

## i-PRO Full HD Fixed Network Camera with AI Engine

**WV-S1136** (Indoor model)

**WV-S2136\*** / **S2136L** (Indoor Dome model)

**WV-S2236L** (Vandal Resistant Indoor Dome model)

\*Not available in U.S market

**Ver. 1.00**

Panasonic i-PRO Sensing Solutions Co., Ltd.



Lens not included in WV-S1136



## The new Standard in i-PRO video surveillance

Drastically improved image quality

- Superior Low Light Performance
- Advanced intelligent Auto
- AI Smart Coding

AI analytical applications capability

- AI-VMD (Video Motion Detection)
- Pre-installed human/vehicle detection
- Up to two AI applications installable per camera
- Detecting suspicious sound with external mic

Usability

- Easy installation by Easy Kitting Package

### Indoor models



WV-S2236L



WV-S2136L



WV-S2136

Not available in U.S.



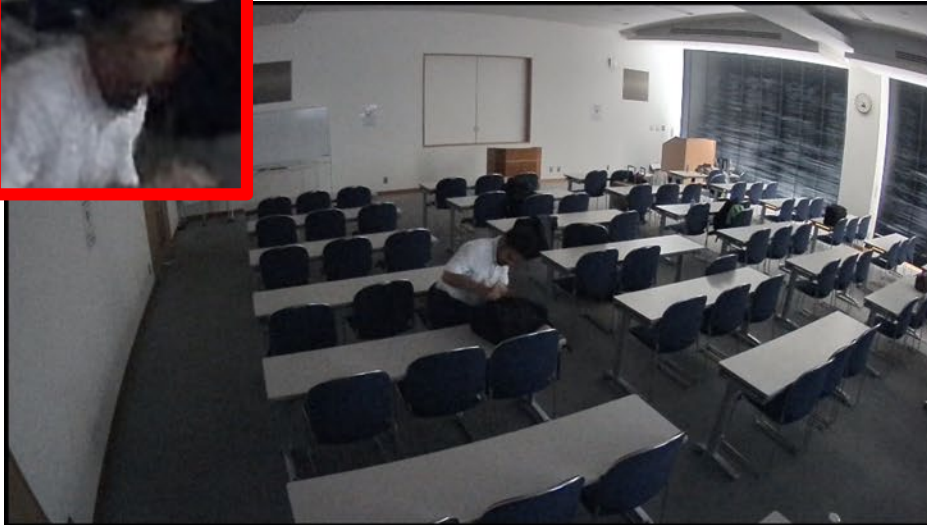
Lens not included.

WV-S1136

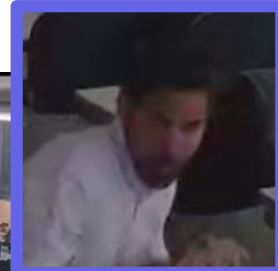
## ■ Superior Low Light Performance

Enables to detect and identify important objects under low light condition.

Less blur figure and less noise in lowlight



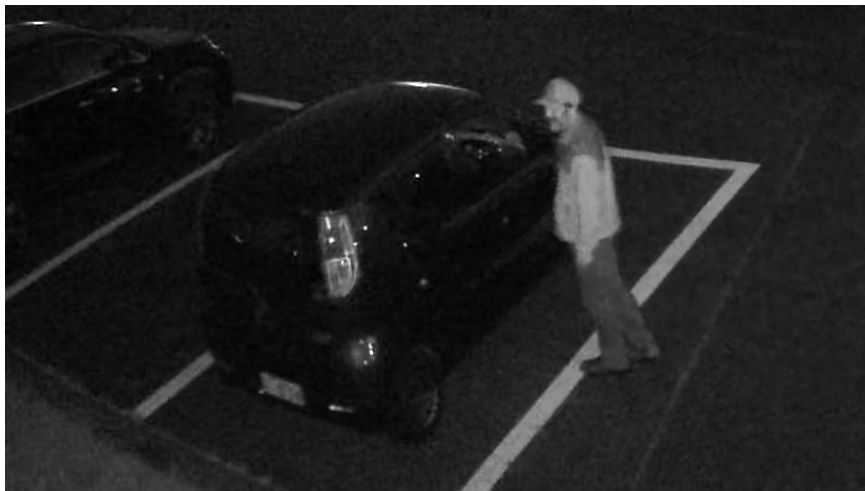
Conventional i-PRO camera



New i-PRO Full HD S-Series

## ■ Improved image for identification even in very low light

Enables to detect and identify important objects in IR-LED illuminated condition.



