hardware and software for a plug and play platform that delivers enhanced point-to-point data security and enterprise-level management-all housed in powerful, intuitive software.

KEY ADVANTAGES OF i-PRO SECURITY PRODUCTS

RELIABILITY
More than just meeting industry standards

DATA SECURITY
Preparing for the threat of cyber attack

DATA COMPRESSION
Reduced load for minimized network and data storage cost.

DATA ANALYTICS
Improved efficiency and reduction of system load via edge & cloud.

IMAGE QUALITY
Capturing evidence in extreme environments

For more information, visit **ipro.com**

Panasonic
An Imaging Solution Provider

Corporate Profile

New Products

Function Introduction

Network Camera Comparison Chart

Multi-Sensor

PTZ

Fixed Dome

360-degree Dome

Bullet

Box

Cylinder

Network products

AI-based high-precision analysis enables surveillance and crime prevention operations.

H.265 Network Camera with AI engine

WV-X2571LN / WV-X2551LN
(Outdoor Dome models)

WV-X2271L / WV-X2251L
(Indoor Dome models)

WV-X1571LN / WV-X1551LN
(Outdoor Bullet models)
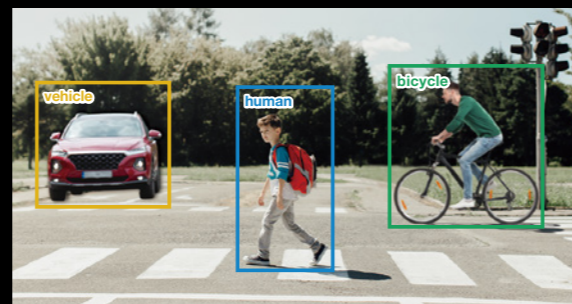
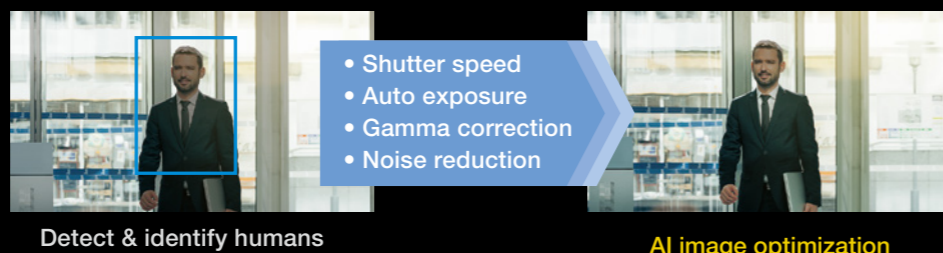WV-X2571LN: with base bracket

WV-X2571LN

WV-X2271L

WV-X1571LN

H.265 Network Camera with AI engine

WV-S2536LTN / WV-S2536LN / WV-S2536L
NEW WV-S2536LGN / **NEW** WV-S2536LG
(Outdoor Dome models)

WV-S1536LTN / WV-S1536LN / WV-S1536L
(Outdoor Bullet models)

WV-S2236L / **NEW** WV-S2236LG
WV-S2136L / **NEW** WV-S2136LG
WV-S2136 / **NEW** WV-S2136G
(Indoor Dome models)

WV-S1136 (Indoor Box models)

Three AI Functions

◉ **High-precision detection & identification**
• Upgrade to advanced video surveillance solutions by using AI technology for high-precision detection and identification of humans, vehicles and two-wheel motorcycles / bicycles.
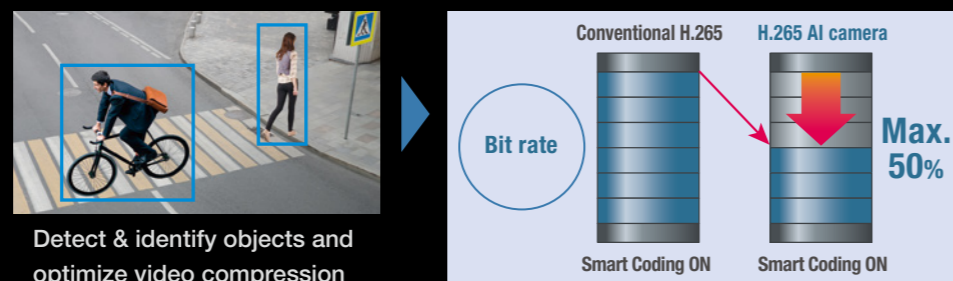
vehicle   human   bicycle

◉ **Optimal image quality settings**
• Detects humans, vehicles, etc., to optimize imaging and improve analysis accuracy.

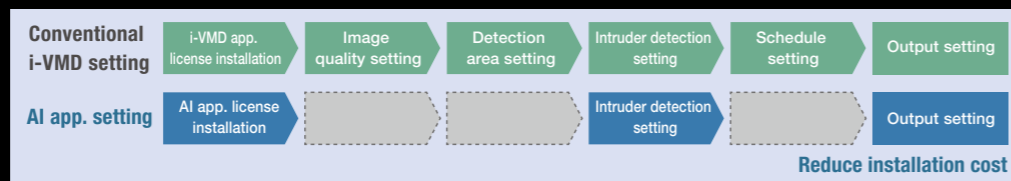• Shutter speed
• Auto exposure
• Gamma correction
• Noise reduction

Detect & identify humans

AI image optimization

◉ **Optimized video compression**
• Optimize video compression to conserve network bandwidth and server storage capacity.

Detect & identify objects and optimize video compression

Conventional H.265   H.265 AI camera

Bit rate

Max. 50%

Smart Coding ON   Smart Coding ON

Simple Setting Procedures

• Enables high-accuracy video analysis through AI technology-enabled simple setting procedures.

Conventional i-VMD setting	i-VMD app. license installation	Image quality setting	Detection area setting	Intruder detection setting	Schedule setting	Output setting
AI app. setting	AI app. license installation			Intruder detection setting		Output setting

Reduce installation cost

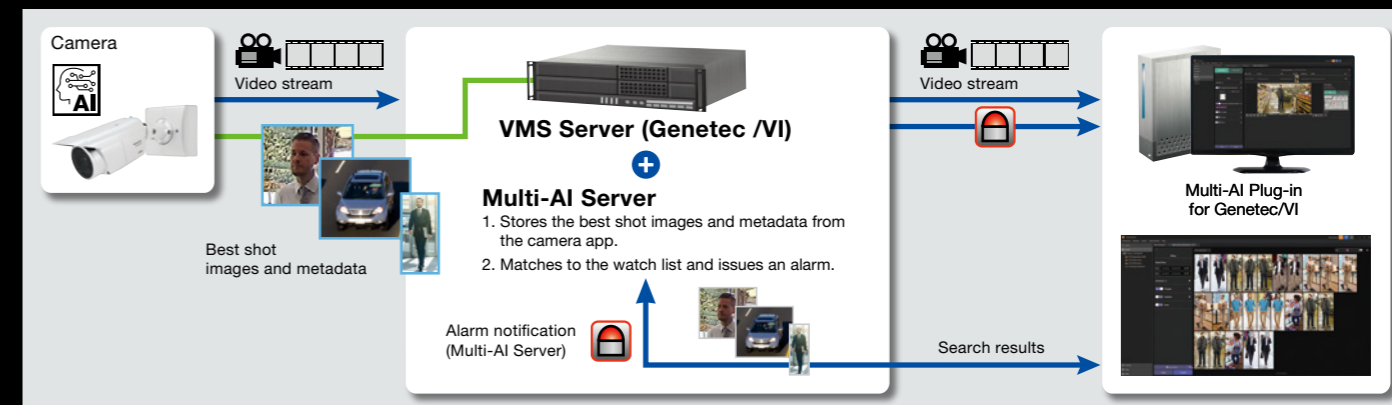### Easy Search Solutions with Multi-AI System

Multi-AI Server stores the best shot images and metadata captured by i-PRO network cameras. Then, it collates this data with the watch list registered in the client software and issues an alarm when a match is found. The server does not require expensive hardware because i-PRO network cameras handle the advanced processing. The server can also be installed on the same hardware as the VMS.
The system comprises the Multi-AI Server, the AI application installed on i-PRO network cameras utilizing AI engines, and the Multi-AI plug-in software for the VMS client.

Example of a basic system connection (Multi-AI server Installed in VMS server)

Camera

Video stream

Video stream

VMS Server (Genetec /VI)
+
Multi-AI Server
1. Stores the best shot images and metadata from the camera app.
2. Matches to the watch list and issues an alarm.

Best shot images and metadata

Alarm notification (Multi-AI Server)

Search results

Multi-AI Plug-in for Genetec/VI

Compatible with Third-Party Applications

i-PRO provides an SDK for application development. Third-party companies can use the SDK to develop AI applications for installation on i-PRO network cameras. This allows users to select the AI application that best matches their requirements from i-PRO AI applications and third-party AI applications.

*Product image for illustration purposes only. Actual product may vary.
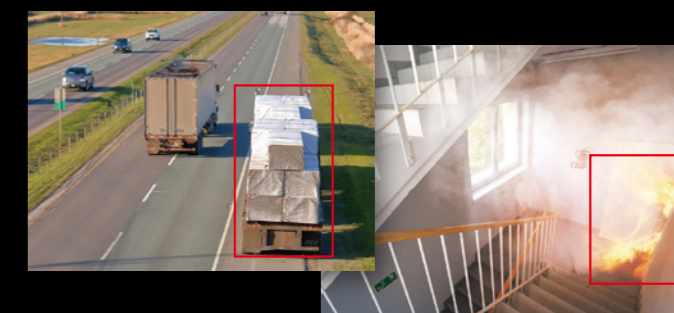
Install subsequently released applications to keep your i-PRO network camera utilizing an AI engine on the cutting edge.
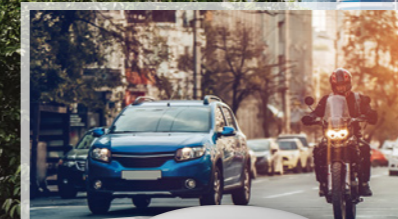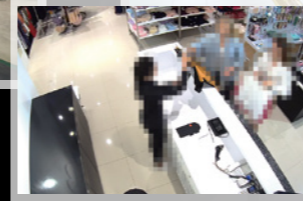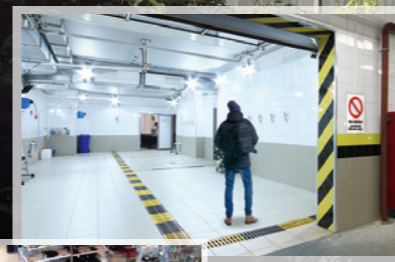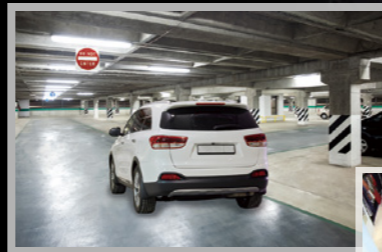
i-PRO AI applications

AI Video Motion Detection (AI-VMD)

AI differentiates between vehicles, motorcycles, bicycles, and people. It further detects and sends warning notifications when they enter a specified area.

Intruders	Loitering	Direction	Cross line

- It is possible to issue an alarm when a moving object enters a specified area.
- It is possible to issue an alarm when a moving object enters a specified area and stays there for a specified amount of time.
- It is possible to issue an alarm when a moving object enters a specified area and moves in the specified direction.
- It is possible to issue an alarm when an object moving in the specified direction crosses a specified threshold.

AI Privacy Guard

To protect privacy and portrait rights, it is possible to automatically apply a mosaic the entire face and figure of a person photographed by the camera.

| Factory		Retail stores	
Original image	Processed image	Original image	Processed image

AI Sound Classification

AI detects and identifies (gunshot / yell / vehicle horn / glass break) sound.
It then sends a warning notification according to the sound identified.

| Gunshot	Yell	Vehicle horn	Glass break
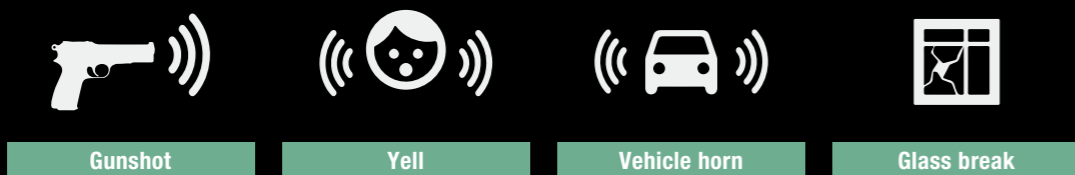
AI Face Detection

The i-PRO network camera utilizing an AI engine and Multi-AI Server realize real-time face recognition without an expensive face recognition server. AI detection enables highly accurate face detection, and is also effective for detection in low lighting, backlit environments, or for detecting faces obscured by masks.

Super Dynamic: OFF   Super Dynamic: 144dB   Surgical mask
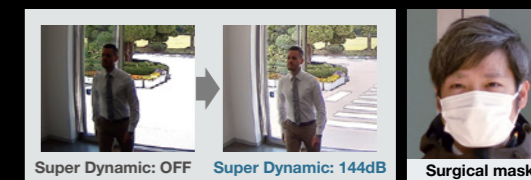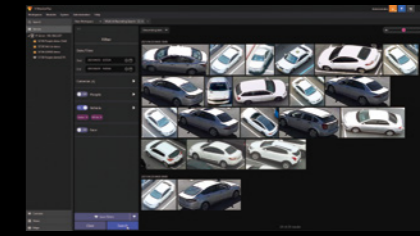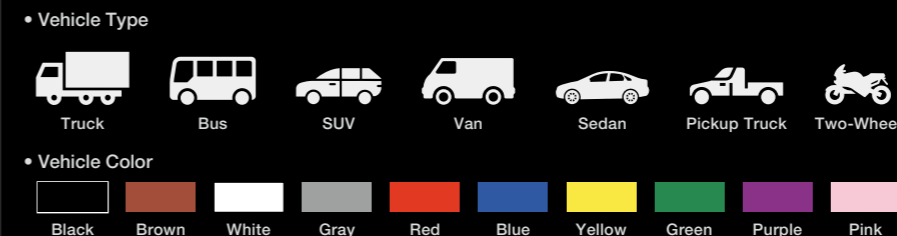
AI People Detection

Characteristics of the human face and clothing are extracted and classified into useful categories such as gender, age, and clothing color. This abundant attribute information can then be searched to easily find the target person.

Attributes	Values
Gender	Male / Female
Age	Child (0-10) / Young Adult (11-20) / Adult (21-60) / Senior (61+)
Mask	Mask / No Mask
Hair type	Long hair / Short hair / Hat
Hair color	Black / Brown / White / Gray / Gold
Sunglasses	Sunglass / No Sunglasses
Beard	Beard / No Beard
Top type	Long sleeves / Short sleeves
Top color	Black / Brown / White / Gray / Green / Red / Blue / Yellow / Orange / Purple / Pink
Bottom type	Short / Long
Bottom Color	Black / Brown / White / Gray / Green / Red / Blue / Yellow / Orange / Purple / Pink

Mask   Beard   Hat   Sunglass
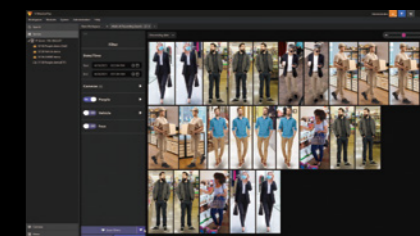
AI Vehicle Detection

Vehicle characteristics are extracted and classified into useful categories such as type and color. This abundant attribute information can then be searched to easily find the target vehicle.

- Vehicle Type

Truck	Bus	SUV	Van	Sedan	Pickup Truck	Two-Wheel

- Vehicle Color

Black	Brown	White	Gray	Red	Blue	Yellow	Green	Purple	Pink

i-PRO AI applications

AI Non-Mask Detection

AI Non-Mask Detection is a software that adds functionality to your network camera with AI engine.

Just install software on the camera to enable the AI non-mask detection function to send notifications to external systems (network disk recorder or Video Insight VMS) when a person without a mask is detected.

◉ Non-Mask Detection

(1) Deep-learning and proprietary image processing technologies recognize mask and detect people who are not wearing them.
(2) Simply install software on your network camera with AI engine and the camera will detect people who are not wearing mask by displaying pop up alarm notification at external systems.
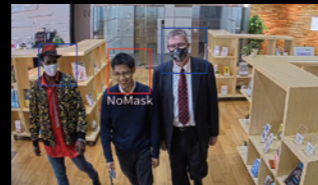
*Caution
Difficulty, failure or error in detection may occur due to brightness of the area, subject movement, and installation conditions.
Please check on-site environment before adopting this system.
- Not compatible with IR-LED environments.   - May not detect certain types of masks.
- May not detect certain ways masks are worn, such as under the chin or when not covering the nose.
- May fail to detect or detect with reduced accuracy due to uneven light, changes in lighting, facial orientation, jewelry worn, fast subject movement, strong external light sources, etc.

*Example image of detection processing.

Recognizable Mask Type and Condition

| Straight forward | Tilted sideways (45° left/right, 30° up/down) | Subject wearing glasses | Subject wearing a hat (eyebrows visible) |

| Flat type | Pleated type | Three-dimensional type |

◉ System Connection Example
##### WJ-NX series Network Disk Recorder

The WJ-NX series network disk recorder and i-PRO Management Software WV-ASM300W can be linked and incorporated into a monitoring system.
The software requires no additional set up.
Simply install it on your network camera with AI engine and it is ready to use.

*Message ID settings are required on the WJ-NX series network disk recorder and WV-ASM300W.
*WJ-NX series network disk recorder and WV-ASM300W detection frame display is not supported.

AI Non-Mask Detection → **Pop-up alarm notification** → **Video Management Software — Video Insight 7**
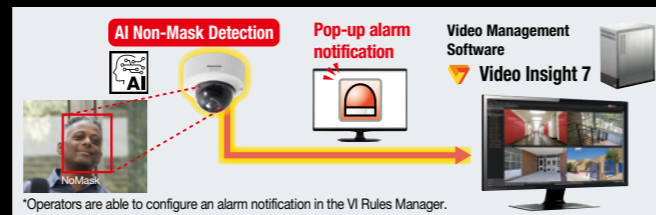
*Operators are able to configure an alarm notification in the VI Rules Manager.
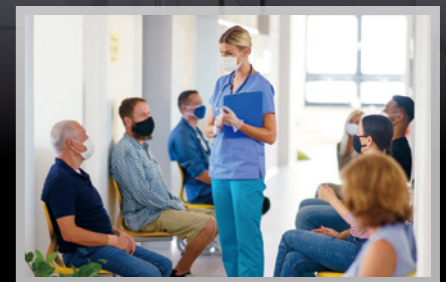
AI Occupancy Detection

AI Occupancy Detection adds functionality to your network camera with AI engine (sold separately).
Install the software on the camera to enable the occupancy detection function to send notifications to external systems (network disk recorder or Video Insight VMS) when set conditions are met.

◉ Occupancy Detection

(1) Detecting the congestion via network camera with AI engine enables that information to be used to direct visitors in advance or help store staff work more efficiently.
(2) The function can be used right away by simply installing the app on a network camera with AI engine and setting detection conditions (detection area, number of people, time) on the app's settings screen.
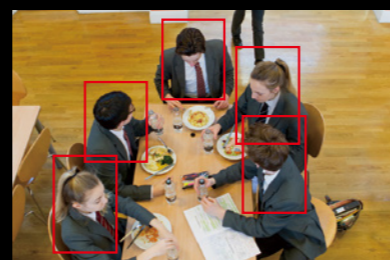
*Caution
Motion may be difficult or impossible to detect and errors may occur due to installation conditions such as brightness of the area and subject movement or due to the usage environment. Please check the on-site environment before adopting this system.
- May fail to detect or detect with reduced accuracy due to uneven light, changes in lighting, jewelry worn, fast subject movement, strong external light sources, etc.
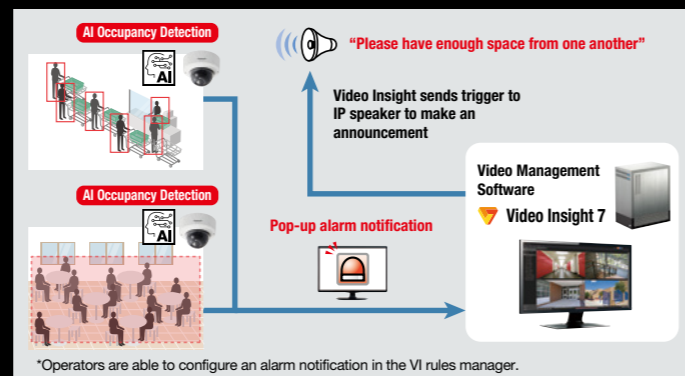- People lying down or who have fallen down may not be detected correctly.

*Example image of detection processing.

◉ System Connection Example
WJ-NX Series Network Disk Recorder

The WJ-NX series network disk recorder and i-PRO management software WV-ASM300W can be linked and incorporated into a monitoring system.

*Message ID settings are required on the WJ-NX series network disk recorder and WV-ASM300W.
*WJ-NX series network disk recorder and WV-ASM300W detection frame display are not supported.

AI Occupancy Detection → **Video Insight sends trigger to IP speaker to make an announcement** — "Please have enough space from one another"

AI Occupancy Detection → **Pop-up alarm notification** → **Video Management Software — Video Insight 7**

*Operators are able to configure an alarm notification in the VI rules manager.

AI applications correspondence list

	WV-X2571LN / WV-X2551LN WV-X2271L / WV-X2251L WV-X1571LN / WV-X1551LN	WV-S2536LTN / WV-S2536L(G)N / WV-S2536L(G) WV-S1536LTN / WV-S1536LN / WV-S1536L WV-S2236L(G) / WV-S2136L(G) / WV-S2136(G) WV-S1136	WV-S4576L / WV-S4576LM WV-S4556L / WV-S4556LM WV-S4176 / WV-S4156
AI Video Motion Detection (AI-VMD)	✓	✓	✓
Privacy Guard	✓	✓	
People Detection	✓	✓	
Face Detection	✓	✓	
Vehicle Detection	✓	✓	
Sound Classification*1	✓	✓	
Non mask Detection		✓	
Occupancy Detection		✓	✓
People Counting			✓
Cross Line Counting			✓
Area Counting			✓
Heat Map			✓
Passing Map			✓
Loitering Map			✓
3rd Party application	✓*2	✓*2	✓*2

*1 Specificaion of camera side.
*2 It may not be available depending on the specifications of 3rd party application. Please check the specifications.

Please find the latest information from our website.
https://bizpartner.panasonic.net/public/file/compatibility-list-extension-software?category=2025

A 360-degree fisheye camera with edge AI for video surveillance and business intelligence.

360 Fisheye Network Camera with AI engine

WV-S4576L / WV-S4576LM
(Outdoor models)

WV-S4556L / WV-S4556LM
(Outdoor models)

WV-S4176 / WV-S4156
(Indoor models)

WV-S4576L / WV-S4576LM
: with base bracket

WV-S4556L / WV-S4556LM

WV-S4176

WV-S4156

Value beyond surveillance

The new S-series fisheye camera is a next-generation camera equipped with an edge AI processor.
The high-performance fisheye lens and our own video compression technology make it possible for a single camera to capture images in 360 degrees in all directions up to the periphery of the screen.
The on-board AI processor can be loaded with applications that allow users to solve a variety of issues suited to their particular needs. Check the number of people and traffic congestion on a dashboard that can be customized to the user's unique operation style, perfect for business intelligence applications.

Usage cases

◉ **Urban areas**
- Equipped with IR-LEDs.
  Meets water resistance standard IP66, as well as impact resistance standards 50J and IK10.
  Enables clear image capture, even when subjected to harsh outdoor environments.

  Applicable models: WV-S4576L / WV-S4556L

◉ **Public transportation**
- Meets European railway standard EN50155-TX.

  Applicable models:
  WV-S4576LM / WV-S4556LM

◉ **Retail stores**
- High resolution, 360-degree surveillance for wide-range image capture.

  Applicable models:
  WV-S4176 / WV-S4156

◉ **Warehouses**
- 360-degree surveillance to enable installation on ceilings or walls. Facilitates efficient surveillance.

  Applicable models:
  WV-S4176 / WV-S4156

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i-PRO AI applications

■ AI-VMD/AI People Counting with the 360-degree fisheye camera

AI Video Motion Detection

AI differentiates between vehicles and people, detecting and sending warning notifications when an intruder enters a specified area.

Intruder detection:
Issues an alarm when a moving object enters a specified area.

Cross Line detection:
Issues an alarm when an object moving in the specified direction crosses a specified threshold.

Loitering detection:
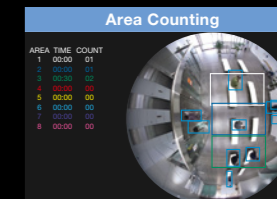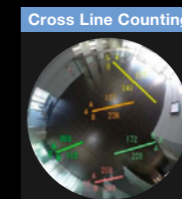Issues an alarm when a moving object enters a specified area and stays there for a specified amount of time.

People Counting

Cross Line Counting:
Counts the number of people moving in a specified direction and cross a specified threshold.
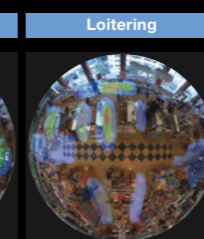
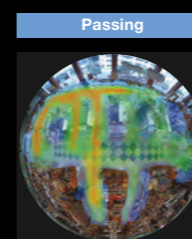**Area Counting (Queue Management):**
Counts the number of people in the set area.

Cross Line Counting

Area Counting

Heat map

Heat mapping provides statistical information about traffic flow and keeps counts for people passing through and loitering in the area.

Passing

Loitering

Occupancy detection

The network camera uses its AI engine to detect congestion, providing data that can be used to direct visitor traffic flow in advance or help staff work more efficiently.
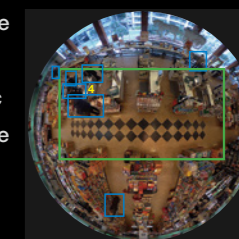
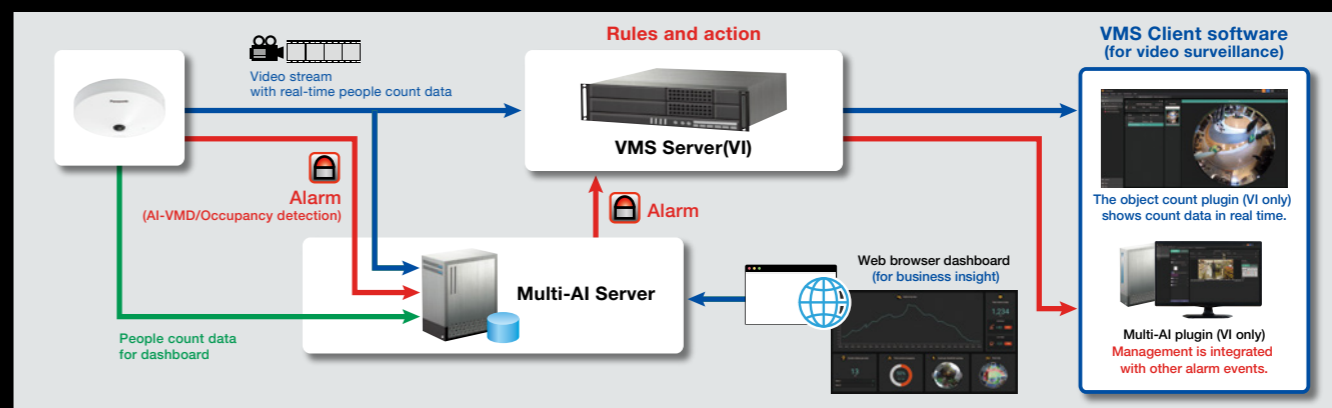### ■ AI Privacy Guard for 360-degree fisheye

AI Privacy Guard

AI can automatically mosaic faces and figures of people who are photographed to safeguard privacy and portrait rights.

Original image

Processed image
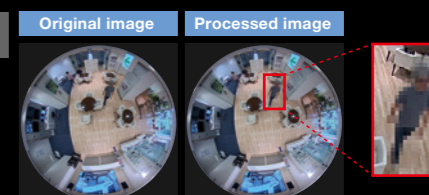
Multi-AI Server

The Multi-AI server stores the best images and metadata captured by i-PRO network cameras, then collates this data with the watch list registered in the client software and issues an alarm when a match is found. The server does not require expensive hardware because i-PRO network cameras handle the advanced processing. The server can even be installed on the same hardware as the VMS. The system comprises the Multi-AI Server, the AI application installed on i-PRO network cameras utilizing AI engines, and the Multi-AI plug-in software for the VMS client.

Example of a basic system connection (with Multi-AI Server) for Video Insight

Video stream
with real-time people count data

Rules and action

VMS Client software
(for video surveillance)

VMS Server(VI)

Alarm
(AI-VMD/Occupancy detection)

Alarm

The object count plugin (VI only) shows count data in real time.

People count data
for dashboard

Multi-AI Server

Web browser dashboard
(for business insight)

Multi-AI plugin (VI only)
Management is integrated
with other alarm events.

Corporate Profile

New Products

Function Introduction

Network Camera Comparison Chart

Multi-Sensor

PTZ

Fixed Dome

360-degree Dome

Bullet

Box

Cylinder

Network products

Multi-Sensor

PTZ

Fixed Dome

360-degree Dome

Bullet

Box

Cylinder

Network products

Are U looking for security without compromise?

NEW

Varifocal Lens Network Camera

WV-U2542LA / WV-U2532LA / WV-U2142LA / WV-U2132LA WV-U1542LA / WV-U1532LA / WV-U1142A / WV-U1132A

NEW

Fixed Lens Network Camera

WV-U2540LA / WV-U2530LA / WV-U2140LA / WV-U2130LA WV-U1130A

Meeting a Multitude of Application Needs

• Both Full HD and higher-resolution 4MP network cameras are available. 4MP network cameras enable monitoring in a more expansive area.

• Fixed lens and Varifocal lens network cameras are available. Varifocal lens network cameras enable focus, zoom and angle of view adjustment. The lens can be adjusted to capture a wider area or to focus on a smaller area in greater detail.

• Box and Dome cameras are available. Select the model best suited to your installation location.

• Outdoor network cameras have IP66 and NEMA 4X ratings for protection against dust, rain and snow, and IK10 ratings for ensure shock resistance.

• Strengthen cyber security by pre-installing digital certificates issued by a third party (GlobalSign).

• Compliant with ONVIF® G/S/T profile and H.265/H.264.

*ONVIF is a trademark of ONVIF, Inc.

Clear Color Images in Low-Light Conditions

• Adopting Color Night Vision technology enables production of extremely high-quality images, even in the most challenging lighting conditions.

Under 0.2-0.3 lux lighting environment

High Image Quality Without Heavy Network Loads

• Adopting H.265/H.264 Smart Coding technology for the GOP control, frame control and Auto-VIQS sharply increases bandwidth efficiency to enable longer recording that takes up less storage.

Panasonic H.264	Panasonic H.265	Panasonic H.265 Smart Coding
	50%	95%
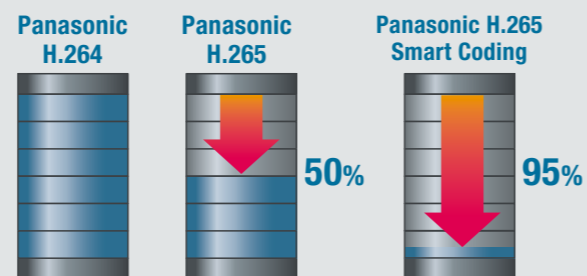
"Smart Coding" provides over 95% reduction in total file size when compared to "H.264"

Four repositionable lenses minimize blind spots and allows the camera to adjust to the various shaped intersections and monitoring areas found in cities.

Multi-Sensor Camera 4 x 4K(33MP)

WV-X8571N

Multi-Sensor Camera 4 x FHD(8MP)

WV-S8531N

WV-X8571N   WV-S8531N

4 x True 4K high resolution

• Can identify vehicles 100 feet diagonal from intersection corners at three lane streets (WV-X8571N)

Combining H.265 compression with Smart Coding technology

• In spite of the high resolution of 4 × 4 K, it achieved the bit rate lower than the bit rate of one 4K camera of H.264.

Resolution	Bit rate*

* "H.265 with Smart Coding" provides max.95% reduction in total file size when compared to "H.264 without Smart Coding" but it depends on a scene.

WV-X8571N   WV-S1572L   WV-X8571N   WV-S1572L

Wide range tilt angle adjustment mechanism

Tilt   Pan

360-degree view angle adjustment

270-degree + right below view angle adjustment

Four repositionable lenses enables to monitoring at minimize blind spots

◉ **270-degree view (Full intersection view)**

• One multi sensor camera at intersection corner, It enables monitoring with minimized blind spots

• Enables to monitoring even if bottom view angle

◉ **360-degree view**

• One multi-sensor camera enables monitor the park by minimize blind spots

Clear visibility of distant objects even in the dark

Long distance IR illumination
iA PTZ Camera
with Heavy salt damage resistance

Long distance IR illumination
iA PTZ Camera

WV-X6533LNS
(40x optical zoom)

WV-X6533LN
(40x optical zoom)

WV-S6532LNS
(22x optical zoom)

WV-S6532LN
(22x optical zoom)

WV-X6533LNS   WV-X6533LN

Built-in IR LED and visible light cut filter enable detection of irregularities in the dark

• A standard camera may not be able to record a clear image because it is difficult to focus if the subject is in a place where there is no light, or if there is light such as a streetlight between the camera and the subject. Even in such cases, the IR LED light and the visible light cut filter can capture clear images.
It is possible to discern the movement of an object 350 m* away in an unlit place at night. *WV-X6533LNS and WV-X6533LN only.

Light near subject: 0 lux

Optical 40x* zoom clearly captures details of distant subjects

• When monitoring large parking lots or large-scale facilities such as power plants and dams, the installation location of cameras is often limited, and both the monitoring of distant areas and wide-area monitoring are important.
The optical 40x* zoom can capture the characteristics of an object 350 m* away.
*WV-X6533LNS and WV-X6533LN only.

1x Zoom   **350 m**   **40x Zoom**
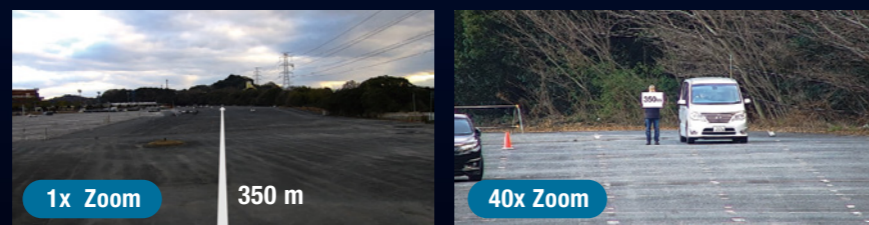
Advanced image stabilization suppresses blur even when using the high-power zoom

• When using the high-power zoom, slight vibrations greatly disturb the image, but the advanced image stabilization function compensates for blurs even for vibrations that cannot be detected by a gyroscope. This minimizes image blur caused by vibration and provides stable images.

Anti-salt atmospheric corrosion protection ideal for seaside environments

• Camera housing is corroded due to damage caused by sea breezes in waterfront locations and high salt-content snow-melting agents. Salt-resistant products* have a special coating that is resistant to corrosion caused by salt. This reduces issues caused by such damage, such as sticking screws and housing corrosion.
*WV-X6533LNS and WV-S6532LNS only.

Ultra-high 4K picture quality for detailed wide-area monitoring with a single camera

4K (3,840 x 2,160) iA H.265 Network Camera

WV-S2572L (Outdoor Vandal Resistant Dome model)
WV-S2272L (Indoor Vandal Resistant Dome model)
WV-S1572L (Outdoor Bullet model)

5-megapixel iA H.265 Network Camera

WV-S2552L (Outdoor Vandal Resistant Dome model)
WV-S2252L (Indoor Vandal Resistant Dome model)
WV-S1552L (Outdoor Bullet model)

WV-S2572L: with base bracket   WV-S2572L
WV-S2272L   WV-S1572L

4K Ultra high-definition captures clear images

• Ultra HD 4K cameras offer , nine times the definition of standard HD (1,280 x 720) and four times that of Full HD (1,920 x 1,080). This means that the finer details of the images remain clear even when you need to magnify only a part of an image.

Low bit rate even with 4K Ultra high-definition

• The new 4K camera uses Smart Coding with Auto VIQS technology, GOP control technology, and H.265 Compression to transmit high-quality video with much less data than conventional 4K cameras. High-resolution cameras (4K, etc.) can have a problem with large-volume data transmission, but the new 4K camera solves this problem.

Recv AVE: 4.890 Mbps
The bit rate depends on the scene.

Color information acquisition in low-light situations

• Color is one of the most important kinds of information in surveillance camera videos, for example: clothing color and car color. Color Night Vision technology enables Panasonic cameras to provide real color information in low-light situations, and these cameras also provide sharp images without motion blur.

Color Night Vision

Light near subject: 3 lux

Delivering sharper images with higher sensitivity. Featuring a more intelligent solution. Introducing the 360-degree Network Camera!

12MP Sensor 360-degree Fisheye Network Camera

WV-X4573L (Outdoor Vandal Resistant model)
WV-X4573LM (Outdoor In-vehicle model)
WV-X4173 / WV-X4172 (Indoor model)

5MP Sensor 360-degree Fisheye Network Camera

WV-S4551L (Outdoor Vandal Resistant model)
WV-S4551LM (Outdoor In-vehicle model)
WV-S4151 (Indoor model)

WV-X4573L : with base bracket
WV-X4573LM
WV-X4173

High-quality images allow evidence to be captured even under challenging conditions

• Stereographic projection lens provides low distortion images.
• Dynamic and sharp images capture objects even in varied lighting conditions.
• Auto back focus captures clear images by adjusting focal length automatically.
• IR-LED provides clear black and white images even in dark environments of 0 lux.
• These cameras meet railway standard EN50155, water resistance standard IP66, and impact resistance standard IK10.

9 m
5 m
*Sample screen from 9M Fisheye mode
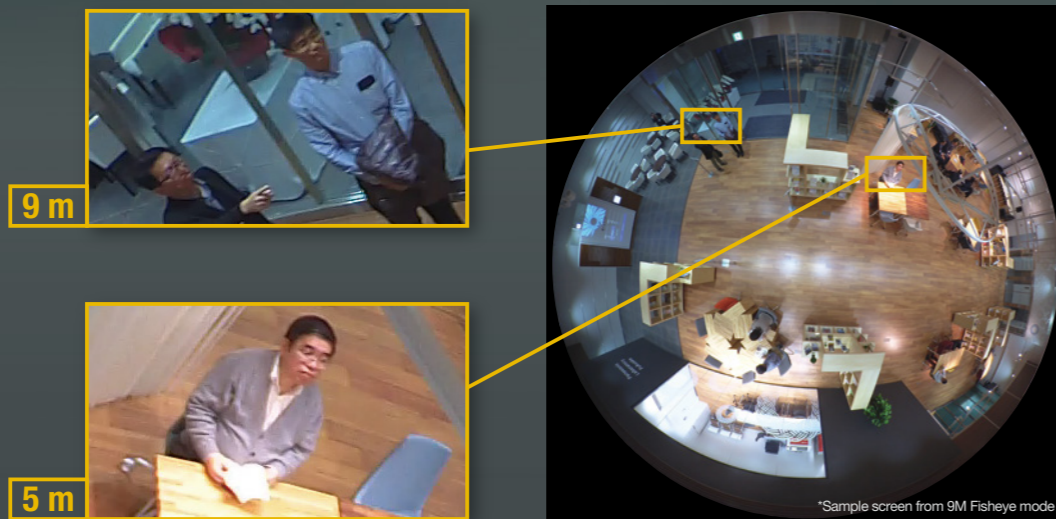
H.265 video compression with new Smart Coding

• H.265 video compression reduces the amount of data while still maintaining video quality.
• Smart Coding reduces the amount of data according to the motion of the video.

Complete with powerful intelligent functions

• i-VMD supports People Counting, Heat-map, Moving Object Remover (MOR), etc., with advanced video analysis technology.

These new dome cameras feature optimum specs and a compact size perfect for installations with limited space.

IR LED Outdoor Compact Dome Camera

WV-S3531L
WV-S3532LM
WV-S3511L
WV-S3512LM

IR LED Indoor Compact Dome Camera

WV-S3131L / WV-S3111L

WV-S3531L
WV-S3131L

Compact & simple design

• Volume ratio 60%. Can be installed even in limited space. (As compared to indoor dome cameras)
• The small, inconspicuous design harmonizes with interiors.

ø109 mm(ø4-9/32″)
53 mm(2-3/32″)
SR27 mm (1-1/16″)

Full-spec performance rivals standard dome cameras

• Performance level of standard dome cameras achieved with Intelligent Auto, Super Dynamic, Color Night Vision, etc.
• Data compression using H.265 + Smart Coding Technology makes it possible to reduce network load and expand recording time.
• The mounting of a 108° wide-angle lens (Full HD model) enables the monitoring of a wide range despite the unit's compact size.
• Even in a 0 lux environment, the movement of people and animals can be captured using an internal IR-LED light providing even illumination up to a 15-meter field.
• For the horizontal direction of narrow corridors and passageways, Corridor Mode can record video optimized for the long perpendicular space.

Monitoring can be made suitable for corridors, aisles, etc. by setting the image to be monitored at an aspect ratio of 9:16.

9 : 16 Corridor mode in Corridor
9 : 16 Corridor mode Stairs in the lobby
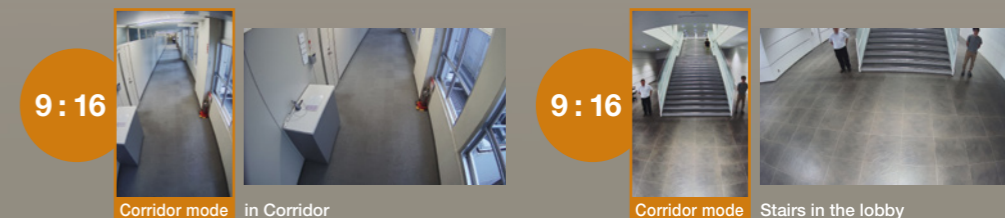
Vandal resistance, waterproof protection, and vehicle-mounting standards (outdoor model)

• Durable housing meets IK10 and IP66
• Meets EN50155 and other vehicle-mounting standards so an excellent choice for monitoring inside trains and buses.

Aerodynamic PTZ with
EXTREME PERFORMANCE - under - EXTREME CONDITIONS

AeroPTZ

Suitable for mission critical tough operations under
arctic-to-desert weather, salty gust winds, and heavy vibrations

- **Hybrid image stabilizer**
- **Wind Resistant**
  Operation: 216 km/h (135 mph)*
  * Upright position
  Non-destructive: 288 km/h (180 mph)
- **Salt Air Resistance** (ISO 14993 compliant)
- **Waterproof IP66 & IP67 Standard**
- **Vandal Resistant** (Meets IK10 Standards)

Anti-severe weather
PTZ network camera

WV-SUD638
(Natural silver)

-H(Gray)

-T(Brown)

IR LED Unit
WV-SUD6FRL1(Natural silver)
WV-SUD6FRL-H(Gray), **-T**(Brown)

With optional IR LED Unit

Wiper & Washer

The Wiper & Washer removes water and dirt that may blur images.
Always monitor crisp and clear images.

Capture High-Resolution, Smooth & Natural Images

Full HD (1920 × 1080), 60fps

Easily Adjust the Direction of the Camera

Use the 360°endless pan and tilt functions to easily adjust the direction of the lens, automatically survey a preset area, or combine the camera with an external sensor to automatically adjust the direction of the lens towards a detected abnormality. Even monitor directly under the camera.
(Front Tilt 45° to Monitor Directly Under the Camera)

45°
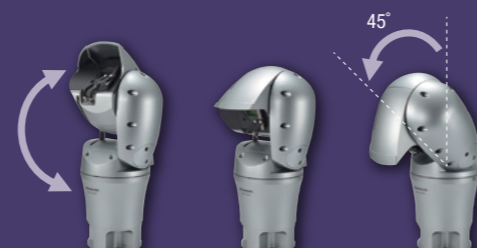
Notice: Do not install this product in locations subject to continuous or large vibration. Failure to observe this may cause a drop resulting in injury or accident.

18

Recognizes those who don't want to be recognized

Our world leading* deep learning facial recognition technology triggers even when the subject is wearing sunglasses.

FacePRO

Facial Recognition Server Software

WV-ASF950W

Additional Camera Kit
1ch: WV-ASFE901W
4ch: WV-ASFE904W

Additional Face Registration Kit
**10,000 face: WV-ASFE951W**

Extension software
WV-ASE231(W) for WV-ASM300W

Facial recognition server software using deep learning technology

High performance facial recognition

• High performance Deep Learning facial recognition function distinguishes face orientation, sunglasses, surgical mask, facial aging change

| Angled face | Sunglasses | Surgical mask | Facial aging change |
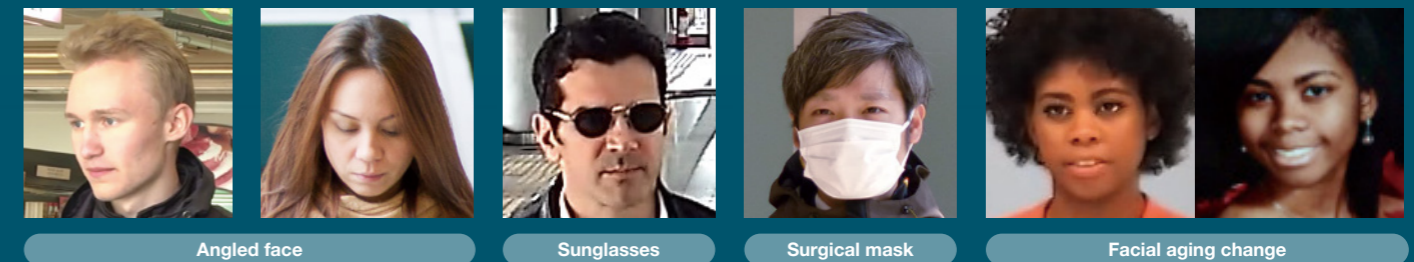
Alarm notification using face detection

The WV-ASF950W supports alarm notification, functions such as registered face detection and unregistered face detection.

• **Registered face detection**
  An alarm notification is issued when the person imaged by the camera matches a person registered in the list.

• **Unregistered face detection**
  An alarm notification is issued when the person imaged by the camera does not match any persons registered in the list.
  Unregistered face detection can detect the intrusion of outsiders for each area when the insiders are registered for those areas.

Face search and face matching functions

• Face matching speed is very fast. Its speed is only 1 second(*1) with 30,000 faces.
• This system can register max.30,000(*2) faces for face matching.
• The face search function of this system can search 5 million faces of database in 3 seconds(*3).

*1 From receiving the face thumbnail to matching in face matching server.
*2 Two Additional Face Registration Kits WV-ASFE951W are necessary.
*3 The best case when the time range is narrowed down and the number of search result is 100 faces.
  Depending on the search conditions, the search time may take several minutes.
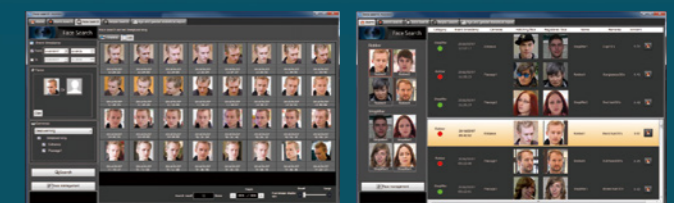
Face search   Face Matching

* In April 2017, the product achieved the highest level of face recognition performance in the world in a comparison test
  (IJB-A Face Verification Challenge Performance Report/IJB -A Face Identification Challenge Performance Report) of NIST (National Institute of Standards and Technology) of the United States, one of the most authoritative institutes in the world.

19

Visibility

Enables automatic capture of evidence at the highest quality under dynamic and challenging surveillance environments.
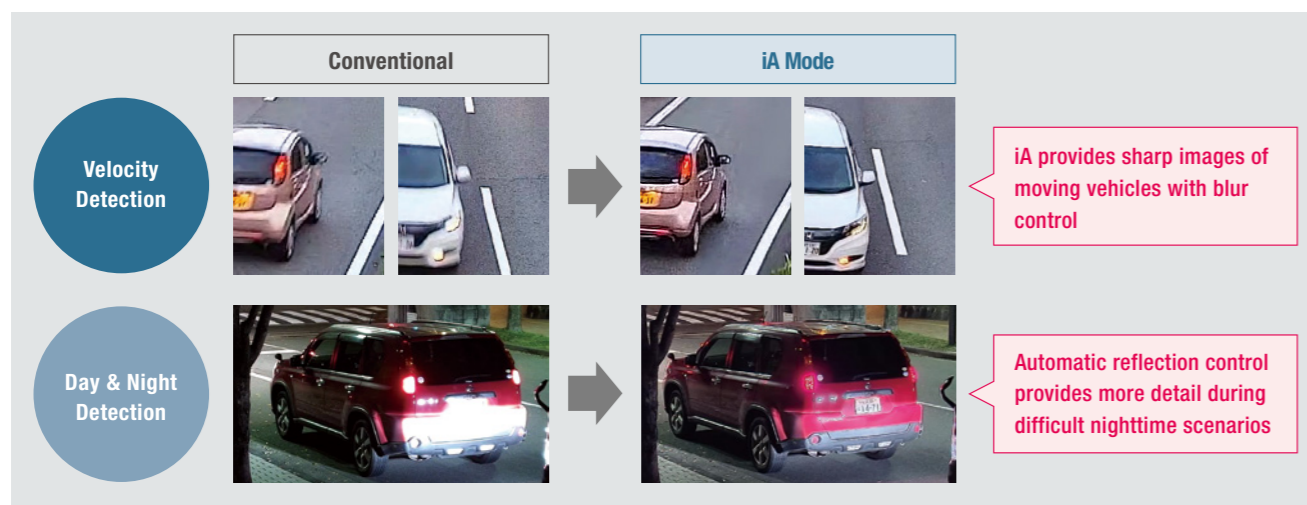
Intelligent Auto Mode (iA)

iA Advanced image stabilization is used to prevent capturing blurry images, and intelligent sensitivity automatically is used to adjust the camera's gain and shutter speed according to brightness levels and movement of the object.

Auto Scene Detection + Parameter Settings

Industry examples: City safety, traffic, transportation

Conventional	iA Mode

Velocity Detection

> iA provides sharp images of moving vehicles with blur control

Day & Night Detection

> Automatic reflection control provides more detail during difficult nighttime scenarios

Color Night Vision

Color Night Vision technology transforms a standard 1/3 inch sensor camera into an effective, low-light capable camera, enabling it to produce an extremely high-quality image even in the most challenging lighting conditions.

Industry examples: City safety, ports, perimeter security
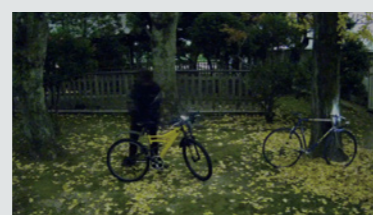
Ordinary Camera 0.6 lx　　**Color Night Vision 0.6 lx**
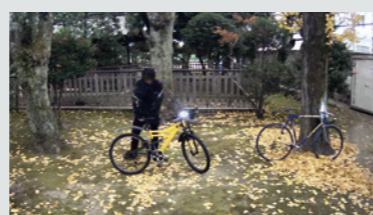
0 lux Pitch Dark Locations

IR LED Cameras with a IR LED can be used to monitor environments that are completely dark.
This enables areas without the level of illumination required to be monitored to prevent graffiti, illegal dumping, and property destruction.
IR LED can illuminate a wide area so that monitoring is not limited to a specific part of the image.
The built-in IR LED of the outdoor model can capture subjects up to 40 meters away.
Light levels are automatically adjusted for blown out highlights and screen whitening when the IR LED shines on a subject close-by, making the right areas highly visible.
The IR LED is covered to make it difficult to detect from the outside or to know which way the lens is pointing.

IR LED: OFF　　**IR LED: ON**

Visibility

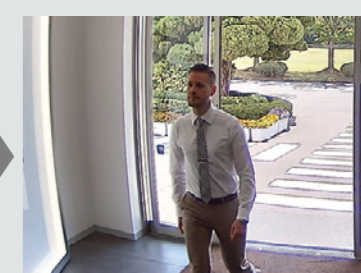## 144dB Super Dynamic

SD i-PRO Super Dynamic Combined with the new 144dB enhanced SD capabilities, this high-performance face detection technology can clearly and automatically identify an individual's face.
It offers optimal facial recognition and can capture evidence even in dynamic scenes or heavily backlit conditions.

Industry examples: Entrances of shopping malls and buildings
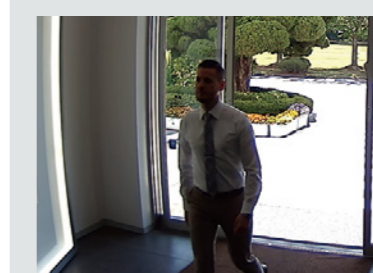
Super Dynamic: OFF　　**Super Dynamic: 144dB**

Intelligent Zoom Stabilization

Intelligent Zoom Stabilization High-power, 40x optical zoom lens allows for higher resolution images of objects at a distance.
The advanced image stabilization function can stabilize high-power zoom images by absorbing vibrations.

Intelligent Zoom Stabilization: OFF　　**Intelligent Zoom Stabilization: ON**

Visibility Enhancement Technology (OP Software)

Fog and sand Compensation i-PRO Management Software is not only used for removing fog but also snow, rain, and other natural conditions that can harm video quality.
Besides real-time image processing during monitoring, post- processing is also possible after the images are saved to the recorder.

Before Correction　　**After Correction**

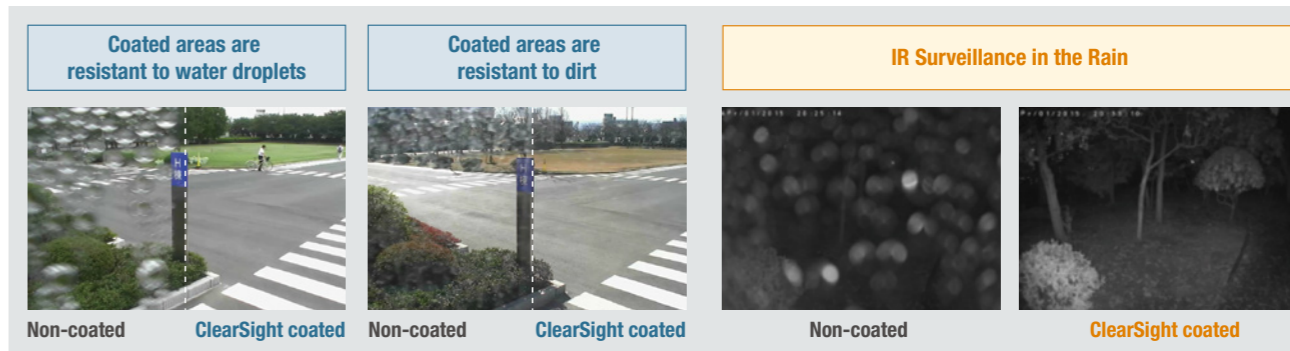## ClearSight coating

COATING Water drops stick to the dome cover on conventional cameras and hinder the shooting of clear images.
Our ClearSight coating models are coated to repel water drops in order that the camera captures clear images when it is raining.
This coating is also effective at repelling dirt, which reduces the frequency of needing to clean the dome cover.
The hydrophilic coating can also be touched without special equipment and improves the ease of maintaining the equipment.
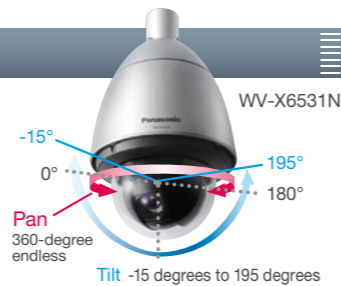
Coated areas are resistant to water droplets	Coated areas are resistant to dirt	IR Surveillance in the Rain

Non-coated　**ClearSight coated**　**Non-coated**　**ClearSight coated**　**Non-coated**　**ClearSight coated**

Visibility

PTZ (Pan-Tilt-Zoom) cameras and omnidirectional cameras enable wide-area monitoring. Multiple cameras can be combined for more efficient monitoring and to eliminate blind spots.

PTZ Camera for Wide Range Monitoring and a High Zoom Ratio

Normal fixed lens cameras can only monitor in a certain direction, but the lens of a PTZ camera can be operated remotely to switch to the direction you want to view. Detailed areas can also be zoomed in to a maximum of 40x.
Since the cameras can be infinitely rotated 360 degrees at a high speed of 300 degrees/sec, you will not miss the subjects you want to monitor.

WV-X6531N

-15°
0°
195°
180°
Pan
360-degree endless
Tilt -15 degrees to 195 degrees

Advanced Auto Tracking

Advanced Auto Tracking

The pan, tilt, and zoom functions can be combined for automatically tracking the movement of a subject.
If the tracked subject moves out of the camera's shootable range, notification is sent to other cameras so that the tracking process can be carried on without interruption.

2011/09/05 15:17:01 046° ∕ 21° ∕X002

2011/09/05 15:17:06 034° ∕ 18° ∕X004

360-degree Monitoring

The 360-degree Network Camera can capture images around the camera lens in all directions.
Available modes include Fisheye, Double Panorama, Panorama, Quad PTZ, and 4 Stream, and the camera can output video images based on the selected video mode for reduced loads on the viewing system.

Fisheye Mode   Double Panorama Mode   Panorama Mode

Quad / Single PTZ Mode   4 Stream Mode

De-warping

The 360-degree Network Camera can generate and output video images for each mode within the camera unit.
Also, the Network Disk Recorder (WJ-NX400/WJ-NX300/WJ-NX200/WJ-NX100) or i-PRO Management Software (WV-ASM300W) can be used on 360° omnidirectional images captured by Fisheye Mode to convert to a format that is easier to view, such as Quad PTZ.
Because the 360° omnidirectional video image is stored in the recorder, nothing is missed within the viewing area.

In addition, the area that you want to view can be selected using a controller or mouse to allow you to automatically move the viewing spot for patrolling the area.
Even during patrolling, areas not visible on the screen are all stored in the recorder in Fisheye Mode so that nothing is left unseen.
The Pan-Tilt of the 360-degree Network Camera does not use mechanical components, and so provides a smooth movement without the mechanized wear that could adversely affect camera longevity.
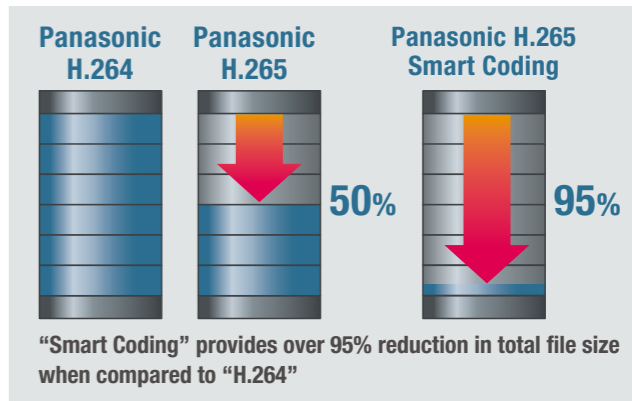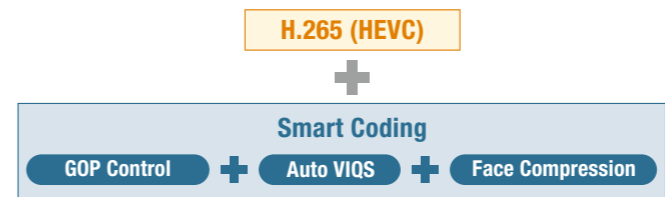
Fisheye Mode   Quad / Single PTZ Mode
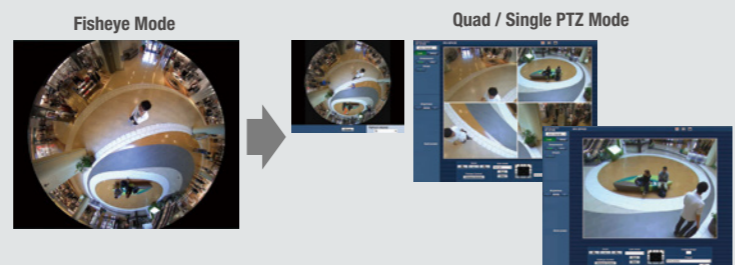
Compression

Compression of high-resolution image data is used to reduce network bandwidth, data storage, and server load costs, while maintaining high quality.

## H.265 Compression + Smart Coding Technology

Smart Coding

Combining H.265 Compression with Smart Coding Technology reduces bandwidth by maximum 95%* of conventional H.264 Compression.
This security system maintains the quality of moving images while reducing bandwidth and storage costs.
*Value in Advanced mode with Smart Facial Coding. It depends on the scene.

H.265 (HEVC)
+
Smart Coding
GOP Control + Auto VIQS + Face Compression

Panasonic H.264   **Panasonic H.265**   **Panasonic H.265 Smart Coding**

50%   95%

"Smart Coding" provides over 95% reduction in total file size when compared to "H.264"
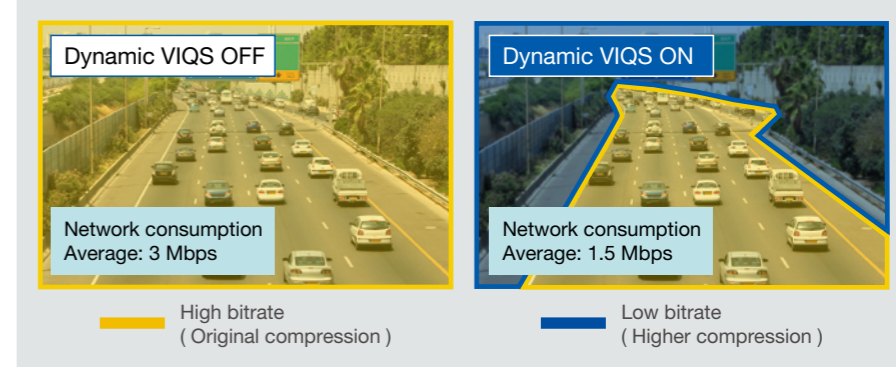
GOP Control

The GOP (group of pictures) control can reduce the total transmitted data of images with little motion by controlling the transmission interval of I-Frame, which is heavy in data.
If the motion is significantly low, the transmission interval can be set to 60 seconds to drastically reduce the total data transmitted.

Every 4 seconds

Every 16 seconds

Every 60 seconds
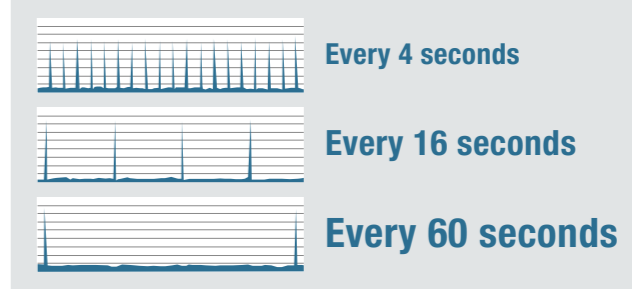
Auto VIQS

Auto VIQS detects movement within the image and compresses areas with little motion to reduce transmitted data while maintaining the quality of the image.

Dynamic VIQS OFF
Network consumption Average: 3 Mbps

Dynamic VIQS ON
Network consumption Average: 1.5 Mbps

High bitrate (Original compression)   Low bitrate (Higher compression)

Face Compression

The camera automatically distinguishes the sections of the images that are important such as moving objects and people's faces.
The quality of unimportant areas is reduced without compromising the quality of important sections, therefore optimizing the data size of the footage.
On top of integrating Smart Coding into the conventional GOP Controls, the improved compression efficiency through Auto VIQS and Long-Term Compression combined with Smart Facial Coding, which detects faces and maintains the quality of only faces, can compress the file drastically to reduce the data size.

High bitrate   Mid bitrate   Low bitrate
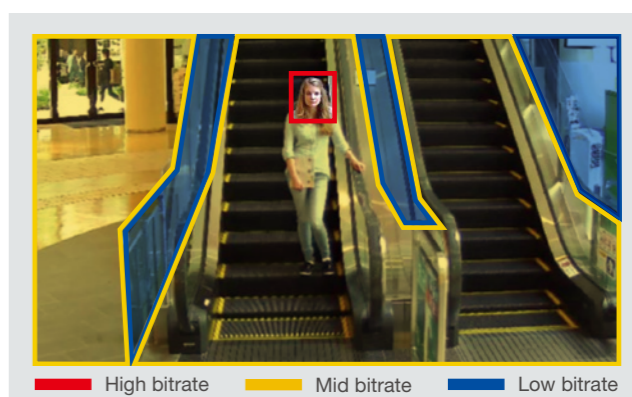
Data Security

In addition to Data encryption and communication encryption, provide secure network access between trusted devices through device certification then prepare for the threat of advanced cyber attacks.

End-to-End Data Protection Solution
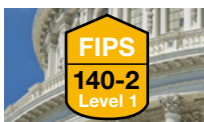
End-to-End Secured System

End-to-End Data Encryption
- Support encryption communication
- Camera-encrypted recording at the edge

Pre-installed GlobalSign®
Device Certification
- Communication encryption
- Video tampering detection

FIPS140-2 CAVP compliant
*Using encryption module standardized by FIPS publication 140-2
- For federal/public safety usage

FIPS
140-2
Level 1

Communication encryption
(SSL/TLS)

GlobalSign®
by GMO

Data encryption

The data encryption function encrypts data to prevent information leakage due to unauthorized access to the camera and theft of the SD card.
If you confirm streams with data encryption set to "On" on the "Live" page,
password entry for decryption is displayed.
If you correctly enter the
"Encryption password" that was set,
you will be able to view images.
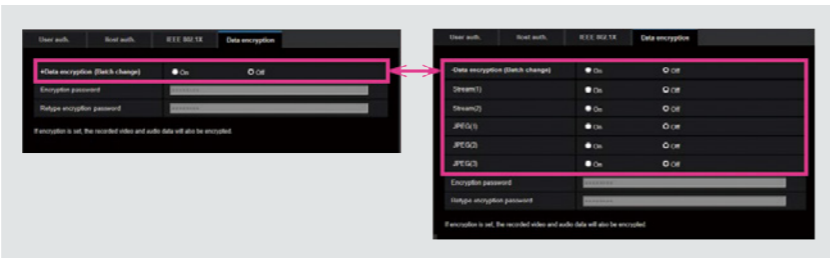
SD Memory Card Recording

Without using a network, footage can be saved directly to the camera by inserting an SD memory card (SD, SDHC, or SDXC) in the camera.
Settings can be adjusted to only record images to the SD memory card when the alarm is triggered.
Inserting SD memory cards also works as a backup system when there is an issue with the network.
Images will be saved onto the memory cards while the network is down and will be transmitted to the recorder when the network reconnects.

SD memory card slot

Detect Alterations to the SD Memory Card

Turn on the Alteration Detection and record images to the SD memory card to be able to verify whether or not the recorded images have been altered.
Playback the images recorded onto the SD memory card with a computer and utilize the Integrity Verifier Tool to analyze the raw data and confirm that the recorded images have not been altered.
Download the Integrity Verifier Tool for free from our "Useful Tool" download page.
https://i-pro.com/global/en/surveillance/training-support/support/technical-information#tool

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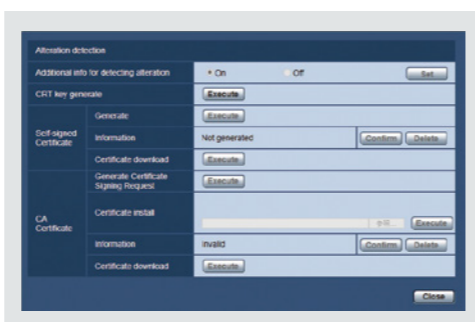
Reliability

Achieves high endurance and long life in storing information even under harsh environments.

HDD Dynamic Power Control

Long life and high reliability is achieved through technology that individually controls access to the HDD.
If a recorder needs to recover crashed data, it can do so in a short amount of time.

Individually-managed HDD

WJ-NX400 manages the status of each HDD, using the following three states:

1 Active state: Currently being accessed by the WJ-NX400. **2 Idle state:** Ready to be accessed **3 Stand-by state:** Halted motor

Active	: Motor – On; Head – Read/Write
Idle	: Motor – On; Head – Home Position (ready for next access to a HDD)
Stand-by	: Motor – Off; Head – Home Position
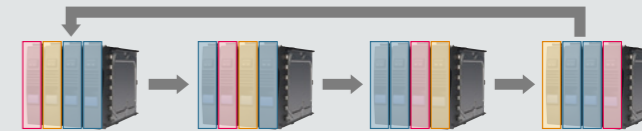
Auto Failover Recording

NVR has an Auto Failover Recording function to reduce the loss of recorded data due to NVR failure.
In the case of an NVR failure, the stand-by NVR will begin recording automatically.
The standby NVR will record instead of the failed NVR, without the need for management software.

Recording NVRs (Max. 5)   Stand-by NVR
1 keep-alive
2 keep-alive   4 recording start
3 fail detect
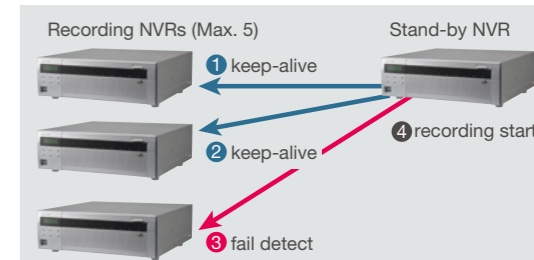
High Performance and Flexibility with TURBO-RAID

WJ-NX400 RAID is a specialized hardware RAID (TURBO-RAID).
WJ-NX400 RAID, equipped with TURBO-RAID, maintains the throughput performance of a non RAID configuration.
TURBO-RAID can provide guaranteed reliability of data and high-performance throughput.
The recorder can recover data quickly in the event of a crash.
*To use TURBO-RAID with WJ-NX300, Additional RAID Kit is required.

## Heavy Salt Damage Resistance, Compliant with ISO14993

Heavy salt damage resistance, with film thickness of 100 micrometers or more, provides protection from salty wind corrosion.
The use of screws with an anti-salt surface treatment prevents trouble occurring from corroded screws in the product.

Rainwater Protection

IP66
standard

The outdoor models have waterproof and dustproof structures that are rated IP66 for exterior installations, eliminating the need for special housing and/or waterproof protection.
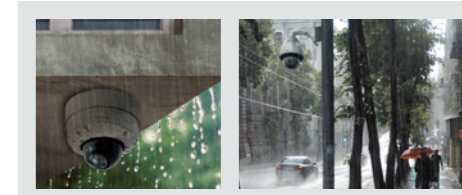
Vandal Resistant

Vandal
Resistant

When installed in locations that are prone to vandalism and tampering, measures are required for preventing damage to the camera.
Models featuring the Vandal Resistant mechanism are ideal for installation in these types of locations.

Vandal resistant mechanism

Models featuring the Vandal Resistant mechanism include a shock absorber around the internal lens.
Even if the dome cover is subjected to a potentially damaging impact, the shock absorber will absorb this impact to protect the internal structure from damage.

Support for Various Installation Environments

Panasonic network cameras are available in a full lineup of products custom-tailored for a wide range of installation environments.
**Their specialized design also helps to reduce the work required for installation.**

• Select the Specialized Model for Your Installation Environment

Easy Installation

The Easy Kitting Package makes setting up the camera easy.
Users do not even need to remove the camera from the box to setup the camera.
This packaging helps reduce the time and effort it requires to install multiple cameras.
On outdoor models, the RJ45 Joint Connector removes the need of using waterproof tape and reduces the time it takes to install the camera.

Rubber (2 pcs)

RJ45 Joint Connector
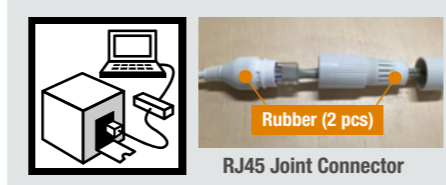
Fiber Optic Media Converter Unit

The network copper cable can only communicate up to 100 m. In order to communicate over 100 m with copper cables, network switches must be cascaded and extended, requiring a large number of network switches and power supplies, which is cumbersome. An optical network using glass cable can communicate over a distance of 10 km, thereby simplifying long-distance communication.
The Fiber Optic Media Converter Unit supports long distance optical networks by converting copper RJ45 to fiber.

*Available only in limited regions
*Refer to the following URL
https://i-pro.com/global/en/surveillance/products/wv-x65f1
https://i-pro.com/global/en/surveillance/products/wv-s25f1

■ **Without Fiber Optic Media Converter Unit**

Ethernet cable **500** m(5×100 m)
Network switch
100 m

■ **With Fiber Optic Media Converter Unit**

Fiber-optic cable **500** m*
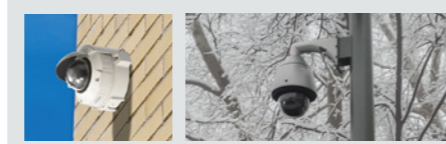*Max **10** km
Fiber media converter
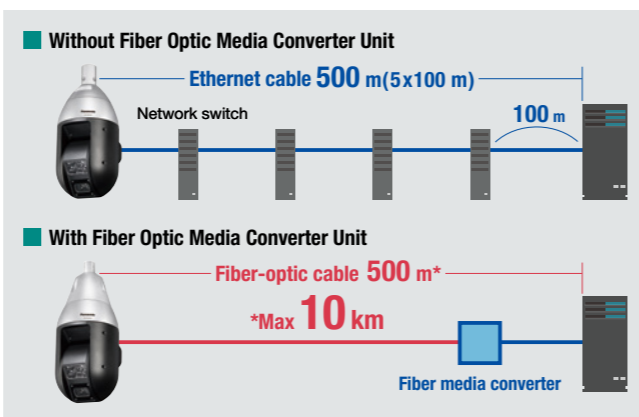
Temperature protection for outdoor installations

Models can be selected to match your specific installation conditions and can be installed in environments with temperatures ranging from +60°C to -50°C.

*The supported temperature range varies depending on the specific model.

Anti-Condensation System

The network camera outdoor models have a built-in dehumidifier device to lower the internal humidity for preventing cloudiness due to condensation.
This eliminates blurry video images caused by clouding of the camera dome cover when installed in locations with high humidity or extreme temperature changes over the course of the day.

Dehumidifier

Onboard Model

A lineup of network cameras is also available with anti-vibration and other specific features for installation in cars, buses, and other vehicles.
The WV-SBV131M, WV-X4573L(M), WV-S4576L(M), WV-S4556L(M), WV-S4551L(M), WV-S3532LM and WV-S3512LM are compliant with the EN50155 European railway standards.
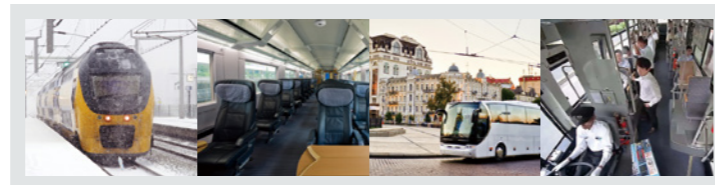
Support for Various Installation Environments

Mount on the Outside of the Vehicle

The rugged mobile network camera WV-SBV131M meets the United States Department of Defense Military Standards MIL-STD-810G to withstand even the harshest of environments.
Also meeting the highest International Protection Standards IP6K9K, the camera is dust tight and waterproof.
Meeting such standards allows the camera to be mounted on the outside of busses and trains, which are constantly shaking and rained on.
The lenses' hard coated surface allows the vehicle to be put through a carwash.
Capable of withstanding temperatures ranging from -40 ℃ and up to +60 ℃ (-40 ℉ and up to 140 ℉) the camera is highly versatile.

WV-SBV131M

Reduced Installation Time

The i-PRO Series cameras include a number of features for reducing the time required for installation.
If you want to change the camera direction after installation, the camera direction can be changed in 90° steps without removing the base.
The dome cover can also be easily removed to change the direction of the lens.
For Outdoor Box type cameras, the stay can be bent to one of two levels to allow installation with a high degree of freedom.

115 degree
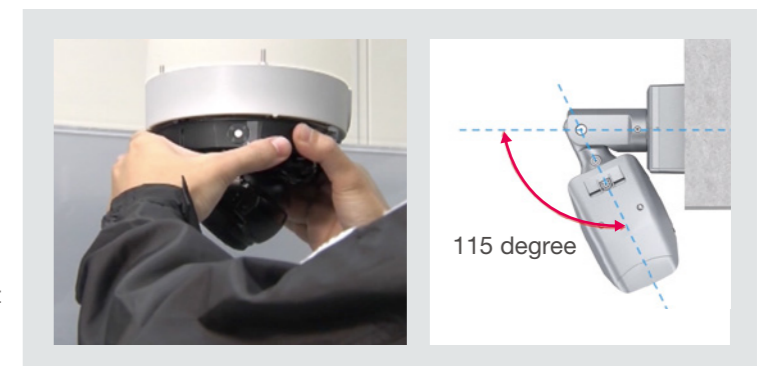
ABF (Auto back Focus)

Auto Back Focus

The ABF feature automatically adjusts the image sensor position when changing from color to B/W mode, optimize the back focus required for clear, sharp images.
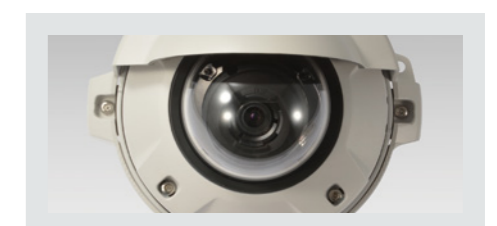In addition, the one-push Auto Back Focus feature sharply reduces the time required to focus cameras during installation, allowing focus to be set using the optional system controller.
The ABF function can also automatically sense and adjust to slight focal length changes due to parts warping caused by temperature changes in the area where the camera is installed.

Camera Head
Lens
Day/Night Mechanism
Whole image sensor Printed Circuit Board moves to focus point
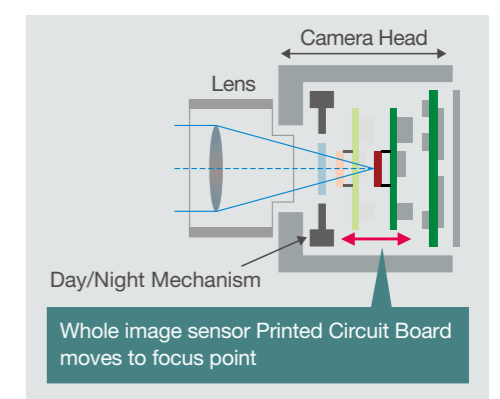
Special Screws for Added Security

Specially-shaped screws are used to secure the cover to prevent tampering with the camera or theft of the SD memory card.

Network Camera Comparison chart — Multi-Sensor

Indoor / Outdoor		Outdoor	
Model Name		WV-X8571N	WV-S8531N
Appearance			
Sensor		1/1.8 CMOS	1/2.8 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	2 (*1)	2 (*1)
	JPEG multi stream	1 (Variable) (*1)	1 (Variable) (*1)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR
	Smart Coding	Yes	Yes
Max. Resolution (*1)	16 : 9	3840 x 2160	1920 x 1080
	4 : 3	—	—
Max. FPS @Max. Resolution (*1)	H.265 / H.264	15fps (4K)	30fps (2 MP)
	JPEG	1fps (4K)	3fps (2 MP)
Super Dynamic / Enhanced SD / WDR		Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist / Manual focus		—	Auto Focus
Min. Illumination	Color	0.12 lx @F1.6	0.05 lx @F2.0
	Color (Sens up)	0.008 lx (16x)	0.003 lx (16x)
	B/W	0.05 lx@F1.6	0.03 lx@F2.0
	B/W (Sens up)	0.003 lx (16x)	0.002 lx (16x)
Lens		f=4.6 mm	f=2.9 to 7.3 mm
Angular field of view (*1)	16 : 9	H: 97 deg. V: 53 deg.	H: 45 (TELE) – 104 (WIDE) deg. V: 25 (TELE) – 58 (WIDE) deg.
	4 : 3	—	—
Adjusting Angle	Horizontal	Sensor1,2,3,4: 360 deg.	Sensor1,2,3,4: 360 deg.
	Vertical	Sensor1,2,3: +30 to +80 deg. Sensor4: -15 to +80 deg.	Sensor1,2,3: +30 to +80 deg. Sensor4: -15 to +80 deg.
	Yaw	Sensor1,2,3,4: ±50 deg.	Sensor1,2,3,4: ±50 deg.
Optical Zoom		1x	2.5x
Digital Zoom		4x	4x
Image Stabilizer		—	—
Corridor Mode		—	—
iA (Intelligent Auto)		Yes	Yes
Video / Sound Analytics		—	—
VIQS		Yes (8-areas)	Yes (8-areas)
Max. Connection		24	24
ONVIF® Profile		G / S	G / S
Audio	In (Line) / Out	Yes / —	—
	In (Built-in MIC)	—	—
	Codec	G.711 / G.726 / AAC (*2)	—
	Audio Detection Alarm	—	—
SD memory Card	Slot	Yes (SDXC)	Yes (SDXC)
	Password & Alter Detection	Yes	Yes
	Audio REC	Yes	—
External I/O		Yes (3) (*3)	—
Monitor Out		Yes (mini-jack)	—
Vandal Resistant		IK10	IK10
Water and Dust Resistance		IP66 / NEMA 4X	IP66 / NEMA 4X
Temperature		–40 to +60 deg.	–40 to +60 deg.
Power Source		12 V DC / PoE+	PoE+
Anti-Condensation System		Yes	Yes
Other Functions		Easy Kitting Package, ClearSight coating	Easy Kitting Package, Built-in heater, ClearSight coating

(*1): Specification of one sensor (*2): Only AAC-LC for SD REC (*3): ALARM IN 1(Alarm input 1/ Black & white input/ Auto time adjustment input),ALARM IN 2 (Alarm input 2/ ALARM OUT),ALARM IN 3 (Alarm input 3/ ALARM OUT/ AUX OUT) (x1 for each)
★ Products that can be purchased is vary according to the locality. ★ ONVIF is a trademark of ONVIF, Inc.

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Network Camera Comparison chart — PTZ

Indoor / Outdoor		Outdoor	
Model Name		WV-X6533LNS / WV-X6533LN	WV-S6532LNS / WV-S6532LN
Appearance		Heavy Salt damage resistance	Heavy Salt damage resistance
Sensor		1/2.8 CMOS	1/2.8 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	4	4
	JPEG multi stream	3 (Variable)	3 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR
	Smart Coding	Yes	Yes
Max. Resolution	16 : 9	1920 x 1080	1920 x 1080
	4 : 3	2048 x 1536 (*1)	2048 x 1536 (*1)
Max. FPS @Max. Resolution	H.265 / H.264	60fps (1080p)	60fps (1080p)
	JPEG	30fps (3 MP)	30fps (3 MP)
Super Dynamic / Enhanced SD / WDR		Enhanced SD	Enhanced SD
Color/BW		Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus	Auto Focus
Min. Illumination	Color	0.015 lx @F1.6	0.015 lx @F1.6
	Color (Sens up)	0.001 lx (16x)	0.001 lx (16x)
	B/W	0 lx @F1.6	0 lx @F1.6
	B/W (Sens up)	—	—
Lens		f = 4.25 to 170 mm, Motorized	f = 4.25 to 95 mm, Motorized
Angular field of view	16 : 9	H: 1.9 to 66 deg. V: 1.1 to 39 deg.	H: 3.4 to 66 deg. V: 2.0 to 39 deg.
	4 : 3	H: 1.4 to 51 deg. V: 1.1 to 39 deg.	H: 2.6 to 51 deg. V: 2.0 to 39 deg.
Pan	Range	Endless	Endless
	Speed	300 deg/sec.	300 deg/sec.
Tilt	Range	-30 to +210 deg.	-30 to +210 deg.
	Speed	300 deg/sec.	300 deg/sec.
360 Pan-Flip		—	—
Number of Preset Positions		256	256
Patrol		Yes	Yes
Auto Tracking		Yes (advanced)	Yes (advanced)
Optical Zoom		40x	22x
Digital Zoom		16x	16x
Image Stabilizer		Yes	Yes
Corridor Mode		—	—
iA (Intelligent Auto)		Yes	Yes
Video / Sound Analytics		i-VMD (Type4)	i-VMD (Type4)
VIQS		Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14
ONVIF® Profile		G / S / T	G / S / T
Audio	In (Line) / Out	Yes / Yes	Yes / Yes
	In (Built-in MIC)	—	—
	Codec	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)
	Audio Detection Alarm	Yes	Yes
SD memory Card	Slot	Yes (SDXC)	Yes (SDXC)
	Password & Alter Detection	Yes	Yes
	Audio REC	Yes	Yes
External I/O		Yes (3) (*3)	Yes (3) (*3)
Monitor Out		—	—
Vandal Resistant		IK10	IK10
Water and Dust Resistance		IP66 / NEMA 4X	IP66 / NEMA 4X
Temperature		-50 to +60 deg. (24 V / 60 W PoE) (*4)(*5) -30 to +60 deg.(PoE+)	-40 to +60 deg. (24 V / 60 W PoE) (*4)(*5) -30 to +60 deg.(PoE+)
Power Source		24 V AC / PoE+ / PoE injecter	24 V AC / PoE+ / PoE injecter
Anti-Condensation System		Yes	Yes
Other Functions		Easy Kitting Package, Built-in defroster, ClearSight coating, Built-in IR LED WV-X6533LNS: ISO14993(Heavy Salt damage resistance)	Easy Kitting Package, Built-in defroster, ClearSight coating, Built-in IR LED WV-S6532LNS: ISO14993(Heavy Salt damage resistance)

(*1): Used by super resolution techniques (*2): Only AAC-LC for SD REC (*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
(*4): When the IR LED is ON, the maximum temperature is 45 deg. (*5): Tested PoE injector ★ Products that can be purchased is vary according to the locality.

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Network Camera Comparison chart — PTZ (Outdoor)

Indoor / Outdoor		Outdoor		
Model Name		WV-X6531NS / WV-X6531N	WV-X6511N	WV-S6530N
Appearance		Heavy Salt damage resistance		
Sensor		1/2.8 MOS	1/2.8 MOS	1/2.9 MOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	4	4	4
	JPEG multi stream	3 (Variable)	3 (Variable)	3 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes
Max. Resolution	16 : 9	1920 x 1080	1280 x 720	1920 x 1080
	4 : 3	2048 x 1536 (*1)	1280 x 960	2048 x 1536 (*1)
Max. FPS @Max. Resolution	H.265 / H.264	60fps (1080p)	60fps (720p)	60fps (1080p)
	JPEG	30fps (3 MP)	30fps (1.3 MP)	30fps (3 MP)
Super Dynamic / Enhanced SD / WDR		Enhanced SD	Enhanced SD	Enhanced SD
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus	Auto Focus	Auto Focus
Min. Illumination	Color	0.015 lx @F1.6	0.011 lx @F1.6	0.015 lx @F1.6
	Color (Sens up)	0.001 lx (16x)	0.0007 lx (16x)	0.001 lx (16x)
	B/W	0.006 lx @F1.6	0.005 lx @F1.6	0.006 lx @F1.6
	B/W (Sens up)	0.0004 lx (16x)	0.0003 lx (16x)	0.0004 lx (16x)
Lens		f = 4.25 to 170 mm, Motorized	f = 4.25 to 170 mm, Motorized	f = 4.0 to 84.6 mm, Motorized
Angular field of view	16 : 9	H: 2.1 to 65 deg. V: 1.2 to 39 deg.	H: 3.4 to 73 deg. V: 1.2 to 39 deg.	H: 3.4 to 73 deg. V: 2.0 to 42 deg.
	4 : 3	H: 1.6 to 51 deg. V: 1.2 to 39 deg.	H: 1.6 to 51 deg. V: 1.2 to 39 deg.	H: 2.9 to 61 deg. V: 2.2 to 46 deg.
Pan	Range	Endless	Endless	0 to +350 deg.
	Speed	300 deg/sec.	300 deg/sec.	300 deg/sec.
Tilt	Range	-15 to +195 deg.	-15 to +195 deg.	-30 to +90 deg.
	Speed	300 deg/sec.	300 deg/sec.	100 deg/sec.
360 Pan-Flip		—	—	Yes
Number of Preset Positions		256	256	256
Patrol		Yes	Yes	Yes
Auto Tracking		Yes (advanced)	Yes (advanced)	Yes (advanced)
Optical Zoom		40x	40x	21x
Digital Zoom		16x	16x	16x
Image Stabilizer		Yes	Yes	Yes
Corridor Mode		—	—	—
iA (Intelligent Auto)		Yes	Yes	Yes
Video / Sound Analytics		i-VMD (Type4)	i-VMD (Type4)	i-VMD (Type4)
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14
ONVIF® Profile		G / S / T	G / S / T	G / S / T
Audio	In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes
	In (Built-in MIC)	—	—	—
	Codec	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)
	Audio Detection Alarm	Yes	Yes	Yes
SD memory Card	Slot	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)
	Password & Alter Detection	Yes	Yes	Yes
	Audio REC	Yes	Yes	Yes
External I/O		Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)
Monitor Out		—	—	Yes (mini-jack) (*4)
Vandal Resistant		IK10	IK10	IK10
Water and Dust Resistance		IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4
Temperature		−50 to +60 deg. (24 V / 60 W PoE) (*5) −30 to +60 deg. (PoE+)	−50 to +60 deg. (24 V / 60 W PoE) (*5) −30 to +60 deg. (PoE+)	-40 to +60 deg.(24 V) -30 to +60 deg. (PoE+)
Power Source		24 V AC / PoE+ / PoE injector	24 V AC / PoE+ / PoE injector	24 V AC / PoE+
Anti-Condensation System		Yes	Yes	Yes
Other Functions		Built-in heater, ClearSight coating, WV-X6531NS: ISO14993(Heavy Salt damage resistance)	Built-in heater, ClearSight coating	Built-in heater, ClearSight coating

(*1): Used by super resolution techniques   (*2): Only AAC-LC for SD REC   (*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
(*4): For adjustment, the audio output can be switched to the monitor output.   (*5): Tested PoE injector   ★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart — PTZ (Indoor)

Indoor / Outdoor		Indoor		
Model Name		WV-S6131	WV-S6111	WV-S6130
Appearance				
Sensor		1/2.8 MOS	1/2.8 MOS	1/2.9 MOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	4	4	4
	JPEG multi stream	3 (Variable)	3 (Variable)	3 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes
Max. Resolution	16 : 9	1920 x 1080	1280 x 720	1920 x 1080
	4 : 3	2048 x 1536 (*1)	1280 x 960	2048 x 1536 (*1)
Max. FPS @Max. Resolution	H.265 / H.264	60fps (1080p)	60fps (720p)	60fps (1080p)
	JPEG	30fps (3 MP)	30fps (1.3 MP)	30fps (3 MP)
Super Dynamic / Enhanced SD / WDR		Enhanced SD	Enhanced SD	Enhanced SD
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus	Auto Focus	Auto Focus
Min. Illumination	Color	0.015 lx @F1.6	0.011 lx @F1.6	0.015 lx @F1.6
	Color (Sens up)	0.001 lx (16x)	0.0007 lx (16x)	0.001 lx (16x)
	B/W	0.006 lx @F1.6	0.005 lx @F1.6	0.006 lx @F1.6
	B/W (Sens up)	0.0004 lx (16x)	0.0003 lx (16x)	0.0004 lx (16x)
Lens		f = 4.25 to 170 mm, Motorized	f = 4.25 to 170 mm, Motorized	f = 4.0 to 84.6 mm, Motorized
Angular field of view	16 : 9	H: 1.9 to 66 deg. V: 1.1 to 39 deg.	H: 1.9 to 66 deg. V: 1.1 to 39 deg.	H: 3.5 to 74 deg. V: 2.0 to 42 deg.
	4 : 3	H: 1.4 to 51 deg. V: 1.1 to 39 deg.	H: 1.4 to 51 deg. V: 1.1 to 39 deg.	H: 3.0 to 61 deg. V: 2.3 to 46 deg.
Pan	Range	Endless	Endless	0 to +350 deg.
	Speed	300 deg/sec.	300 deg/sec.	300 deg/sec.
Tilt	Range	-25 to +205 deg.	-25 to +205 deg.	-30 to +90 deg.
	Speed	300 deg/sec.	300 deg/sec.	100 deg/sec.
360 Pan-Flip		—	—	Yes
Number of Preset Positions		256	256	256
Patrol		Yes	Yes	Yes
Auto Tracking		Yes (advanced)	Yes (advanced)	Yes (advanced)
Optical Zoom		40x	40x	21x
Digital Zoom		16x	16x	16x
Image Stabilizer		Yes	Yes	Yes
Corridor Mode		—	—	—
iA (Intelligent Auto)		Yes	Yes	Yes
Video / Sound Analytics		i-VMD (Type4)	i-VMD (Type4)	i-VMD (Type4)
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14
ONVIF® Profile		G / S / T	G / S / T	G / S / T
Audio	In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes
	In (Built-in MIC)	—	—	—
	Codec	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)
	Audio Detection Alarm	Yes	Yes	Yes
SD memory Card	Slot	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)
	Password & Alter Detection	Yes	Yes	Yes
	Audio REC	Yes	Yes	Yes
External I/O		Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)
Monitor Out		Yes (mini-jack) (*4)	Yes (mini-jack) (*4)	Yes (mini-jack)
Vandal Resistant		—	—	—
Water and Dust Resistance		—	—	—
Temperature		-10 to +50 deg.	-10 to +50 deg.	−10 to +50 deg. (Ceiling / Camera mount bracket) −10 to +40 deg. (Desktop / Tripod)
Power Source		12 V DC / PoE	12 V DC / PoE	12 V DC / PoE
Anti-Condensation System		—	—	—
Other Functions		—	—	—

(*1): Used by super resolution techniques   (*2): Only AAC-LC for SD REC   (*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
(*4): For adjustment, the audio output can be switched to the monitor output.   ★ Products that can be purchased is vary according to the locality.

Corporate Profile · New Products · Function Introduction · Network Camera Comparison Chart · Multi-Sensor · PTZ · Fixed Dome · 360-degree Dome · Bullet · Box · Cylinder · Network products

Network Camera Comparison chart — Fixed Dome

Indoor / Outdoor	Outdoor			
Model Name	**WV-X2571LN**	**WV-X2551LN**	**WV-S2572L**	**WV-S2552L**
Appearance				
Sensor	1/1.8 CMOS	1/2.8 CMOS	1/1.8 CMOS	1/2.8 CMOS
Codec and Transmission — Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
H.265 / H.264 multi stream	4	4	4	4
JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)
H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR	VBR
Smart Coding	Yes	Yes	Yes	Yes
Max. Resolution — 16 : 9	3840 x 2160	3072 x 1728 (*1)	3840 x 2160	3072 x 1728 (*1)
4 : 3	—	—	—	3072 x 2304 (*1)
Max. FPS @Max. Resolution — H.265 / H.264	30fps (4K)	30fps (5 MP)	30fps (4K)	30fps (5 MP)
JPEG	30fps (4K)	30fps (5 MP)	30fps (4K)	30fps (5 MP)
Super Dynamic / Enhanced SD / WDR	Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic
Color/BW	Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist	Auto Focus	Auto Focus	Auto Focus	Auto Focus
Min. Illumination — Color	0.09 lx @F1.5	0.07 lx @F1.3	0.09 lx @F1.5	0.07 lx @F1.3
Color (Sens up)	0.006 lx (16x)	0.0044 lx (16x)	0.006 lx (16x)	0.0044 lx (16x)
B/W	0 lx @F1.5 (w/IR)	0 lx @F1.3 (w/IR)	0 lx @F1.5 (w/IR)	0 lx @F1.3 (w/IR)
B/W (Sens up)	—	—	—	—
Lens	f = 4.3 to 8.6 mm, Motorized	f = 2.9 to 9 mm, Motorized	f = 4.3 to 8.6 mm, Motorized	f = 2.9 to 9 mm, Motorized
Angular field of view — 16 : 9	H: 52 to 101 deg. V: 29 to 55 deg.	H: 33 to 103 deg. V: 19 to 55 deg.	H: 52 to 101 deg. V: 29 to 55 deg.	H: 33 to 103 deg. V: 19 to 55 deg.
4 : 3	—	—	—	H: 33 to 103 deg. V: 25 to 75 deg.
Adjusting Angle — Pan	-180 to +180 deg.	-180 to +180 deg.	-180 to +180 deg.	-180 to +180 deg.
Tilt	-30 to +85 deg.	-30 to +85 deg.	-30 to +85 deg.	-30 to +85 deg.
Optical Zoom	2x	3.1x	2x	3.1x
Digital Zoom	4x	4x	4x	4x
Image Stabilizer	—	—	—	—
Corridor Mode	Yes	Yes	Yes	Yes
iA (Intelligent Auto)	Yes(AI iA)	Yes(AI iA)	Yes	Yes
Video / Sound Analytics	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	i-VMD (Type7)	i-VMD (Type7)
VIQS	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection	14	14	14	14
ONVIF® Profile	G / S / T	G / S / T	G / S / T	G / S / T
Audio — In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
In (Built-in MIC)	—	—	—	—
Codec	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)
Audio Detection Alarm	—	—	—	—
SD memory Card — Slot	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)
Password & Alter Detection	Yes	Yes	Yes	Yes
Audio REC	Yes	Yes	Yes	Yes
External I/O	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)
Monitor Out	Yes (mini-jack)	Yes (mini-jack)	Yes (mini-jack)	Yes (mini-jack)
Vandal Resistant	50J, IK10	50J, IK10	50J, IK10	50J, IK10
Water and Dust Resistance	IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X
Temperature	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)
Power Source	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE
Anti-Condensation System	Yes	Yes	Yes	Yes
Other Functions	Easy Kitting Package, Built-in heater, ClearSight coating, Built-in IR LED	Easy Kitting Package, Built-in heater, ClearSight coating, Built-in IR LED	Easy Kitting Package, Built-in heater, Built-in IR LED	Easy Kitting Package, Built-in heater, Built-in IR LED

(*1): Used by super resolution techniques   (*2): Only AAC-LC for SD REC   (*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
(*4): When the IR LED is ON, the maximum temperature is 50 deg.   ★ Products that can be purchased is vary according to the locality.

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Network Camera Comparison chart — Fixed Dome

Indoor / Outdoor	Outdoor				
Model Name	**WV-S2536LTN**	**NEW WV-S2536LGN**	**NEW WV-S2536LG**	**WV-S2536LN**	**WV-S2536L**
Appearance					
Sensor	1/2.8 CMOS	1/2.8 CMOS	1/2.8 CMOS	1/2.8 CMOS	1/2.8 CMOS
Codec and Transmission — Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
H.265 / H.264 multi stream	4	4	4	4	4
JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)
H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR	VBR	VBR
Smart Coding	Yes	Yes	Yes	Yes	Yes
Max. Resolution — 16 : 9	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
4 : 3	2048 x 1536 (*1)	2048 x 1536 (*1)	2048 x 1536 (*1)	2048 x 1536 (*1)	2048 x 1536 (*1)
Max. FPS @Max. Resolution — H.265 / H.264	60fps (1080p)	60fps (1080p)	60fps (1080p)	60fps (1080p)	60fps (1080p)
JPEG	15fps (3 MP)	15fps (3 MP)	15fps (3 MP)	15fps (3 MP)	15fps (3 MP)
Super Dynamic / Enhanced SD / WDR	Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic
Color/BW	Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist	Auto Focus	Auto Focus	Auto Focus	Auto Focus	Auto Focus
Min. Illumination — Color	0.015 lx @F1.7 (50IRE)	0.025 lx @F1.3 (50IRE)	0.025 lx @F1.3 (50IRE)	0.009 lx @F1.3 (50IRE)	0.009 lx @F1.3 (50IRE)
Color (Sens up)	0.011 lx @F1.7 (30IRE)	0.018 lx @F1.3 (30IRE)	0.018 lx @F1.3 (30IRE)	0.007 lx @F1.3 (30IRE)	0.007 lx @F1.3 (30IRE)
B/W	0 lx @F1.7 (w/IR)	0 lx @F1.3 (w/IR)	0 lx @F1.3 (w/IR)	0 lx @F1.3 (w/IR)	0 lx @F1.3 (w/IR)
B/W (Sens up)	—	—	—	—	—
Lens	f = 9 to 21 mm, Motorized	f = 2.9 to 9 mm, Motorized	f = 2.9 to 9 mm, Motorized	f = 2.9 to 9 mm, Motorized	f = 2.9 to 9 mm, Motorized
Angular field of view — 16 : 9	H: 15 to 36 deg. V: 9 to 20 deg.	H: 36 to 113 deg. V: 20 to 60 deg.	H: 36 to 113 deg. V: 20 to 60 deg.	H: 36 to 113 deg. V: 20 to 60 deg.	H: 36 to 113 deg. V: 20 to 60 deg.
4 : 3	H: 11 to 27 deg. V: 9 to 20 deg.	H: 26 to 82 deg. V: 20 to 60 deg.	H: 26 to 82 deg. V: 20 to 60 deg.	H: 26 to 82 deg. V: 20 to 60 deg.	H: 26 to 82 deg. V: 20 to 60 deg.
Adjusting Angle — Pan	-194 to +166 deg.	-194 to +166 deg.	-194 to +166 deg.	-194 to +166 deg.	-194 to +166 deg.
Tilt	-30 to +85 deg.	-30 to +85 deg.	-30 to +85 deg.	-30 to +85 deg.	-30 to +85 deg.
Optical Zoom	2.3x	3.1x	3.1x	3.1x	3.1x
Digital Zoom	—	—	—	—	—
Image Stabilizer	—	—	—	—	—
Corridor Mode	Yes	Yes	Yes	Yes	Yes
iA (Intelligent Auto)	Yes(AI iA)	Yes(AI iA)	Yes (AI iA)	Yes(AI iA)	Yes (AI iA)
Video / Sound Analytics	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications
VIQS	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection	14	14	14	14	14
ONVIF® Profile	G / M / S / T	G / M / S / T	G / M / S / T	G / M / S / T	G / M / S / T
Audio — In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
In (Built-in MIC)	—	—	—	—	—
Codec	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)
Audio Detection Alarm	Yes	Yes	Yes	Yes	Yes
SD memory Card — Slot	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)
Password & Alter Detection	Yes	Yes	Yes	Yes	Yes
Audio REC	Yes	Yes	Yes	Yes	Yes
External I/O	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)
Monitor Out	—	—	—	—	—
Vandal Resistant	50J, IK10	50J, IK10	50J, IK10	50J, IK10	50J, IK10
Water and Dust Resistance	IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X
Temperature	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)
Power Source	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE
Anti-Condensation System	Yes	Yes	Yes	Yes	Yes
Other Functions	Easy Kitting Package, Built-in heater, ClearSight coating, Built-in IR LED	Easy Kitting Package, Built-in heater, ClearSight coating, Built-in IR LED	Easy Kitting Package, Built-in heater, ClearSight coating, Built-in IR LED	Easy Kitting Package, Built-in heater, ClearSight coating, Built-in IR LED	Easy Kitting Package, Built-in heater, ClearSight coating, Built-in IR LED

(*1): Used by super resolution techniques   (*2): Only AAC-LC for microSD REC   (*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
(*4): When the IR LED is ON, the maximum temperature is 50 deg.   ★ Products that can be purchased is vary according to the locality.

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Network Camera Comparison chart — Fixed Dome

Indoor / Outdoor		**Outdoor**			
Model Name		**NEW** WV-U2542LA	**NEW** WV-U2532LA	**NEW** WV-U2540LA	**NEW** WV-U2530LA
Appearance					
Sensor		1/2.7 CMOS	1/3 CMOS	1/2.7 CMOS	1/3 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	3	3	3	3
	JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes	Yes
Max. Resolution	16 : 9	2560 x 1440	1920 x 1080	2560 x 1440	1920 x 1080
	4 : 3	—	1600 x 1200	—	1600 x 1200
Max. FPS @Max. Resolution	H.265 / H.264	30fps (4 MP)	30fps (1080p)	30fps (4 MP)	30fps (1080p)
	JPEG	30fps (4 MP)	30fps (1080p)	30fps (4 MP)	30fps (1080p)
Super Dynamic / Enhanced SD / WDR		Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus	Auto Focus	Auto Focus	Auto Focus
Min. Illumination	Color	0.3 lx @F2.0	0.1 lx @F2.0	0.3 lx @F2.0	0.1 lx @F2.0
	Color (Sens up)	0.019 lx (16x)	0.006 lx (16x)	0.019 lx (16x)	0.006 lx (16x)
	B/W	0 lx @F2.0 (w/IR)	0 lx @F2.0 (w/IR)	0 lx @F2.0 (w/IR)	0 lx @F2.0 (w/IR)
	B/W (Sens up)	—	—	—	—
Lens		f = 2.9 to 7.3 mm, Motorized	f = 2.9 to 7.3 mm, Motorized	f = 3.2 mm	f = 3.2 mm
Angular field of view	16 : 9	H: 43 to 100 deg. V: 24 to 56 deg.	H: 43 to 100 deg. V: 24 to 55 deg.	H: 100 deg. V: 54 deg.	H: 100 deg. V: 54 deg.
	4 : 3	—	H: 35 to 82 deg. V: 27 to 61 deg.	—	H: 81 deg. V: 60 deg.
Adjusting Angle	Pan	-170 to +190 deg.	-170 to +190 deg.	-175 to +175 deg.	-175 to +175 deg.
	Tilt	-30 to +85 deg.	-30 to +85 deg.	-30 to +80 deg.	-30 to +80 deg.
Optical Zoom		2.5x	2.5x	1x	1x
Digital Zoom		4x	4x	4x	4x
Image Stabilizer		—	—	—	—
Corridor Mode		Yes	Yes	Yes	Yes
iA (Intelligent Auto)		Yes	Yes	Yes	Yes
Video / Sound Analytics		—	—	—	—
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14	14
ONVIF® Profile		G / S / T	G / S / T	G / S / T	G / S / T
Audio	In (Line) / Out	—	—	—	—
	In (Built-in MIC)	—	—	—	—
	Codec	—	—	—	—
	Audio Detection Alarm	—	—	—	—
SD memory Card	Slot	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)
	Password & Alter Detection	Yes	Yes	Yes	Yes
	Audio REC	—	—	—	—
External I/O		—	—	—	—
Monitor Out		—	—	—	—
Vandal Resistant		IK10	IK10	IK10	IK10
Water and Dust Resistance		IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X
Temperature		-30 to +50 deg.	-30 to +50 deg.	-30 to +50 deg.	-30 to +50 deg.
Power Source		PoE	PoE	PoE	PoE
Anti-Condensation System		Yes	Yes	Yes	Yes
Other Functions		Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED

★ Products that can be purchased is vary according to the locality.

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Network Camera Comparison chart — Fixed Dome

Indoor / Outdoor		**Indoor**			
Model Name		WV-X2271L	WV-X2251L	WV-S2272L	WV-S2252L
Appearance					
Sensor		1/1.8 CMOS	1/2.8 CMOS	1/1.8 CMOS	1/2.8 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	4	4	4	4
	JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes	Yes
Max. Resolution	16 : 9	3840 x 2160	3072 x 1728 (*1)	3840 x 2160	3072 x 1728 (*1)
	4 : 3	—	—	—	3072 x 2304 (*1)
Max. FPS @Max. Resolution	H.265 / H.264	30fps (4K)	30fps (5 MP)	30fps (4K)	30fps (5 MP)
	JPEG	30fps (4K)	30fps (5 MP)	30fps (4K)	30fps (5 MP)
Super Dynamic / Enhanced SD / WDR		Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus	Auto Focus	Auto Focus	Auto Focus
Min. Illumination	Color	0.09 lx @F1.5	0.07 lx @F1.3	0.09 lx @F1.5	0.07 lx @F1.3
	Color (Sens up)	0.006 lx (16x)	0.0044 lx (16x)	0.006 lx (16x)	0.0044 lx (16x)
	B/W	0 lx @F1.5 (w/IR)	0 lx @F1.3 (w/IR)	0 lx @F1.5 (w/IR)	0 lx @F1.3 (w/IR)
	B/W (Sens up)	—	—	—	—
Lens		f=4.3 to 8.6 mm, Motorized	f=2.9 to 9 mm, Motorized	f=4.3 to 8.6 mm, Motorized	f=2.9 to 9 mm, Motorized
Angular field of view	16 : 9	H: 52 to 101 deg. V: 29 to 55 deg.	H: 33 to 105 deg. V: 19 to 56 deg.	H: 52 to 101 deg. V: 29 to 55 deg.	H: 33 to 105 deg. V: 19 to 56 deg.
	4 : 3	—	—	—	H: 33 to 105 deg. V: 25 to 76 deg.
Adjusting Angle	Pan	-180 to +180 deg.	-180 to +180 deg.	-180 to +180 deg.	-180 to +180 deg.
	Tilt	-30 to +85 deg.	-30 to +85 deg.	-30 to +85 deg.	-30 to +85 deg.
Optical Zoom		2x	3.1x	2x	3.1x
Digital Zoom		4x	4x	4x	4x
Image Stabilizer		—	—	—	—
Corridor Mode		Yes	Yes	Yes	Yes
iA (Intelligent Auto)		Yes (AI iA)	Yes (AI iA)	Yes	Yes
Video / Sound Analytics		See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	i-VMD (Type7)	i-VMD (Type7)
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14	14
ONVIF® Profile		G / S / T	G / S / T	G / S / T	G / S / T
Audio	In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
	In (Built-in MIC)	—	—	—	—
	Codec	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)
	Audio Detection Alarm	—	—	—	—
SD memory Card	Slot	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)
	Password & Alter Detection	Yes	Yes	Yes	Yes
	Audio REC	Yes	Yes	Yes	Yes
External I/O		Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)
Monitor Out		Yes (mini-jack)	Yes (mini-jack)	Yes (mini-jack)	Yes (mini-jack)
Vandal Resistant		IK10	IK10	IK10	IK10
Water and Dust Resistance		—	—	—	—
Temperature		-10 to +50 deg.	-10 to +50 deg.	-10 to +50 deg.	-10 to +50 deg.
Power Source		12V DC / PoE	12V DC / PoE	12 V DC / PoE	12 V DC / PoE
Anti-Condensation System		—	—	—	—
Other Functions		Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED

(*1): Used by super resolution techniques   (*2): Only AAC-LC for SD REC   (*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
★ Products that can be purchased is vary according to the locality.

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Network Camera Comparison chart — Fixed Dome

Indoor / Outdoor		Indoor					
Model Name		NEW WV-S2236LG	WV-S2236L	NEW WV-S2136LG	WV-S2136L	NEW WV-S2136G	WV-S2136
Appearance							
Sensor		1/2.8 CMOS	1/2.8 CMOS	1/2.8 CMOS	1/2.8 CMOS	1/2.8 CMOS	1/2.8 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	4	4	4	4	4	4
	JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes	Yes	Yes	Yes
Max. Resolution	16 : 9	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	4 : 3	2048 x 1536 (*1)	2048 x 1536 (*1)	2048 x 1536 (*1)	2048 x 1536 (*1)	2048 x 1536 (*1)	2048 x 1536 (*1)
Max. FPS @Max. Resolution	H.265 / H.264	60fps (1080p)	60fps (1080p)	60fps (1080p)	60fps (1080p)	60fps (1080p)	60fps (1080p)
	JPEG	15fps (3 MP)	15fps (3 MP)	15fps (3 MP)	15fps (3 MP)	15fps (3 MP)	15fps (3 MP)
Super Dynamic / Enhanced SD / WDR		Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus	Auto Focus	Auto Focus	Auto Focus	Auto Focus	Auto Focus
Min. Illumination	Color	0.025 lx @F1.3 (50IRE)	0.009 lx @F1.3 (50IRE)	0.025 lx @F1.3 (50IRE)	0.009 lx @F1.3 (50IRE)	0.025 lx @F1.3 (50IRE)	0.009 lx @F1.3 (50IRE)
	Color (Sens up)	0.018 lx @F1.3 (30IRE)	0.007 lx @F1.3 (30IRE)	0.018 lx @F1.3 (30IRE)	0.007 lx @F1.3 (30IRE)	0.018 lx @F1.3 (30IRE)	0.007 lx @F1.3 (30IRE)
	B/W	0 lx @F1.3 (w/IR)	0 lx @F1.3 (w/IR)	0 lx @F1.3 (w/IR)	0 lx @F1.3 (w/IR)	0.017 lx @F1.3 (50IRE)	0.006 lx @F1.3 (50IRE)
	B/W (Sens up)	—	—	—	—	0.002 lx (16x)	0.0004 lx (16x)
Lens		f = 2.9 to 9 mm	f = 2.9 to 9 mm	f = 2.9 to 9 mm	f = 2.9 to 9 mm	f = 2.9 to 9 mm	f = 2.9 to 9 mm
Angular field of view	16 : 9	H: 36 to 114 deg. V: 20 to 60 deg.	H: 36 to 114 deg. V: 20 to 60 deg.	H: 36 to 115 deg. V: 20 to 61 deg.	H: 36 to 115 deg. V: 20 to 61 deg.	H: 36 to 115 deg. V: 20 to 61 deg.	H: 36 to 115 deg. V: 20 to 61 deg.
	4 : 3	H: 27 to 82 deg. V: 20 to 60 deg.	H: 27 to 82 deg. V: 20 to 60 deg.	H: 28 to 82 deg. V: 20 to 61 deg.	H: 28 to 82 deg. V: 20 to 61 deg.	H: 28 to 82 deg. V: 20 to 61 deg.	H: 28 to 82 deg. V: 20 to 61 deg.
Adjusting Angle	Pan	-240 to +120 deg.	-240 to +120 deg.	-240 to +120 deg.	-240 to +120 deg.	-240 to +120 deg.	-240 to +120 deg.
	Tilt	30 to +85 deg.	30 to +85 deg.	30 to +85 deg.	30 to +85 deg.	30 to +85 deg.	30 to +85 deg.
Optical Zoom		3.1x	3.1x	3.1x	3.1x	3.1x	3.1x
Digital Zoom		—	—	—	—	—	—
Image Stabilizer		—	—	—	—	—	—
Corridor Mode		Yes	Yes	Yes	Yes	Yes	Yes
iA (Intelligent Auto)		Yes (AI iA)	Yes (AI iA)	Yes (AI iA)	Yes (AI iA)	Yes (AI iA)	Yes (AI iA)
Video / Sound Analytics		See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14	14	14	14
ONVIF® Profile		G / M / S / T	G / M / S / T	G / M / S / T	G / M / S / T	G / M / S / T	G / M / S / T
Audio	In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
	In (Built-in MIC)	—	—	—	—	—	—
	Codec	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)
	Audio Detection Alarm	Yes	Yes	Yes	Yes	Yes	Yes
SD memory Card	Slot	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)
	Password & Alter Detection	Yes	Yes	Yes	Yes	Yes	Yes
	Audio REC	Yes	Yes	Yes	Yes	Yes	Yes
External I/O		Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)
Monitor Out		—	—	—	—	—	—
Vandal Resistant		IK10	IK10	—	—	—	—
Water and Dust Resistance		—	—	—	—	—	—
Temperature		-10 to +50 deg.	-10 to +50 deg.	-10 to +50 deg.	-10 to +50 deg.	-10 to +50 deg.	-10 to +50 deg.
Power Source		12 V DC / PoE	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE
Anti-Condensation System		—	—	—	—	—	—
Other Functions		Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package	Easy Kitting Package

(*1): Used by super resolution techniques   (*2): Only AAC-LC for microSD REC   (*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart — Fixed Dome

Indoor / Outdoor		Indoor			
Model Name		NEW WV-U2142LA	NEW WV-U2132LA	NEW WV-U2140LA	NEW WV-U2130LA
Appearance					
Sensor		1/2.7 CMOS	1/3 CMOS	1/2.7 CMOS	1/3 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	3	3	3	3
	JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes	Yes
Max. Resolution	16 : 9	2560 x 1440	1920 x 1080	2560 x 1440	1920 x 1080
	4 : 3	—	1600 x 1200	—	1600 x 1200
Max. FPS @Max. Resolution	H.265 / H.264	30fps (4 MP)	30fps (1080p)	30fps (4 MP)	30fps (1080p)
	JPEG	30fps (4 MP)	30fps (1080p)	30fps (4 MP)	30fps (1080p)
Super Dynamic / Enhanced SD / WDR		Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus	Auto Focus	Auto Focus	Auto Focus
Min. Illumination	Color	0.3 lx @F2.0	0.1 lx @F2.0	0.3 lx @F2.0	0.1 lx @F2.0
	Color (Sens up)	0.019 lx (16x)	0.006 lx (16x)	0.019 lx (16x)	0.006 lx (16x)
	B/W	0 lx @F2.0 (w/IR)	0 lx @F2.0 (w/IR)	0 lx @F2.0 (w/IR)	0 lx @F2.0 (w/IR)
	B/W (Sens up)	—	—	—	—
Lens		f = 2.9 to 7.3 mm, Motorized	f = 2.9 to 7.3 mm, Motorized	f = 3.2 mm	f = 3.2 mm
Angular field of view	16 : 9	H: 44 to 102 deg. V: 25 to 57 deg.	H: 43 to 100 deg. V: 24 to 56 deg.	H: 100 deg. V: 54 deg.	H: 100 deg. V: 54 deg.
	4 : 3	—	H: 36 to 83 deg. V: 27 to 62 deg.	—	H: 81 deg. V: 60 deg.
Adjusting Angle	Pan	-180 to +180 deg.	-180 to +180 deg.	-175 to +175 deg.	-175 to +175 deg.
	Tilt	-30 to +85 deg.	-30 to +85 deg.	-30 to +80 deg.	-30 to +80 deg.
Optical Zoom		2.5x	2.5x	1x	1x
Digital Zoom		4x	4x	4x	4x
Image Stabilizer		—	—	—	—
Corridor Mode		Yes	Yes	Yes	Yes
iA (Intelligent Auto)		Yes	Yes	Yes	Yes
Video / Sound Analytics		—	—	—	—
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14	14
ONVIF® Profile		G / S / T	G / S / T	G / S / T	G / S / T
Audio	In (Line) / Out	—	—	—	—
	In (Built-in MIC)	—	—	—	—
	Codec	—	—	—	—
	Audio Detection Alarm	—	—	—	—
SD memory Card	Slot	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)
	Password & Alter Detection	Yes	Yes	Yes	Yes
	Audio REC	—	—	—	—
External I/O		—	—	—	—
Monitor Out		—	—	—	—
Vandal Resistant		—	—	—	—
Water and Dust Resistance		—	—	—	—
Temperature		-10 to +50 deg.	-10 to +50 deg.	-10 to +50 deg.	-10 to +50 deg.
Power Source		PoE	PoE	PoE	PoE
Anti-Condensation System		—	—	—	—
Other Functions		Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED

★ Products that can be purchased is vary according to the locality.

Sidebar tabs (left page): Corporate Profile · New Products · Function Introduction · Network Camera Comparison Chart · Multi-Sensor · PTZ · Fixed Dome · 360-degree Dome · Bullet · Box · Cylinder · Network products

Network Camera Comparison chart — Fixed Dome

Indoor / Outdoor		Outdoor		Indoor	
Model Name		WV-S3531L/WV-S3532LM	WV-S3511L/WV-S3512LM	WV-S3131L	WV-S3111L
Appearance					
Sensor		1/3 CMOS	1/3 CMOS	1/3 CMOS	1/3 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	4	4	4	4
	JPEG multi stream	3 (Variable)	3 (Variable)	3 (Variable)	3 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes	Yes
Max. Resolution	16 : 9	1920 x 1080	1280 x 720	1920 x 1080	1280 x 720
	4 : 3	2048 x 1536 (*1)	1280 x 960	2048 x 1536 (*1)	1280 x 960
Max. FPS @Max. Resolution	H.265 / H.264	60fps (1080 P)	60fps (720 P)	60fps (1080 P)	60fps (720 P)
	JPEG	30fps (3 MP)	30fps (1.3 MP)	30fps (3 MP)	30fps (1.3 MP)
Super Dynamic / Enhanced SD / WDR		Enhanced SD	Enhanced SD	Enhanced SD	Enhanced SD
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		—	—	—	—
Min. Illumination	Color	0.03 lx @F2.3	0.02 lx @F2.3	0.03 lx @F2.3	0.02 lx @F2.3
	Color (Sens up)	0.0019 lx (16x)	0.0013 lx (16x)	0.0019 lx (16x)	0.0013 lx (16x)
	B/W	0 lx @F2.3 (w/IR)	0 lx @F2.3 (w/IR)	0 lx @F2.3 (w/IR)	0 lx @F2.3 (w/IR)
	B/W (Sens up)	—	—	—	—
Lens		f = 2.8 mm	f = 2.8 mm	f = 2.8 mm	f = 2.8 mm
Angular field of view	16 : 9	H: 108 deg. V: 60 deg.	H: 97 deg. V: 54 deg.	H: 108 deg. V: 60 deg.	H: 97 deg. V: 54 deg.
	4 : 3	H: 89 deg. V: 66 deg.	H: 97 deg. V: 72 deg.	H: 89 deg. V: 66 deg.	H: 97 deg. V: 72 deg.
Adjusting Angle	Pan	±45°	±45°	±45°	±45°
	Tilt	0° to +90° (*2)	0° to +90° (*2)	0° to +90° (*2)	0° to +90° (*2)
Optical Zoom		1x	1x	1x	1x
Digital Zoom		4x	4x	4x	1x
Image Stabilizer		—	—	—	—
Corridor Mode		Yes	Yes	Yes	Yes
iA (Intelligent Auto)		Yes	Yes	Yes	Yes
Video / Sound Analytics		i-VMD (Type4)	i-VMD (Type4)	i-VMD (Type4)	i-VMD (Type4)
VIQS		Yes	Yes	Yes	Yes
Max. Connection		14	14	14	14
ONVIF® Profile		G / S / T	G / S / T	G / S / T	G / S / T
Audio	In (Line) / Out	— / —	— / —	— / —	— / —
	In (Built-in MIC)	Yes	Yes	Yes	Yes
	Codec	G.711 / G.726 / AAC-LC (*3)	G.711 / G.726 / AAC-LC (*3)	G.711 / G.726 / AAC-LC (*3)	G.711 / G.726 / AAC-LC (*3)
	Audio Detection Alarm	Yes	Yes	Yes	Yes
SD memory Card	Slot	Yes (microSDXC)	Yes (microSDXC)	Yes (microSDXC)	Yes (microSDXC)
	Password & Alter Detection	Yes	Yes	Yes	Yes
	Audio REC	Yes	Yes	Yes	Yes
External I/O		—	—	—	—
Monitor Out		—	—	—	—
Vandal Resistant		IK10	IK10	—	—
Water and Dust Resistance		IP66 / NEMA 4X	IP66 / NEMA 4X	—	—
Temperature		WV-S3531L : -30 to +50 deg. WV-S3532LM : -40 to +60 deg.	WV-S3511L : -30 to +50 deg. WV-S3512LM : -40 to +60 deg.	0 to +40 deg.	0 to +40 deg.
Power Source		PoE	PoE	PoE	PoE
Anti-Condensation System		—	—	—	—
Other Functions		Easy Kitting Package, Built-in IR LED, EN50155, IEC62236-3-2, ECE-R10, EN50498, **WV-S3531L : RJ45 connector** **WV-S3532LM : M12 connector**	Easy Kitting Package, Built-in IR LED, EN50155, IEC62236-3-2, ECE-R10, EN50498, **WV-S3511L : RJ45 connector** **WV-S3512LM : M12 connector**	Built-in IR LED	Built-in IR LED

(*1): Used by super resolution techniques   (*2): When viewing images at night using IR LED, set the vertical (TILT) angle between 0 ° to +75 °.   (*3): Only AAC-LC for microSD REC
★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart — 360-degree Dome

Indoor / Outdoor		Outdoor			
Model Name		WV-X4573L / WV-X4573LM	**NEW** WV-S4576L / WV-S4576LM	**NEW** WV-S4556L / WV-S4556LM	WV-S4551L / WV-S4551LM
Appearance		*Base Bracket WV-X4573L only	*Base Bracket WV-S4576L only	*Base Bracket WV-S4556L only	*Base Bracket WV-S4551L only
Sensor		1/2 CMOS	1/2 CMOS	1/3 CMOS	1/3 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	2	2	2	2
	JPEG multi stream	2	2	2	2
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes	Yes
Max. Resolution	16 : 9	2560 x 1440	2560 x 1440	1920 x 1080	1920 x 1080
	4 : 3	2560 x 1920 2992 x 2992 (1 : 1)	2560 x 1920 2992 x 2992 (1 : 1)	1600 x 1200 2192 x 2192 (1 : 1)	1600 x 1200 2192 x 2192 (1 : 1)
Max. FPS @Max. Resolution	H.265 / H.264	30fps (9 MP)	30fps (9 MP)	30fps (5 MP)	30fps (5 MP)
	JPEG	30fps (9 MP)	30fps (9 MP)	30fps (5 MP)	30fps (5 MP)
Super Dynamic / Enhanced SD / WDR		WDR	WDR	Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		ABF	ABF	—	—
Min. Illumination	Color	0.3 lx @F1.9	0.3 lx @F1.9	0.15 lx @F2.4	0.15 lx @F2.4
	Color (Sens up)	0.02 lx (16x)	0.02 lx (16x)	0.01 lx (16x)	0.01 lx (16x)
	B/W	0 lx @F1.9 (w/IR)	0 lx @F1.9 (w/IR)	0 lx @F2.4 (w/IR)	0 lx @F2.4 (w/IR)
	B/W (Sens up)	—	—	—	—
Lens		f = 1.4 mm	f = 1.4 mm	f = 0.84 mm	f = 0.84 mm
Angular field of view	1 : 1	H: 183 deg. V: 183 deg.	H: 183 deg. V: 183 deg.	H: 186 deg. V: 186 deg.	H: 186 deg. V: 186 deg.
Adjusting Angle	Pan	-5°, 0°, +5°	-5°, 0°, +5°	-5°, 0°, +5°	-5°, 0°, +5°
	Tilt	—	—	—	—
Optical Zoom		—	—	—	—
Digital Zoom		Choose from x1, x2, x4	Choose from x1, x2, x4	Choose from x1, x2, x4	Choose from x1, x2, x4
Image Stabilizer		—	—	—	—
Corridor Mode		—	—	—	—
iA (Intelligent Auto)		Yes	Yes	Yes	Yes
Video / Sound Analytics		i-VMD (Type8)	See pages 6-9 for supported AI applications		i-VMD (Type8)
VIQS		—	—	—	—
Max. Connection		14	14	14	14
ONVIF® Profile		G / S / T	G / M / S / T	G / M / S / T	G / S / T
Audio	In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
	In (Built-in MIC)	—	—	—	—
	Codec	G.711 / G.726 / AAC (*1)	G.711 / G.726 / AAC (*1)	G.711 / G.726 / AAC (*1)	G.711 / G.726 / AAC (*1)
	Audio Detection Alarm	—	—	—	—
SD memory Card	Slot	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)
	Password & Alter Detection	Yes	Yes	Yes	Yes
	Audio REC	Yes	Yes	Yes	Yes
External I/O		Yes (3) (*2)	Yes (3) (*2)	Yes (3) (*2)	Yes (3) (*2)
Monitor Out		Yes (mini-jack) (*3)	Yes (mini-jack) (*3)	Yes (mini-jack) (*3)	Yes (mini-jack) (*3)
Vandal Resistant		50J, IK10	50J, IK10	50J, IK10	50J, IK10
Water and Dust Resistance		IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X
Temperature		-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)
Power Source		12 V DC / PoE	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE
Anti-Condensation System		Yes	Yes	Yes	Yes
Other Functions		Easy Kitting Package, 360° monitoring, **EN45545 compliant (WV-X4573LM only),** EN50155-TX, Built-in IR LED, **WV-X4573L : RJ45 connector** **WV-X4573LM : M12 connector**	Easy Kitting Package, 360° monitoring, **EN45545 compliant (WV-S4576LM only),** EN50155-TX, Built-in IR LED, **WV-S4576L : RJ45 connector** **WV-S4576LM : M12 connector**	Easy Kitting Package, 360° monitoring, **EN45545 compliant (WV-S4556LM only),** EN50155-TX, Built-in IR LED, **WV-S4556L : RJ45 connector** **WV-S4556LM : M12 connector**	Easy Kitting Package, 360° monitoring, **EN45545 compliant (WV-S4551LM only),** EN50155-TX, Built-in IR LED, **WV-S4551L : RJ45 connector** **WV-S4551LM : M12 connector**

(*1): Only AAC-LC for SD REC   (*2): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
(*3): For adjustment, the audio output can be switched to the monitor output.   (*4): When the IR LED is ON, the maximum temperature is 50 deg.   ★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart — 360-degree Dome

Indoor / Outdoor		Indoor	
Model Name		**WV-X4173**	**WV-X4172**
Appearance			
Sensor		1/2 CMOS	1/2 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	2	2
	JPEG multi stream	2	2
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR
	Smart Coding	Yes	Yes
Max. Resolution	16 : 9	2560 x 1440	2560 x 1440
	4 : 3	2560 x 1920 / 2992 x 2992 (1 : 1)	2560 x 1920 / 2992 x 2992 (1 : 1)
Max. FPS @Max. Resolution	H.265 / H.264	30fps (9 MP)	30fps (9 MP)
	JPEG	30fps (9 MP)	30fps (9 MP)
Super Dynamic / Enhanced SD / WDR		WDR	WDR
Color/BW		Day/Night (Electrical)	Day/Night (Electrical)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		ABF	ABF
Min. Illumination	Color	0.3 lx @F1.9	0.3 lx @F1.9
	Color (Sens up)	0.02 lx (16x)	0.02 lx (16x)
	B/W	0.2 lx @F1.9	0.2 lx @F1.9
	B/W (Sens up)	0.01 lx (16x)	0.01 lx (16x)
Lens		f = 1.4 mm	f = 1.4 mm
Angular field of view	1 : 1	H: 183 deg. V: 183 deg.	H: 183 deg. V: 183 deg.
Adjusting Angle	Pan	-5°, 0°, +5°	-5°, 0°, +5°
	Tilt	—	—
Optical Zoom		—	—
Digital Zoom		Choose from x1, x2, x4	Choose from x1, x2, x4
Image Stabilizer		—	—
Corridor Mode		—	—
iA (Intelligent Auto)		Yes	Yes
Video / Sound Analytics		i-VMD (Type8)	i-VMD (Type8)
VIQS		—	—
Max. Connection		14	14
ONVIF® Profile		G / S / T	G / S / T
Audio	In (Line) / Out	Yes / Yes	— / —
	In (Built-in MIC)	Yes	—
	Codec	G.711 / G.726 / AAC (*1)	—
	Audio Detection Alarm	—	—
SD memory Card	Slot	Yes (SDXC)	Yes (SDXC)
	Password & Alter Detection	Yes	Yes
	Audio REC	Yes	Yes
External I/O		Yes (3) (*2)	—
Monitor Out		Yes(mini-jack) (*3)	—
Vandal Resistant		—	—
Water and Dust Resistance		—	—
Temperature		−10 to +50 deg.	0 to +40 deg.
Power Source		12 V DC / PoE	PoE
Anti-Condensation System		—	—
Other Functions		360° monitoring	360° monitoring

(*1): Only AAC-LC for SD REC   (*2): ALARM IN1 (Alarm input 1/ Auto time adjustment input), ALARM IN2 (Alarm input 2/ ALARM OUT), ALARM IN3 (Alarm input 3/ AUX OUT) (x1 for each)
(*3): For adjustment, the audio output can be switched to the monitor output.   ★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart — 360-degree Dome

Indoor / Outdoor		Indoor		
Model Name		**NEW WV-S4176**	**NEW WV-S4156**	**WV-S4151**
Appearance				
Sensor		1/2 CMOS	1/3 CMOS	1/3 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	2	2	2
	JPEG multi stream	2	2	2
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes
Max. Resolution	16 : 9	2560 x 1440	1920 x 1080	1920 x 1080
	4 : 3	2560 x 1920 / 2992 x 2992 (1 : 1)	1600 x 1200 / 2192 x 2192 (1:1)	1600 x 1200 / 2192 x 2192 (1:1)
Max. FPS @Max. Resolution	H.265 / H.264	30fps (9 MP)	30fps (5 MP)	30fps (5 MP)
	JPEG	30fps (9 MP)	30fps (5 MP)	30fps (5 MP)
Super Dynamic / Enhanced SD / WDR		WDR	Super Dynamic	Super Dynamic
Color/BW		Day/Night (Electrical)	Day/Night (Electrical)	Day/Night (Electrical)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		ABF	—	—
Min. Illumination	Color	0.3 lx @F1.9	0.15 lx @F2.4	0.15 lx @F2.4
	Color (Sens up)	0.02 lx (16x)	0.01 lx (16x)	0.01 lx (16x)
	B/W	0.2 lx @F1.9	0.1 lx @F2.4	0.1 lx @F2.4
	B/W (Sens up)	0.01 lx (16x)	0.006 lx (16x)	0.006 lx (16x)
Lens		f = 1.4 mm	f = 0.84 mm	f = 0.84 mm
Angular field of view	1 : 1	H: 183 deg. V: 183 deg.	H: 186 deg. V: 186 deg.	H: 186 deg. V: 186 deg.
Adjusting Angle	Pan	-5°, 0°, +5°	-5°, 0°, +5°	-5°, 0°, +5°
	Tilt	—	—	—
Optical Zoom		—	—	—
Digital Zoom		Choose from x1, x2, x4	Choose from x1, x2, x4	Choose from x1, x2, x4
Image Stabilizer		—	—	—
Corridor Mode		—	—	—
iA (Intelligent Auto)		Yes	Yes	Yes
Video / Sound Analytics		See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	i-VMD (Type8)
VIQS		—	—	—
Max. Connection		14	14	14
ONVIF® Profile		G / M / S / T	G / M / S / T	G / S / T
Audio	In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes
	In (Built-in MIC)	Yes	Yes	Yes
	Codec	G.711 / G.726 / AAC (*1)	G.711 / G.726 / AAC (*1)	G.711 / G.726 / AAC (*1)
	Audio Detection Alarm	—	—	—
SD memory Card	Slot	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)
	Password & Alter Detection	Yes	Yes	Yes
	Audio REC	Yes	Yes	Yes
External I/O		Yes (3) (*2)	Yes (3) (*2)	Yes (3) (*2)
Monitor Out		Yes(mini-jack) (*3)	Yes(mini-jack) (*3)	Yes(mini-jack) (*3)
Vandal Resistant		—	—	—
Water and Dust Resistance		—	—	—
Temperature		−10 to +50 deg.	−10 to +50 deg.	−10 to +50 deg.
Power Source		12 V DC / PoE	12 V DC / PoE	12 V DC / PoE
Anti-Condensation System		—	—	—
Other Functions		360° monitoring	360° monitoring	360° monitoring

(*1): Only AAC-LC for SD REC   (*2): ALARM IN1 (Alarm input 1/ Auto time adjustment input), ALARM IN2 (Alarm input 2/ ALARM OUT), ALARM IN3 (Alarm input 3/ AUX OUT) (x1 for each)
(*3): For adjustment, the audio output can be switched to the monitor output.   ★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart — Bullet

Indoor / Outdoor		Outdoor			
Model Name		WV-X1571LN	WV-X1551LN	WV-S1572L	WV-S1552L
Appearance					
Sensor		1/1.8 CMOS	1/2.8 CMOS	1/1.8 CMOS	1/2.8 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	4	4	4	4
	JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)	2 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes	Yes
Max. Resolution	16 : 9	3840×2160	3072 x 1728 (*1)	3840×2160	3072 x 1728 (*1)
	4 : 3	—	—	—	3072 x 2304 (*1)
Max. FPS @Max. Resolution	H.265 / H.264	30fps (4K)	30fps (5 MP)	30fps (4K)	30fps (5 MP)
	JPEG	30fps (4K)	30fps (5 MP)	30fps (4K)	30fps (5 MP)
Super Dynamic / Enhanced SD / WDR		Super Dynamic	Super Dynamic	Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		ABF	ABF	ABF	ABF
Min. Illumination	Color	0.09 lx @F1.5	0.07 lx @F1.3	0.09 lx @F1.5	0.07 lx @F1.3
	Color (Sens up)	0.006 lx (16x)	0.0044 lx (16x)	0.006 lx (16x)	0.0044 lx (16x)
	B/W	0 lx @F1.5 (w/IR)	0 lx @F1.3 (w/IR)	0 lx @F1.5 (w/IR)	0 lx @F1.3 (w/IR)
	B/W (Sens up)	—	—	—	—
Lens		f=4.3 to 8.6 mm, Motorized	f=2.9 to 9 mm, Motorized	f=4.3 to 8.6 mm, Motorized	f=2.9 to 9 mm, Motorized
Angular field of view	16 : 9	H: 53 to 104 deg. V: 30 to 56 deg.	H: 34 to 106 deg. V: 19 to 57 deg.	H: 53 to 104 deg. V: 30 to 56 deg.	H: 34 to 106 deg. V: 19 to 57 deg.
	4 : 3	—	—	—	H: 34 to 106 deg. V: 25 to 77 deg.
Adjusting Angle	Pan	-180 to +180 deg.	-180 to +180 deg.	-180 to 180 deg.	-180 to +180 deg.
	Tilt	0 to +100 deg.	0 to +100 deg.	0 to 100 deg.	0 to +100 deg.
Optical Zoom		2x	3.1x	2x	3.1x
Digital Zoom		4x	4x	4x	4x
Image Stabilizer		—	—	—	—
Corridor Mode		Yes	Yes	Yes	Yes
iA (Intelligent Auto)		Yes(AI iA)	Yes(AI iA)	Yes	Yes
Video / Sound Analytics		See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	i-VMD (Type7)	i-VMD (Type7)
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14	14
ONVIF® Profile		G / S / T	G / S / T	G / S / T	G / S / T
Audio	In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
	In (Built-in MIC)	—	—	—	—
	Codec	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)
	Audio Detection Alarm	—	—	—	—
SD memory Card	Slot	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)	Yes (SDXC)
	Password & Alter Detection	Yes	Yes	Yes	Yes
	Audio REC	Yes	Yes	Yes	Yes
External I/O		Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)
Monitor Out		Yes (RCA)	Yes (RCA)	Yes (RCA)	Yes (RCA)
Vandal Resistant		IK10	IK10	IK10	IK10
Water and Dust Resistance		IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X
Temperature		-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)
Power Source		12 V DC / PoE	12 V DC / PoE	12 V DC / PoE	12 V DC / PoE
Anti-Condensation System		Yes	Yes	Yes	Yes
Other Functions		Easy Kitting Package, Built-in heater, ClearSight coating, Built-in IR LED	Easy Kitting Package, Built-in heater, ClearSight coating, Built-in IR LED	Easy Kitting Package, Built-in heater, Built-in IR LED	Easy Kitting Package, Built-in heater, Built-in IR LED

(*1): Used by super resolution techniques (*2): Only AAC-LC for SD REC (*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
(*4): When the IR LED is ON, the maximum temperature is 50 deg. ★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart — Bullet

Indoor / Outdoor		Outdoor		
Model Name		WV-S1536LTN	WV-S1536LN	WV-S1536L
Appearance				
Sensor		1/2.8 CMOS	1/2.8 CMOS	1/2.8 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	4	4	4
	JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes
Max. Resolution	16 : 9	1920 x 1080	1920 x 1080	1920 x 1080
	4 : 3	2048 x 1536 (*1)	2048 x 1536 (*1)	2048 x 1536 (*1)
Max. FPS @Max. Resolution	H.265 / H.264	60fps (1080p)	60fps (1080p)	60fps (1080p)
	JPEG	15fps (3 MP)	15fps (3 MP)	15fps (3 MP)
Super Dynamic / Enhanced SD / WDR		Super Dynamic	Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		ABF	ABF	ABF
Min. Illumination	Color	0.015 lx @F1.7 (50IRE)	0.009 lx @F1.3 (50IRE)	0.009 lx @F1.3 (50IRE)
	Color (Sens up)	0.011 lx @F1.7 (30IRE)	0.007 lx @F1.3 (30IRE)	0.007 lx @F1.3 (30IRE)
	B/W	0 lx @F1.7 (w/IR)	0 lx @F1.3 (w/IR)	0 lx @F1.3 (w/IR)
	B/W (Sens up)	—	—	—
Lens		f = 9 to 21 mm, Motorized	f=2.9 to 9 mm, Motorized	f=2.9 to 9 mm, Motorized
Angular field of view	16 : 9	H: 15 to 36 deg. V: 9 to 20 deg.	H: 37 to 117 deg. V: 21 to 62 deg.	H: 37 to 117 deg. V: 21 to 62 deg.
	4 : 3	H: 11 to 27 deg. V: 9 to 20 deg.	H: 27 to 82 deg. V: 21 to 62 deg.	H: 27 to 82 deg. V: 21 to 62 deg.
Adjusting Angle	Pan	-180 to +180 deg.	-180 to +180 deg.	-180 to +180 deg.
	Tilt	0 to +100 deg.	0 to +100 deg.	0 to +100 deg.
Optical Zoom		2.3x	3.1x	3.1x
Digital Zoom		—	—	—
Image Stabilizer		—	—	—
Corridor Mode		Yes	Yes	Yes
iA (Intelligent Auto)		Yes (AI iA)	Yes (AI iA)	Yes (AI iA)
Video / Sound Analytics		See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications	See pages 6-9 for supported AI applications
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14
ONVIF® Profile		G / M / S / T	G / M / S / T	G / M / S / T
Audio	In (Line) / Out	Yes / Yes	Yes / Yes	Yes / Yes
	In (Built-in MIC)	—	—	—
	Codec	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)	G.711 / G.726 / AAC (*2)
	Audio Detection Alarm	Yes	Yes	Yes
SD memory Card	Slot	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)
	Password & Alter Detection	Yes	Yes	Yes
	Audio REC	Yes	Yes	Yes
External I/O		Yes (3) (*3)	Yes (3) (*3)	Yes (3) (*3)
Monitor Out		Yes (RCA)	Yes (RCA)	Yes (RCA)
Vandal Resistant		IK10	IK10	IK10
Water and Dust Resistance		IP66 / NEMA 4X	IP66 / NEMA 4X	IP66 / NEMA 4X
Temperature		-40 to +60 deg. (*4)	-40 to +60 deg. (*4)	-40 to +60 deg. (*4)
Power Source		12 V DC / PoE	12 V DC / PoE	12 V DC / PoE
Anti-Condensation System		Yes	Yes	Yes
Other Functions		Easy Kitting Package, ClearSight coating, Built-in IR LED	Easy Kitting Package, ClearSight coating, Built-in IR LED	Easy Kitting Package, Built-in IR LED

(*1): Used by super resolution techniques (*2): Only AAC-LC for microSD REC (*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
(*4): When the IR LED is ON, the maximum temperature is 50 deg. ★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart — Bullet / Box

		Bullet		Box
Indoor / Outdoor		**Outdoor**		**Indoor**
Model Name		**NEW** WV-U1542LA	**NEW** WV-U1532LA	WV-S1136
Appearance				Lens not included
Sensor		1/2.7 CMOS	1/3 CMOS	1/2.8 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	3	3	4
	JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes
Max. Resolution	16 : 9	2560 x 1440	1920 x 1080	1920 x 1080
	4 : 3	—	1600 x 1200	2048 x 1536 (*1)
Max. FPS @Max. Resolution	H.265 / H.264	30fps (4 MP)	30fps (1080p)	60fps (1080p)
	JPEG	30fps (4 MP)	30fps (1080p)	15fps (3 MP)
Super Dynamic / Enhanced SD / WDR		Super Dynamic	Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus	Auto Focus	ABF
Min. Illumination	Color	0.3 lx @F2.0	0.1 lx @F2.0	0.008 lx @F1.2 (50IRE)
	Color (Sens up)	0.019 lx (16x)	0.006 lx (16x)	0.006 lx @F1.2 (30IRE)
	B/W	0 lx @F2.0 (w/IR)	0 lx @F2.0 (w/IR)	0.004 lx @F1.2 (50IRE)
	B/W (Sens up)	—	—	0.0003 lx (16x)
Lens		f = 2.9 to 7.3 mm, Motorized	f = 2.9 to 7.3 mm, Motorized	CS Mount
Angular field of view	16 : 9	H: 44 to 103 deg. V: 25 to 57 deg.	H: 44 to 102 deg. V: 24 to 56 deg.	—
	4 : 3	—	H: 36 to 84 deg. V: 27 to 63 deg.	—
Adjusting Angle	Pan	-180 to +180 deg.	-180 to +180 deg.	—
	Tilt	0 to +100 deg.	0 to +100 deg.	—
Optical Zoom		2.5x	2.5x	—
Digital Zoom		4x	4x	—
Image Stabilizer		—	—	—
Corridor Mode		Yes	Yes	Yes
iA (Intelligent Auto)		Yes	Yes	Yes (AI iA)
Video / Sound Analytics		—	—	See pages 6-9 for supported AI applications
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14
ONVIF® Profile		G / S / T	G / S / T	G / M / S / T
Audio	In (Line) / Out	—	—	Yes / Yes
	In (Built-in MIC)	—	—	—
	Codec	—	—	G.711 / G.726 / AAC (*2)
	Audio Detection Alarm	—	—	Yes
SD memory Card	Slot	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)
	Password & Alter Detection	Yes	Yes	Yes
	Audio REC	—	—	Yes
External I/O		—	—	Yes (3) (*3)
Monitor Out		—	—	Yes (RCA)
Vandal Resistant		IK10	IK10	—
Water and Dust Resistance		IP66 / NEMA 4X	IP66 / NEMA 4X	—
Temperature		-30 to +50 deg.	-30 to +50 deg.	-10 to +50 deg.
Power Source		PoE	PoE	12 V DC / PoE
Anti-Condensation System		Yes	Yes	—
Other Functions		Easy Kitting Package, Built-in IR LED	Easy Kitting Package, Built-in IR LED	Easy Kitting Package

(*1): Used by super resolution techniques　(*2): Only AAC-LC for microSD REC　(*3): ALARM IN1(Alarm input 1/ Black & white input/ Auto time adjustment input), ALARM IN2(Alarm input 2/ ALARM OUT), ALARM IN3(Alarm input 3/ AUX OUT)(x1 for each)
★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart — Cylinder

		Cylinder		
Indoor / Outdoor		**Indoor**		
Model Name		**NEW** WV-U1142A	**NEW** WV-U1132A	**NEW** WV-U1130A
Appearance				
Sensor		1/2.7 CMOS	1/3 CMOS	1/3 CMOS
Codec and Transmission	Video Codec	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG	H.265 / H.264 / JPEG
	H.265 / H.264 multi stream	3	3	3
	JPEG multi stream	2 (Variable)	2 (Variable)	2 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR	VBR	VBR
	Smart Coding	Yes	Yes	Yes
Max. Resolution	16 : 9	2560 x 1440	1920 x 1080	1920 x 1080
	4 : 3	—	1600 x 1200	1600 x 1200
Max. FPS @Max. Resolution	H.265 / H.264	30fps (4 MP)	30fps (1080p)	30fps (1080p)
	JPEG	30fps (4 MP)	30fps (1080p)	30fps (1080p)
Super Dynamic / Enhanced SD / WDR		Super Dynamic	Super Dynamic	Super Dynamic
Color/BW		Yes (ICR)	Yes (ICR)	Yes (ICR)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus	Auto Focus	Auto Focus
Min. Illumination	Color	0.3 lx @F2.0	0.1 lx @F2.0	0.1 lx @F2.0
	Color (Sens up)	0.019 lx (16x)	0.006 lx (16x)	0.006 lx (16x)
	B/W	0.12 lx @F2.0	0.04 lx @F2.0	0.04 lx @F2.0
	B/W (Sens up)	0.0075 lx (16x)	0.0025 lx (16x)	0.0025 lx (16x)
Lens		f = 2.9 to 7.3 mm, Motorized	f = 2.9 to 7.3 mm, Motorized	f = 3.2 mm
Angular field of view	16 : 9	H: 44 to 103 deg. V: 25 to 57 deg.	H: 44 to 102 deg. V: 24 to 56 deg.	H: 102 deg. V: 55 deg.
	4 : 3	—	H: 36 to 84 deg. V: 27 to 63 deg.	H: 83 deg. V: 61 deg.
Adjusting Angle	Pan	—	—	—
	Tilt	—	—	—
Optical Zoom		2.5x	2.5x	1x
Digital Zoom		4x	4x	4x
Image Stabilizer		—	—	—
Corridor Mode		Yes	Yes	Yes
iA (Intelligent Auto)		Yes	Yes	Yes
Video / Sound Analytics		—	—	—
VIQS		Yes (8-areas)	Yes (8-areas)	Yes (8-areas)
Max. Connection		14	14	14
ONVIF® Profile		G / S / T	G / S / T	G / S / T
Audio	In (Line) / Out	—	—	—
	In (Built-in MIC)	—	—	—
	Codec	—	—	—
	Audio Detection Alarm	—	—	—
SD memory Card	Slot	Yes (micro SDXC)	Yes (micro SDXC)	Yes (micro SDXC)
	Password & Alter Detection	Yes	Yes	Yes
	Audio REC	—	—	—
External I/O		—	—	—
Monitor Out		—	—	—
Vandal Resistant		—	—	—
Water and Dust Resistance		—	—	—
Temperature		-10 to +50 deg.	-10 to +50 deg.	-10 to +50 deg.
Power Source		PoE	PoE	PoE
Anti-Condensation System		—	—	—
Other Functions		Easy Kitting Package	Easy Kitting Package	Easy Kitting Package

★ Products that can be purchased is vary according to the locality.

Network Camera Comparison chart | PTZ | Fixed Dome

Indoor / Outdoor		Outdoor			
Model Name		WV-SUD638(Natural silver)	WV-SUD638-H(Gray)	WV-SUD638-T(Brown)	WV-SBV131M
Appearance					
Sensor		1/3 MOS			1/3 MOS
Codec and Transmission	Video Codec	H.264 / JPEG			H.264 / JPEG
	H.265 / H.264 multi stream	4			4
	JPEG multi stream	3			6 (Variable)
	H.265 / H.264: VBR / AVBR (Advanced VBR)	VBR / AVBR			VBR / AVBR
	Smart Coding	Yes			Yes
Max. Resolution	16 : 9	1920 x 1080			1920 x 1080
	4 : 3	1280 x 960			2048 x 1536 (*1)
Max. FPS @Max. Resolution	H.265 / H.264	60fps (1080p)			30fps (1080p)
	JPEG	60fps (1080p)			30fps (3 MP)
Super Dynamic / Enhanced SD / WDR		Super Dynamic			WDR
Color/BW		Yes (ICR)			Day/Night (Electrical)
ABF (Auto Back Focus) / Auto Focus / Focus Assist		Auto Focus			—
Min. Illumination	Color	0.06 lx @F1.6			0.1 lx @F2.2
	Color (Sens up)	0.004 lx (16x)			0.007 lx (16x)
	B/W	0.02 lx @F1.6			0.06 lx @F2.2
	B/W (Sens up)	0.001 lx (16x)			0.004 lx (16x)
Lens		f = 4.3 to 129 mm, Motorized			f = 1.95 mm
Angular field of view	16 : 9	H: 2.3 to 64 deg. V: 1.3 to 38 deg.			H: 109 deg. V: 73 deg.
	4 : 3	H: 1.8 to 50 deg. V: 1.3 to 38 deg.			H: 97 deg. V: 79 deg.
Pan	Range	Endless			—
	Speed	200 deg/sec			—
Tilt	Range	Upright: -45° to +90°, Forward tilt: -90° to +90° Hanging: +30° to -90°			—
	Speed	200 deg/sec			—
360 Pan-Flip		—			—
Number of Preset Positions		256			—
Patrol		Yes			—
Auto Tracking		Yes (advanced)			—
Optical Zoom		30x (45x with Extra Zoom at HD)			—
Digital Zoom		24x			4x
Image Stabilizer		Yes (Hybrid)			—
Corridor Mode		—			—
iA (Intelligent Auto)		—			—
Video / Sound Analytics		—			—
VIQS		Yes (8-areas)			Yes (8-areas)
Max. Connection		14			14
ONVIF® Profile		S			G / S
Audio	In (Line) / Out	Yes / Yes			— / —
	In (Built-in MIC)	—			—
	Codec	G.711 / G.726 / AAC			—
	Audio Detection Alarm	—			—
SD memory Card	Slot	—			Yes (SDXC)
	Password & Alter Detection	—			—
	Audio REC	—			—
External I/O		Yes (3) (*2)			—
Monitor Out		—			—
Vandal Resistant		IK10			IK10
Water and Dust Resistance		IP66 / IP67 / NEMA 4X			IP6K9K / IP66 / NEMA 4X
Temperature		-50 to +60 deg. (*3) (AC100 to 240 V) -30 to +60 deg. (*3) (PoE) (*4)	-50 to +55 deg. (*3) (AC100 to 240 V) -30 to +55 deg. (*3) (PoE) (*4)		-40 to +60 deg.
Power Source		100 to 240 V AC / PoE Injector			PoE
Anti-Condensation System		Yes			—
Other Functions		Optional IR LED, Built-in wiper and defroster, ISO14993(Salt damage resistance)			MIL-STD-810G EN50155-T3, EN50121, EN45545, EN50498, ECE-R10

(*1): with Simple Full-HD mode(tentative name)　(*2): Alarm In1(Black & White In), Alarm In2(Alarm Out), Alarm In3(AUX Out) (x1 for each)
(*3): When using the tested PoE injector and IR LED unit at the same time : −20 ℃ to +55 ℃ (−4 ℉ to 131 ℉))　(*4): Tested PoE injector　★ Products that can be purchased is vary according to the locality.

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Optional Accessories Compatibility with Network Cameras

▢ Outdoor ▢ Indoor	Ceiling	Hanging	Wall	Pole / Corner *A set of brackets for Wall Hanging required.	Other	Dome Cover
WV-X8571N (i-PRO white) WV-S8531N (i-PRO white)	WV-Q105A *For Indoor installation only ——— WV-QJB501-W (i-PRO white) Different Color Model : WV-Q193 (Light gray)	WV-QCL501-W (i-PRO white)(*1) Different Color Model(*1) : WV-Q121B (Fine silver) WV-Q178 (Gray) WV-QSR502A-W (i-PRO white) (*2) Different Color Model (*2) : WV-Q187 (Light gray)	WV-QWL501-W (i-PRO white)(*1) Different Color Model (*1) : WV-Q122A (Fine silver) WV-Q185 (Light gray) WV-QSR502A-W (i-PRO white) (*3) Different Color Model (*3) : WV-Q187 (Light gray)	Pole Mount Bracket WV-QPL500-W (i-PRO white) Different Color Model: WV-Q188 (Fine silver) WV-Q182 (Light gray) Corner Mount Bracket WV-QCN500-W (i-PRO white) Different Color Model: WV-Q189 (Fine silver) WV-Q183 (Light gray)	Attachment pipe (For 3rd party bracket) (*1) WV-QAT500-W (i-PRO white) Different Color Model: WV-Q123A (Fine silver) WV-Q179 (Light gray) WV-QSR502A-W (i-PRO white) (*4) Different Color Model (*4) : WV-Q187 (Light gray) Extension Unit* WV-S25F1 (Light gray) *Available only in limited regions WV-S25F1 is WV-X8571N only	
WV-X6533LNS WV-S6532LNS (Silver) *Heavy salt damage resistance WV-X6531NS (Metallic silver) *Heavy salt damage resistance		WV-Q121BS (Silver) *Heavy salt damage resistance	WV-Q122AS (Silver) *Heavy salt damage resistance			
WV-X6533LN WV-S6532LN (Fine silver) WV-X6531N WV-X6511N WV-S6530N (Natural silver)	WV-QCL500-S (Silver)	WV-Q121B (Fine silver) Different Color Model: WV-Q178 (gray) WV-QCL501-W (i-PRO white)	WV-Q122A (Fine silver) Different Color Model: WV-Q185 (Light gray) WV-QWL501-W (i-PRO white)	Pole Mount Bracket WV-Q188 (Fine silver) Different Color Model: WV-Q182 (Light gray) WV-QPL500-W (i-PRO white) Corner Mount Bracket WV-Q189 (Fine silver) Different Color Model: WV-Q183 (Light gray) WV-QCN500-W (i-PRO white)	Extension Unit WV-X65F1 (Fine silver) *Available only in limited regions	

(*1): This bracket requires WV-QSR502A-W or WV-Q187.　(*2): This bracket requires WV-QCL501-W, WV-Q121B or WV-Q178.　(*3): This bracket requires WV-QWL501-W, WV-Q122A or WV-Q185.
(*4): This bracket requires WV-QAT500-W, WV-Q123A or WV-Q179.　★ Brackets are available in four colors, Fine silver, Light gray, Gray and i-PRO white. It is possible to use them in different color combinations.

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Optional Accessories Compatibility with Network Cameras

Outdoor / Indoor	Ceiling		Hanging	Wall	Pole / Corner *A set of brackets for Wall Hanging required.	Other	Dome Cover
WV-S6131 WV-S6111 (Sail white)	WV-Q105A	WV-Q126A	WV-QCL100-W (*1) (i-PRO white)	WV-Q119	Pole Mount Bracket **WV-QPL500-W** (i-PRO white) Corner Mount Bracket **WV-QCN500-W** (i-PRO white)		**WV-CS5S** (Smoke) **WV-CS5C** (Clear) transmissivity: approx. 40%
WV-S6130 (Fine silver)	WV-Q105A **WV-Q160S** (Smoke) **WV-Q160C** (Clear) Smoke type transmissivity: approx. 50%	**WV-Q159S** (Smoke) **WV-Q159C** (Clear) Smoke type transmissivity: approx. 50%	WV-QCL100-W (*1) (i-PRO white)	**WV-Q158S** (Smoke) **WV-Q158C** (Clear) Smoke type transmissivity: approx. 50% **WV-QWL500-G** (Gray) Different Color Model: WV-QWL500-W (i-PRO white) **WV-QJB500-G*** (Gray) Different Color Model : WV-QJB500-W* (i-PRO white) *Use adapter box if necessary.	Pole Mount Bracket **WV-QPL500-W** (i-PRO white) Corner Mount Bracket **WV-QCN500-W** (i-PRO white) Pole Mount Bracket **WV-Q188** (Fine silver) Different Color Model: WV-Q182 (Light gray) WV-QPL500-W (i-PRO white) Corner Mount Bracket **WV-Q189** (Fine silver) Different Color Model: WV-Q183 (Light gray) WV-QCN500-W (i-PRO white)	Inner Cover **WV-Q161**	

(*1): It's possible to be used on the camera side and ceiling side. If used on both side, 2pieces are required.

★ Brackets are available in four colors, Fine silver, Light gray, Gray and i-PRO white. It is possible to use them in different color combinations.

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Optional Accessories Compatibility with Network Cameras

Outdoor / Indoor	Ceiling		Hanging	Wall	Pole / Corner *A set of brackets for Wall Hanging required.	Other	Dome Cover
WV-X2571LN WV-X2551LN WV-S2572L WV-S2552L (i-PRO white) *Base bracket included	WV-Q105A *For Indoor installation only		**WV-QCL501-W (i-PRO white)**(*1) Different Color Model(*1) : WV-Q121B (Fine silver) WV-Q178 (Gray) **WV-QSR501-W (i-PRO white)**(*2) Different Color Model (*2): WV-Q124 (Fine silver) WV-Q186 (Light gray)	**WV-QWL501-W (i-PRO white)**(*1) Different Color Model (*1) : WV-Q122A (Fine silver) WV-Q185 (Light gray) **WV-QSR501-W (i-PRO white)**(*3) Different Color Model (*3): WV-Q124 (Fine silver) WV-Q186 (Light gray)	**WV-QSR500-W (i-PRO white)** Different Color Model: WV-Q7118 (Light gray) **WV-QJB501-W (i-PRO white)** Different Color Model : WV-Q193 (Light gray)	Attachment pipe (For 3rd party bracket) (*1) **WV-QAT500-W (i-PRO white)** Different Color Model: WV-Q123A (Fine silver) WV-Q179 (Light gray) Pole Mount Bracket (*4) **WV-QPL500-W (i-PRO white)** Different Color Model: WV-Q188 (Fine silver) WV-Q182 (Light gray) **WV-QSR501-W (i-PRO white)**(*5) Different Color Model (*5): WV-Q124 (Fine silver) WV-Q186 (Light gray)	**WV-CW7S** (Smoke) transmissivity: approx. 45%
WV-S2536LTN WV-S2536LGN WV-S2536LG WV-S2536LN WV-S2536L (i-PRO white)	**WV-QEM500-W (i-PRO white)** Different Color Model: WV-Q169A (light silver) *For Indoor installation only	**WV-QJB501-W (i-PRO white)** Different Color Model : WV-Q193 (Light gray)		**WV-QWL500-W (i-PRO white)** Different Color Model: WV-QWL500-G (Gray)	**WV-QJB501-W (i-PRO white)** Different Color Model : WV-Q193 (Light gray)	Corner Mount Bracket (*4) **WV-QCN500-W (i-PRO white)** Different Color Model: WV-Q189 (Fine silver) WV-Q183 (Light gray) Extension Unit* **WV-S25F1 (Light gray)** *Available only in limited regions WV-S25F1 is WV-S2572L / WV-S2552L / WV-S2536LTN / WV-S2536LN / WV-S2536L / WV-S2536LGN / WV-S2536LG only RJ45 Ethernet Cable **WV-QCA500A WV-QCA500APK**(*7) I/O Cable **WV-QCA501A WV-QCA501APK**(*7) RJ45 Ethernet Cable and I/O Cable are WV-S2536LTN / WV-S2536LN / WV-S2536L / WV-S2536LGN / WV-S2536LG only	**WV-CW7SN** (Smoke) (ClearSight coating) transmissivity: approx. 45% **WV-CW7CN** (Clear) (ClearSight coating)
WV-U2542LA WV-U2532LA (i-PRO white)			WV-QCL100-W (*6) (i-PRO white) *For Indoor installation only	WV-QWL500-W (i-PRO white) Different Color Model: WV-QWL500-G (Gray) **WV-QJB500-W* (i-PRO white)** Different Color Model: WV-QJB500-G* (Gray) *Use adapter box if necessary.			
WV-U2540LA WV-U2530LA (i-PRO white)	**WV-QJB502-W (i-PRO white)** Different Color Model: WV-QJB502-G (Gray)		WV-QCL100-W (*6) (i-PRO white) *For Indoor installation only	WV-QWL500-W (i-PRO white) Different Color Model: WV-QWL500-G (Gray) **WV-QJB500-W* (i-PRO white)** Different Color Model: WV-QJB500-G* (Gray) *Use adapter box if necessary.	**WV-QJB502-W (i-PRO white)** Different Color Model: WV-QJB502-G (Gray)	Pole Mount Bracket (*4) **WV-QPL500-W (i-PRO white)** Different Color Model: WV-Q188 (Fine silver) WV-Q182 (Light gray) Corner Mount Bracket (*4) **WV-QCN500-W (i-PRO white)** Different Color Model: WV-Q189 (Fine silver) WV-Q183 (Light gray)	**WV-QDC500S** Smoke type transmissivity: approx. 45%

(*1): This bracket requires WV-QSR501-W, WV-Q124 or WV-Q186.　(*2): This bracket requires WV-QCL501-W, WV-Q121B or WV-Q178.　(*3): This bracket requires WV-QWL501-W, WV-Q122A or WV-Q185.　(*4): Use WV-QJB500-W/ WV-QJB500-G if necessary.
(*5): This bracket requires　WV-QAT500-W, WV-Q123A or WV-Q179.　(*6): It's possible to be used on the camera side and ceiling side. If used on both side, 2pieces are required.　(*7) : Package of 10 cables.

★ Brackets are available in four colors, Fine silver, Light gray, Gray and i-PRO white. It is possible to use them in different color combinations.

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Optional Accessories Compatibility with Network Cameras (Left)

Outdoor / Indoor	Ceiling	Hanging	Wall	Pole / Corner *A set of brackets for Wall Hanging required.	Other	Dome Cover
WV-X2271L WV-X2251L WV-S2272L WV-S2252L WV-S2236LG WV-S2236L (i-PRO white)	WV-Q105A ; WV-QEM100-W (i-PRO white) Different Color Model: WV-Q174B (Sail white)	WV-QCL501-W (i-PRO white)(*1) Different Color Model(*1): WV-Q121B (Fine silver) ; WV-QSR501-W (i-PRO white)(*2) Different Color Model (*2): WV-Q124 (Fine silver) ; WV-QCL100-W (*6) (i-PRO white)	WV-QWL501-W (i-PRO white)(*1) Different Color Model (*1): WV-Q122A (Fine silver) ; WV-QSR501-W (i-PRO white)(*3) Different Color Model (*3): WV-Q124 (Fine silver) ; WV-QWL500-W (i-PRO white) Different Color Model: WV-QWL500-G (Gray) ; WV-QJB500-W* (i-PRO white) Different Color Model: WV-QJB500-G* (Gray) *Use adapter box if necessary.	Pole Mount Bracket (*4) WV-QPL500-W (i-PRO white) Different Color Model: WV-Q188 (Fine silver) ; Corner Mount Bracket (*4) WV-QCN500-W (i-PRO white) Different Color Model: WV-Q189 (Fine silver)	Attachment pipe (For 3rd party bracket) (*1) WV-QAT500-W (i-PRO white) Different Color Model : WV-Q123A (Fine silver) ; WV-QSR501-W (i-PRO white)(*5) Different Color Model (*5): WV-Q124 (Fine silver)	WV-CR1S Smoke type transmissivity: approx. 45% ; WV-CF5SA Smoke type transmissivity: approx. 30%
WV-S2136LG WV-S2136L WV-S2136G WV-S2136 WV-U2142LA WV-U2132LA (i-PRO white)						
WV-U2140LA WV-U2130LA (i-PRO white)	WV-QJB502-W (i-PRO white) Different Color Model: WV-QJB502-G (Gray)	WV-QCL100-W (*6) (i-PRO white)	WV-QWL500-W (i-PRO white) Different Color Model: WV-QWL500-G (Gray) ; WV-QJB500-W* (i-PRO white) Different Color Model: WV-QJB500-G* (Gray) *Use adapter box if necessary.	WV-QJB502-W (i-PRO white) Different Color Model: WV-QJB502-G (Gray)	Pole Mount Bracket (*4) WV-QPL500-W (i-PRO white) Different Color Model: WV-Q188 (Fine silver) ; Corner Mount Bracket (*4) WV-QCN500-W (i-PRO white) Different Color Model: WV-Q189 (Fine silver)	Gangbox adapter WV-QAT502-W (White) Different Color Model: WV-QAT502-G (Gray)	WV-QDC500S Smoke type transmissivity: approx. 45%
WV-S3531L WV-S3532LM WV-S3511L WV-S3512LM (Light gray)	WV-QJB502-G (Gray) Different Color Model: WV-QJB502-W (i-PRO white)	WV-QCL100-W (*6) (i-PRO white) *For Indoor installation only	WV-QWL500-G (Gray) Different Color Model: WV-QWL500-W (i-PRO white) ; WV-QJB500-G* (Gray) Different Color Model: WV-QJB500-W* (i-PRO white) *Use adapter box if necessary.	WV-QJB502-G (Gray) Different Color Model: WV-QJB502-W (i-PRO white)	Pole Mount Bracket (*4) WV-Q182 (Light gray) Different Color Model: WV-Q188 (Fine silver) WV-QPL500-W (i-PRO white) ; Corner Mount Bracket (*4) WV-Q183 (Light gray) Different Color Model: WV-Q189 (Fine silver) WV-QCN500-W (i-PRO white)	Gangbox adapter WV-QAT502-G (Gray) Different Color Model: WV-QAT502-W (White)	WV-CW6SA Smoke type transmissivity: approx. 36%
WV-S3131L WV-S3111L (Sail white)		WV-QCL100-W (*6) (i-PRO white)	WV-QWL500-W (i-PRO white) Different Color Model: WV-QWL500-G (Gray) ; WV-QJB500-W* (i-PRO white) Different Color Model: WV-QJB500-G* (Gray) *Use adapter box if necessary.		Pole Mount Bracket (*4) WV-QPL500-W (i-PRO white) Different Color Model: WV-Q188 (Fine silver) WV-Q182 (Light gray) ; Corner Mount Bracket (*4) WV-QCN500-W (i-PRO white) Different Color Model: WV-Q189 (Fine silver) WV-Q183 (Light gray)	Gangbox adapter WV-QAT502-W (White) Different Color Model: WV-QAT502-G (Gray)	WV-CW6SA Smoke type transmissivity: approx. 36%

(*1): This bracket requires WV-QSR501-W or WV-Q124.　(*2): This bracket requires WV-QCL501-W or WV-Q121B.　(*3): This bracket requires WV-QWL501-W or WV-Q122A.　(*4): Use WV-QJB500-W/ WV-QJB500-G if necessary.
(*5): This bracket requires WV-QAT500-W or WV-Q123A.　(*6): It's possible to be used on the camera side and ceiling side. If used on both side, 2pieces are required.
★ Brackets are available in four colors, Fine silver, Light gray, Gray and i-PRO white. It is possible to use them in different color combinations.

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Optional Accessories Compatibility with Network Cameras (Right)

Outdoor / Indoor	Ceiling	Hanging	Wall	Pole / Corner *A set of brackets for Wall Hanging required.	Other	Dome Cover
WV-X4173 WV-X4172 WV-S4176 (i-PRO white) ; WV-S4156 WV-S4151 (i-PRO white)	WV-Q105A	WV-QCL100-W (*1) (i-PRO white)	WV-QWL500-W (i-PRO white) Different Color Model: WV-QWL500-G (Gray) ; WV-QJB500-W* (i-PRO white) Different Color Model: WV-QJB500-G* (Gray) *Use adapter box if necessary.	Pole Mount Bracket (*5) WV-QPL500-W (i-PRO white) Different Color Model: WV-Q188 (Fine silver) WV-Q182 (Light gray) ; Corner Mount Bracket (*5) WV-QCN500-W (i-PRO white) Different Color Model: WV-Q189 (Fine silver) WV-Q183 (Light gray)		
WV-X4573L (i-PRO white) *Base bracket included ; WV-S4576L WV-S4556L WV-S4551L (i-PRO white) *Base bracket included	WV-Q105A *For Indoor installation only	WV-QCL501-W (i-PRO white)(*2) Different Color Model(*2) : WV-Q121B (Fine silver) WV-Q178 (Gray) ; WV-QSR501-W (i-PRO white)(*3) Different Color Model (*3): WV-Q124 (Fine silver) WV-Q186 (Light gray)	WV-QWL501-W (i-PRO white)(*2) Different Color Model (*2) : WV-Q122A (Fine silver) WV-Q185 (Light gray) ; WV-QSR501-W (i-PRO white)(*4) Different Color Model (*4): WV-Q124 (Fine silver) WV-Q186 (Light gray) ; WV-QWL500-W (i-PRO white) Different Color Model: WV-QWL500-G (Gray) ; WV-QJB500-W* (i-PRO white) Different Color Model: WV-QJB500-G* (Gray) *Use adapter box if necessary.	Pole Mount Bracket (*5) WV-QPL500-W (i-PRO white) Different Color Model: WV-Q188 (Fine silver) WV-Q182 (Light gray) ; Corner Mount Bracket (*5) WV-QCN500-W (i-PRO white) Different Color Model: WV-Q189 (Fine silver) WV-Q183 (Light gray)	Attachment pipe (For 3rd party bracket) (*2) WV-QAT500-W (i-PRO white) Different Color Model : WV-Q123A (Fine silver) WV-Q179 (Light gray) ; WV-QSR501-W (i-PRO white)(*6) Different Color Model (*6): WV-Q124 (Fine silver) WV-Q186 (Light gray) ; Extension Unit WV-S25F1 (Light gray) *Available only in limited regions	
WV-X4573LM (i-PRO white) ; WV-S4576LM WV-S4556LM WV-S4551LM (i-PRO white)	WV-QJB501-W (i-PRO white) Different Color Model : WV-Q193 (Light gray)		WV-QJB501-W (i-PRO white) Different Color Model : WV-Q193 (Light gray)			

(*1): It's possible to be used on the camera side and ceiling side. If used on both side, 2pieces are required.　(*2): This bracket requires WV-QSR501-W, WV-Q124 or WV-Q186.　(*3): This bracket requires WV-QCL501-W, WV-Q121B or WV-Q178.
(*4): This bracket requires WV-QWL501-W, WV-Q122A or WV-Q185.　(*5): Use WV-QJB500-W/ WV-QJB500-G if necessary.　(*6): This bracket requires WV-QAT500-W, WV-Q123A or WV-Q179.
★ Brackets are available in four colors, Fine silver, Light gray, Gray and i-PRO white. It is possible to use them in different color combinations.

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Optional Accessories Compatibility with Network Cameras

▨ Outdoor ▨ Indoor	Ceiling	Hanging	Wall	Pole / Corner	Other	Dome Cover
WV-X1571LN **WV-X1551LN** (i-PRO white)	Use adapter box included, if necessary.		Use adapter box included, if necessary.	Pole Mount Bracket (*1) **WV-QPL500-W** (i-PRO white) Different Color Model: WV-Q188 (Fine silver) WV-Q182 (Light gray)		
WV-S1572L **WV-S1552L** (i-PRO white)					Front Panel **WV-CW8CN** (Clear) (ClearSight coating)
WV-S1536LTN **WV-S1536LN** **WV-S1536L** (i-PRO white)	Use adapter box included.		Use adapter box included.	Corner Mount Bracket (*1) **WV-QCN500-W** (i-PRO white) Different Color Model: WV-Q189 (Fine silver) WV-Q183 (Light gray)	RJ45 Ethernet Cable **WV-QCA500A** **WV-QCA500APK** (*2) I/O Cable **WV-QCA501A** **WV-QCA501APK** (*2)	
WV-U1542LA **WV-U1532LA** (i-PRO white)	**WV-QJB500-W*** (i-PRO white) Different Color Model : WV-QJB500-G* (Gray) *Use adapter box if necessary.		**WV-QJB500-W*** (i-PRO white) Different Color Model : WV-QJB500-G* (Gray) *Use adapter box if necessary.			

(*1): Use WV-QJB500-W/ WV-QJB500-G if necessary.   (*2): Package of 10 cables.
★ Brackets are available in four colors, Fine silver, Light gray, Gray and i-PRO white. It is possible to use them in different color combinations.

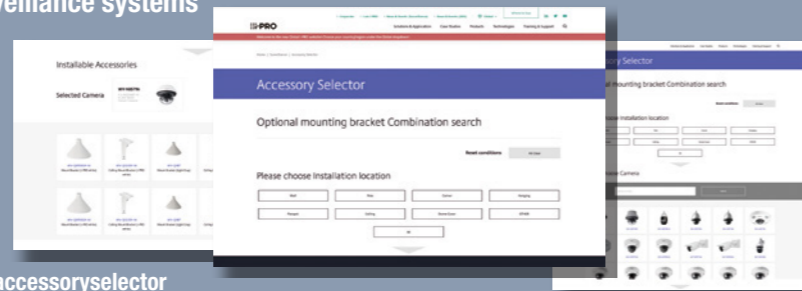## Optional Accessories Compatibility with Network Cameras

Accessory Selector - Security cameras & surveillance systems

A variety of brackets and dome covers are available for a wide range of cameras and installation locations. Use the Accessory Selector to find the one that suits your needs.

https://i-pro.com/global/en/surveillance/accessoryselector

i-PRO SD memory card

i-PRO SD Memory Card

The i-PRO SD Memory Card is suitable for use with i-PRO products.
This SD memory card is recommended when recording video with an i-PRO network camera that has an SD card slot in all cases such as streets and public places.
There are large-capacity models that can record long-term video.

Specifications

	SD memory card for i-PRO devices					microSD memory card for i-PRO devices			
Product number	WV-SDA032G	WV-SDA064G	WV-SDA128G	WV-SDA256G	WV-SDA512G	WV-SDB032G	WV-SDB064G	WV-SDB128G	WV-SDB256G
Standard	SDHC	SDXC				SDHC	SDXC		
Capacity	32 GB	64 GB	128 GB	256 GB	512 GB	32 GB	64 GB	128 GB	256 GB
Nand Flash	3D TLC Type					3D TLC Type			
Number of rewrites (Reference value)	3000 times					3000 times			
Speed Class	Class10					Class10			
UHS Speed Class	U1		U3			U1		U3	
Video Speed Class	V10		V30			V10		V30	
Max Transfer Speed (R: Read/W: Write)	R : 100 MB/s W : 50 MB/s					R : 100 MB/s W : 50 MB/s			
Ambient Operating Temperature	−25°C to +85°C					−25°C to +85°C			

Network Products   Network Video Recorders

TURBO-RAID Network Disk Recorder

WJ-NX400   H.265 H.264 JPEG ONVIF®I S

(120 V AC: NTSC, 220-240 V AC: PAL)

Additional Camera kit: **WJ-NXE40W**

Optional Accessory

Hard Disk Extension Unit
WJ-HXE400

Power Source
120 V AC, 60 Hz (NTSC)
220 - 240 V AC, 50 Hz (PAL)

Power Consumption approx. 85 W

Dimensions 430 mm (W) x 132 mm (H) x 413 mm(D)
(From Rack Mount Bracket 400 mm)
(16-15/16" (W) x 5-3/16" (H) x 16-1/4" (D))
(From Rack Mount Bracket 15-3/4")
(excluding rubber feet and projections)

Weight 11 kg (24.3 lbs.) (When no HDD exist)
19.5 kg (43 lbs.) (When 9 HDDs are installed)

• **64 ch. expandable to 128 ch.** camera input. Support **H.265 / H.264** mixed recordings.
• **640 Mbps** total through put (including **384 Mbps** recording bandwidth)
• (9) integrated drive-bays **RAID 1 / 5 / 6**
• External storage expansion up to **324 TB**
• Redundant fail-over using 2nd recorder to enable mission-critical recording* *KMS registration is necessary for activation.
• NVR backup important data to NAS devices.* *KMS registration is necessary for activation.
• GlobalSign® device certificates pre-installed *Secure Communication Kits are necessary.
• Built-in GUI and Dual HDMI (4K/FHD) outputs

Example of a basic system connection

TURBO-RAID Network Disk Recorder

WJ-NX300   H.265 H.264 JPEG ONVIF®I S

[WJ-NX300K (120 V AC): NTSC] [WJ-NX300K/G (220 - 240 V AC): PAL]

Additional Camera Kit: **WJ-NXE30W**

Additional RAID Kit: **WJ-NXR30W**

• 16 ch. expandable to 32 ch. camera input. Support **H.265 / H.264** mixed recordings.
• 512 Mbps total through put (including 256 Mbps recording bandwidth)
• (4) integrated drive-bays **RAID 1 / 5 / 6** *Additional RAID Kit license is necessary to use the RAID feature.
• **TURBO-RAID** for quick RAID recovery without sacrificing recording bandwidth and performance
• Built-in GUI and Dual HDMI (4K/FHD) outputs

Network Disk Recorder

WJ-NX200   H.265 H.264 JPEG ONVIF®I S

[WJ-NX200K (120 V AC): NTSC] [WJ-NX200K/G (220 - 240 V AC): PAL]

Additional Camera Kit: **WJ-NXE20W**

• 9 ch. expandable to 16(WJ-NX200K) / 32(WJ-NX200K/G) ch. camera input.
  Supports **H.265 / H.264** mixed recordings.
• 384 Mbps total through put(including 192 Mbps recording bandwidth)
• (2) integrated drive-bays RAID1
• Quick setup by automatic camera detection and simple setup wizard without the use of PC
• **High-speed copy to USB storage**
• Built-in GUI and Dual HDMI (4K/FHD) outputs

Network Disk Recorder

WJ-NX100   H.265 H.264 JPEG ONVIF®I S

[100 V AC to 240 V AC: NTSC, PAL] *Available only in limited regions

• 4 ch. camera input. Supports **H.265 / H.264** mixed recordings.
• 192 Mbps total through put (including 96 Mbps recording bandwidth)
• No annual license updates required.
• **High-speed copy to USB storage**
• Built-in GUI and HDMI (4K/FHD) outputs
• ECO-writing: Acceleration of data access (reading/writing) by original file system

Optional Accessories

Hard Disk Extension Unit (WJ-NX300 only)
WJ-HXE400

Power Source
120 V AC, 60 Hz (NTSC),
220 - 240 V AC, 50 Hz (PAL)

**Power Consumption**
approx. 85 W

Dimensions
430 mm (W) x 132 mm (H) x 413 mm(D) (From Rack Mount Bracket 400 mm)
(16-15/16" (W) x 5-3/16" (H) x 16-1/4" (D)) (From Rack Mount Bracket 15-3/4")
(excluding rubber feet and projections)

Weight
11 kg (24.3 lbs.) (When no HDD exist)
19.5 kg (43 lbs.) (When 9 HDDs are installed)

Rack Mount Bracket
(WJ-NX300 / WJ-NX200 / WJ-NX100)
WV-Q202

*When installing WJ-NX100,
WV-Q202 is used for vertical
installation and wall mounting.
WJ-NX100 cannot be mounted in a rack using WV-Q202.

WJ-NX300 / WJ-NX200 Easy operation and setup without PC

WJ-NX100 Easy operation and setup without PC

Network Products — Softwares related to the recorders
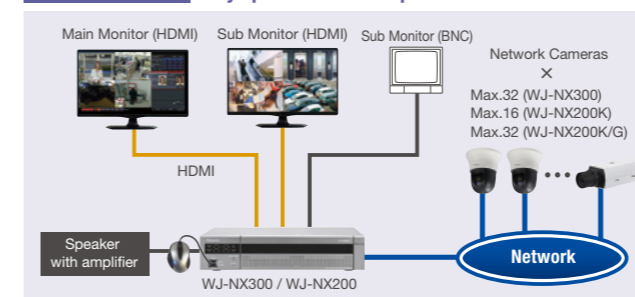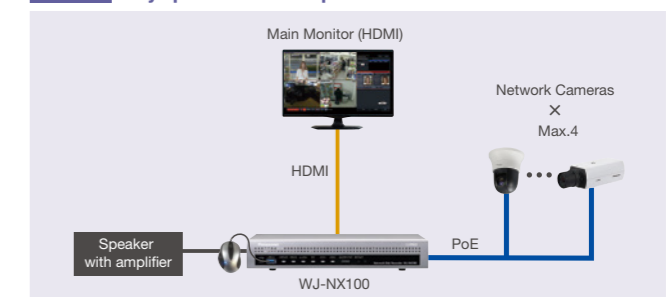
Secure Communication Kits
WJ-NXS01W / WJ-NXS04W / WJ-NXS16W / WJ-NXS32W

`Secure`

The Secure Communication Kits are license kits to use the security function of the network disk recorder.
Each Secure Communication Kit allows the following number of cameras to be registered.

WJ-NXS01W	WJ-NXS04W	WJ-NXS16W	WJ-NXS32W
1 camera	4 cameras	16 cameras	32 cameras

Additional Business Intelligence Kit
WJ-NXF02W

`Face Matching`

Additional Business Intelligence Kit WJ-NXF02W are
license kits intended to improve the usefulness of Network Disk Recorder
WJ-NX300 / WJ-NX200 / WJ-NX100.

- **New statistical processing functions such as "People counting" and "Face matching / Age & Gender judgment"**
- The number of detected human faces can be displayed on a statistical chart separated by age & gender for a single day or a specified time period.
- Age distribution groups are displayed by separate colors.
- The statistical data can be saved as a CSV file[*1] on a USB or on a PC connected over a network.

WJ-NX300 WJ-NX200 WJ-NX100

*1: CSV file: A file that can be edited using a spreadsheet software such as Microsoft® Office Excel®

*To use this product, it is necessary to register the license (Registration Key) for Additional Business Intelligence Kit into the WJ-NX300 / WJ-NX200 / WJ-NX100 in use.

Network Products — Management Software

i-PRO Management Software
WV-ASM300W

Extension Software
WV-ASE202W
WV-ASE203W
WV-ASE205W
WV-ASE306W

*monitor displays are optional

Easy setting: New WV-ASM300W software enable a whole setting from camera configuration to recorder configuration.

- Up to 100 recorders, 64 encoders and 256 directly connected cameras can be registered. Up to 6,400 cameras registered in the recorders and 256 cameras registered in the encoders are automatically registered in the WV-ASM300W (the number of the cameras depends on the recorder and encoder).
- Encryption of SSL and data encryption support latest "AES-256bit key" strong encryption
- MP4 data direct download from WJ-NX400, WJ-NX300, WJ-NX200, WJ-NX100
- When used with WJ-NX400 series, VMD, thumbnail search can be operated.
- Selecting the camera icon in map window, a still image of the camera is overlaid.
- Live window, Map window in addition to the Operation window (3 monitors)
- Control using the System Controller WV-CU980
- 3D Dewarp: virtual PTZ operations for better operability and monitoring experience.

*To use the multi-monitor function, it is necessary to install an additional video card on the PC in use.

WV-ASE202W
- Expand the maximum numbers of screens to 64.
- Up to 4 live windows.
- Multi-monitor function using up to 6 PC monitors.
- To display the operation window, the map window and the 4 map windows simultaneously.
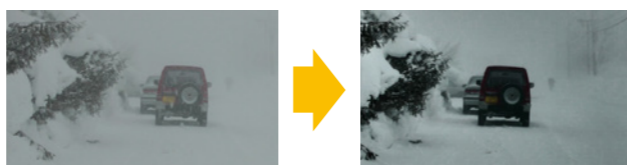
WV-ASE203W
- Expand the maximum numbers of registered recorders, encoders and cameras to 100, 64 and 256 respectively.
- Up to 4 licenses for the WV-ASE203W can be added.

WV-ASE205W
- Visibility Enhancement Function

`Spatial Tonal Correction` `Snowfall and Rainfall Noise Reduction` `Multi-frame Synthesis Noise Reduction`

Spatial Tonal Correction ,
Snowfall and Rainfall Noise Reduction

Extension Software WV-ASE306W
- Controlling Video Insight server

Optional Accessory

Ethernet 3D Joystick System Controller **WV-CU980**

Compact system controller with easy-to-use joystick

Key Features
- Intuitive operation with ergonomic design
- Installed in many locations with compact body and Ethernet interface
- Monitoring control of simple monitor switching and easy operation
- Camera and recorder control with quick response joystick

Network Products — Video Management Software

▼ Video Insight 7

Wide range of supported cameras
Video Insight 7 is an open platform that supports over 4,000 camera models from more than 150 manufacturers.

License included with i-PRO Cameras
i-PRO camera is bundled with the Video Insight VMS, requiring no camera licensing or support fees.

Lower Total Cost of Ownership (TCO)
Affordability, flexibility and a simple licensing model are what sets Video Insight apart from the rest – we provide the most cost-effective enterprise class VMS solution on the market.

The enterprise VMS features you love
The Video Insight VMS has a wide range of robust features you'd expect to find in enterprise-level software. Automated Failover, unlimited clients and users, and Active Directory/LDAP integration are included.

PLUG-IN MODULES
The new plug-in architecture enhances the capability of Video Insight 7 and adds greater scalability and improved feature sets.
New plug-ins include: Analytics, LPR, Gun Detection, Geolocation and more.

Analytics License Plate Recognition Gunshot Detection and more.

`PNA-123`

Scale your system without limitations
Our pure 64-bit VMS supports an industry leading number of cameras per server, unlimited scalability, client workstations, users with simple integration to legacy systems, centralized administration of the system and more.

Making the most of existing legacy systems
Video Insight easily integrates with your existing systems, including access control and building management. Our robust SDK and API make it easy to maintain a single interface and manage all systems from a centralized console.

* Video Insight is a product of Panasonic i-PRO Sensing Solutions Corporation of America.

Network Products — Face Server

Facial Recognition Server Software
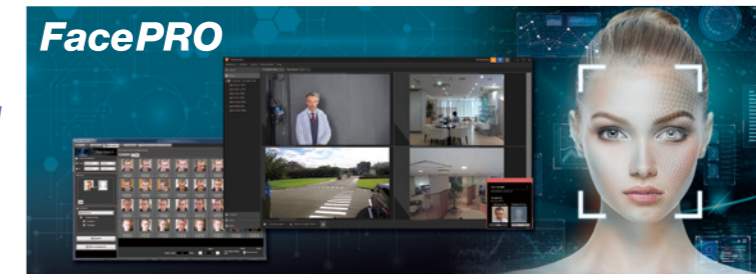# WV-ASF950W

`Face Matching`

FacePRO

Additional Camera Kit
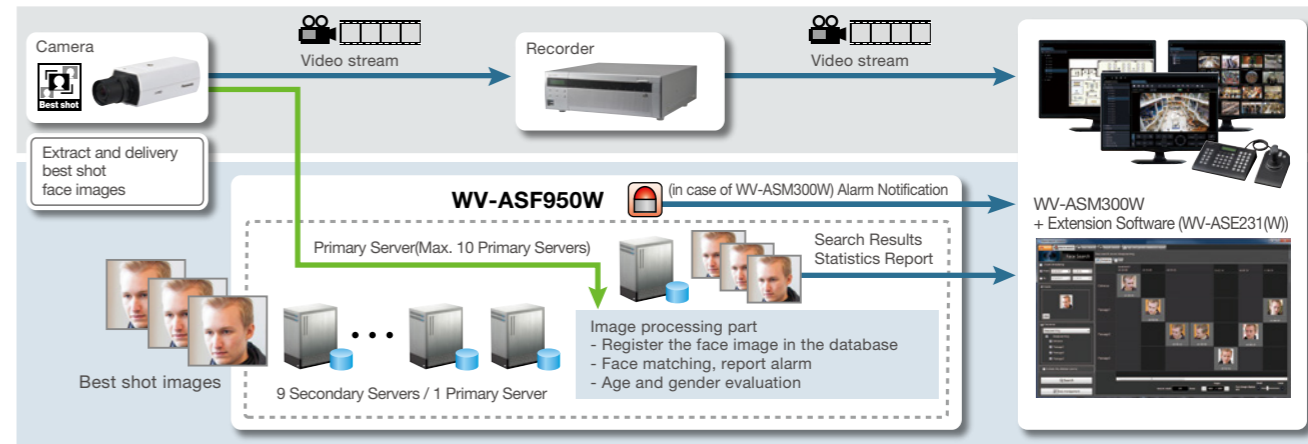### 1ch: WV-ASFE901W / 4ch: WV-ASFE904W
Additional Face Registration Kit
10,000 face: WV-ASFE951W

Registered face detection function, Unregistered face detection function (detection of suspicious persons)

Example of a Basic Connection System

Camera
Best shot

Extract and delivery best shot face images

Video stream

Recorder

Video stream

WV-ASF950W (in case of WV-ASM300W) Alarm Notification

Primary Server(Max. 10 Primary Servers)

Best shot images

9 Secondary Servers / 1 Primary Server

Image processing part
- Register the face image in the database
- Face matching, report alarm
- Age and gender evaluation

Search Results
Statistics Report

WV-ASM300W
+ Extension Software (WV-ASE231(W))

`Important`
- When you install WV-ASF950W, please select "Registered face detection function" or "Unregistered face detection function." Only one of these functions can be used on a single server.
- When the "Unregistered face detection function" is used, the time that it takes to issue the alarm is several seconds longer than the conventional recognition function.

Extension software
WV-ASE231(W) for WV-ASM300W

- To use the WV-ASF950W, WV-ASM300W with extension software WV-ASE231(W) is required.
- Extension Software for Facial Recognition Analytics Platform (WV-ASF950W)
- Face Search / Face Matching / People counting results display on WV-ASM300W screen
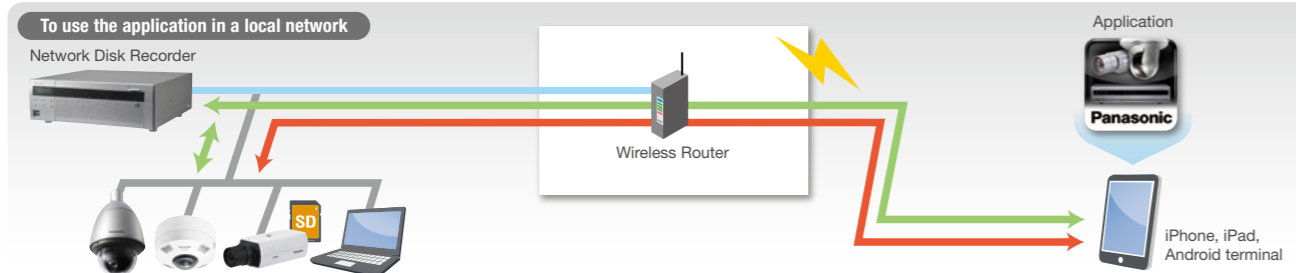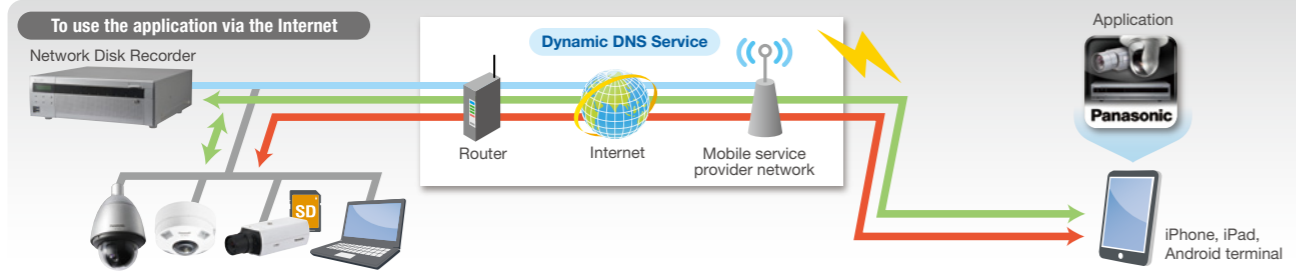- i-VMD (Intelligent Video Motion Detection) tracking path display on WV-ASM300W screen

Network Products | **Application for Smartphone / Tablet PC**

Panasonic Security Viewer

Introduction to the application

Panasonic Security Viewer is an application that can view the images from i-PRO Series Network Cameras, Network Disk Recorder.
By connecting a terminal to a 3G/4G or wireless LAN (Wi-Fi), it is possible to view live images from cameras registered on the recorder and recorded images stored on recorders.
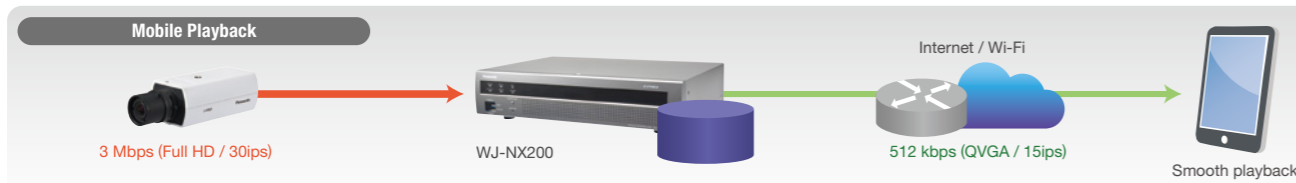
Preface

To use the **Panasonic Security Viewer** via the Internet, it is recommended to register in the Dynamic DNS (DDNS) service.

To use the application via the Internet
Network Disk Recorder

Dynamic DNS Service
Router · Internet · Mobile service provider network

Application
Panasonic

iPhone, iPad, Android terminal

To use the application in a local network
Network Disk Recorder

Wireless Router

Application
Panasonic

iPhone, iPad, Android terminal

A PC is required to register a Dynamic DNS Service and configure the settings of the router.

Direct Camera connection
• Live monitoring • Playing back in SD memory card.

Via recorder
• Live monitoring • Playback

Mobile Playback

Internet / Wi-Fi

3 Mbps (Full HD / 30ips)   WJ-NX200   512 kbps (QVGA / 15ips)   Smooth playback

WJ-NX400 / WJ-NX300 / WJ-NX200 / WJ-NX100 can transcode image size/bit rate to fit the customers environment, and stream it.
This mode can be used by WJ-NX400 / WJ-NX300 / WJ-NX200 / WJ-NX100 only.

• Download the Panasonic Security Viewer application on the Google play™ store, Apple App Store.
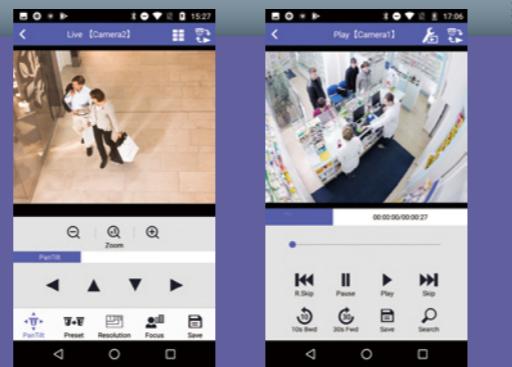
Features of the application

Network disk recorder

• Live image: Live images from the network cameras connected to the recorder
• Playing back recorded images: To play back the images stored on the recorder
• Mobile Playback feature (WJ-NX400 / WJ-NX300 / WJ-NX200 / WJ-NX100)
• Time & date search: To search the images to play back based on the time & date

Network camera

• Network camera control*
  (Resolution switchover, focus, panning / tilting, zoom, preset position switchover)
• Playing back recorded image in the SD memory card*
  *Depends on the network camera functions.

Android™

Outline of the application

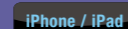| OS	Android™ OS 5.0 or later.
How to get the application	Download from the Google play™ store.

• Download the application from here.

Android™

https://play.google.com/store/apps/details?id=com.panasonic.security.ProductSelector&hl=en

iPhone / iPad

Outline of the application

OS	iOS 11.0 or later
How to get the application	Download from the App Store.

• Download the application from here.

iPhone / iPad

https://apps.apple.com/us/app/panasonic-product-selector/id1445984458

Network Products | **Application for Smartphone / Tablet PC**
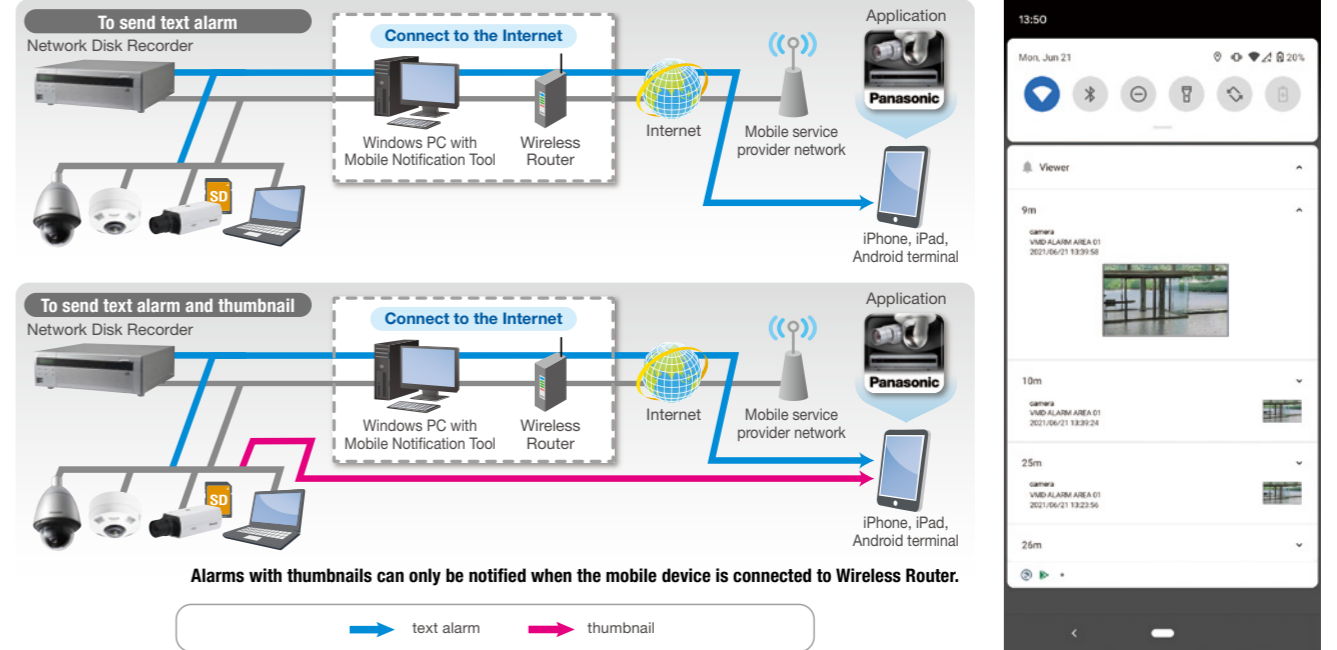
Mobile Notification Tool

Introduction

The Mobile Notification Tool, which is Windows10 application, enables network cameras and/or network recorders to sends alarm notifications to Panasonic Security Viewer.

Features

• You can receive alarm notifications with a push notification function of mobile devices (smartphones, tablets, etc.).
• You can easily and safely check videos from network cameras and recorders that have detected alarms.

Alarm with thumbnail image

To send text alarm
Network Disk Recorder

Connect to the Internet
Windows PC with Mobile Notification Tool · Wireless Router · Internet · Mobile service provider network

Application
Panasonic

iPhone, iPad, Android terminal

To send text alarm and thumbnail
Network Disk Recorder

Connect to the Internet
Windows PC with Mobile Notification Tool · Wireless Router · Internet · Mobile service provider network

Application
Panasonic

iPhone, iPad, Android terminal

Alarms with thumbnails can only be notified when the mobile device is connected to Wireless Router.

text alarm   thumbnail
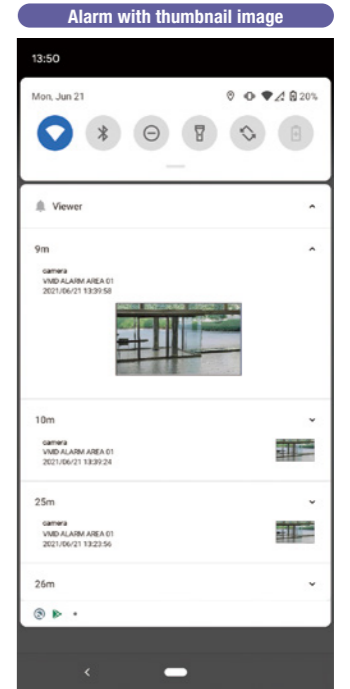
Easily migrate to an advanced IP system while still using the existing assets of your analog system

Effective utilization of cabling

Coaxial-LAN Converter

• The coaxial cables of existing analog cameras can be used for expanding the reach of the IP network.

Coaxial-LAN Converter with PoE function

4-channel receiver side unit
WJ-PR204

1-channel receiver side unit
WJ-PR201

(Indoor use only)

Camera side unit
WJ-PC200

Receiver side unit   Camera side unit

Optional Accessory

Rack Mount Connecting Fitting
BY-HCA10A
(for mounting three or four Receiver side unit)

– For U.S. and Canada: BY-HCA10A
– For Europe and other countries: BY-HCA10CE

*With PoE function: 500 m (1,640 feet 5 inches) / Without PoE function: 2.0 km (6,560 feet 8 inches)[WJ-PR204]

Coaxial LAN cables can be used up to distances of 2.0 km.[WJ-PR204]
Power can also be supplied to PoE cameras for distances of up to 500 m, PoE+ cameras for distances of up to 300 m.
*Distance will vary depending on the power supply environment. Please refer to the spec sheet for details.

Panasonic Product Selector

https://i-pro.com/global/en/surveillance/productselector

Introduction to the application

Panasonic Product Selector is an application for selecting models that meet customer requirements from among Panasonic network cameras and accessories.

Features of the application

• **Search Cameras**: The user can pick out a camera suitable for the requirements by designating the camera type or function.
In addition, accessories suitable for the selected camera can be checked.
• **Search Accessories**: The user can pick out the necessary accessories by specifying the type of accessories such as brackets and dome covers.
Furthermore, the camera corresponding to the selected accessory can be checked.

• **Compare Cameras**: The user can specify up to six cameras of interest and compare their specifications.
This function can identify the camera most suitable to the user's requirements.
• **View Specification Sheets**: The spec sheet of the camera selected by the user is displayed, and the user can view the details of the camera.
• **View Drawings**: The CAD image of the camera selected by the user is displayed, and the user can view the detailed shape of the camera.
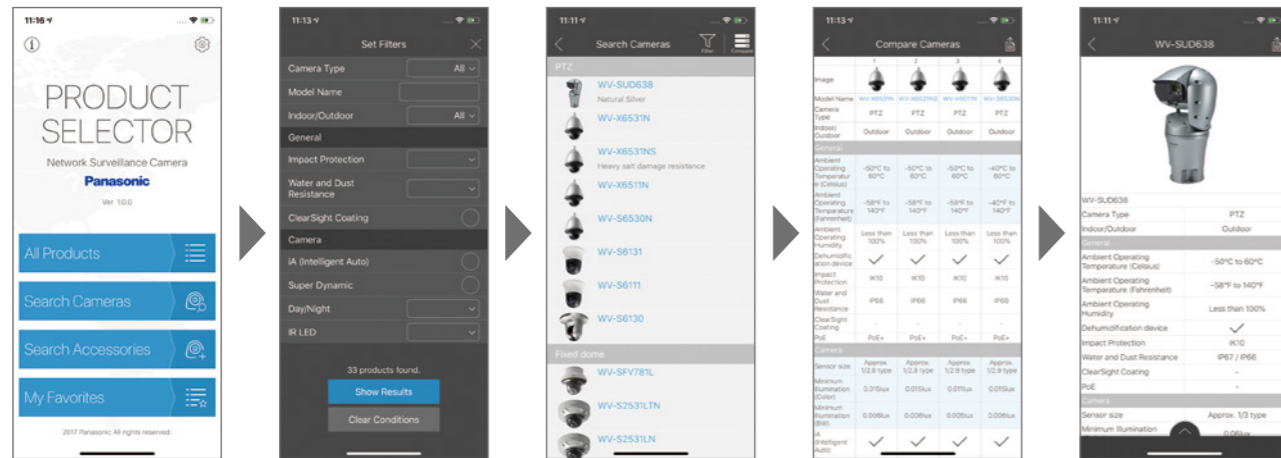
Supporting every operation phase-from proposal to installation and maintenance.

Considerable time is required to design and install a security system, from selecting camera and recorder models, to layout planning that meets site requirements.
Panasonic provides tools that promote work efficiency in each operation phase, from proposal to installation and maintenance.

System Design Tool

https://i-pro.com/global/en/surveillance/tools/sdt

Introduction

System Design Tool can be used on the web anytime and anywhere, greatly reducing the work required for system design.

Features

• **Interactive**: When the camera setting conditions are changed, the perception and size of the subject can be immediately simulated.
• **Optimization**: The ideal camera placement and number can be calculated while confirming overlap in recording range.
• **Accessibility**: Data saved as a project can be accessed from the web at any time.
• **Utility**: Saved device lists and results of storage calculation can be exported in CSV format for utilization in proposals.

Operations Procedure

1. Access/Log-in

- Main Page
- User Registration*1
- Log-in*2
- Create New Project
- Edit Saved Project*2

2. Map Import

- Map Import/Floor Plan
- Scale Adjustment
- Set Unit of Length (meter or feet)
- Set Initial Height

3. Camera Placement

- Camera Placement
- Select Camera
- Parameter Adjustment
- Adjust Viewing Angle and Object Distance
- Export Plan as Image
Repeat the steps above until completion.

4. Listing/Calculation

- Camera List View
- Export List View
- Storage Calculation
- Recorder Calculation
- Export Calc. Result
- Save Project*2

*1 Required for saving projects.   *2 Save/edit created project is available only while signed-in.

i-PRO Configuration Tool

https://i-pro.com/global/en/surveillance/tools/ict

Introduction

i-PRO Configuration Tool is designed to efficiently configure network camera and disk recorder settings through a computer.

Features

• **Network settings**
Batch processing sets the IP address of many devices at one time.
• **Camera settings**
The tool enables to batch camera settings.
• **Inspection Report**
The camera installation and settings report can be output with a single click.
• **Maintenance**
The tool will automatically determine if the version of the device is up-to-date.
All you have to do is specify download and installation.

Panasonic®

Panasonic Corporation

Panasonic i-PRO Sensing Solutions Co., Ltd.

https://i-pro.com/corp/
https://i-pro.com/global/en/surveillance
https://www.linkedin.com/company/i-pro-sensing-solutions-co-ltd/

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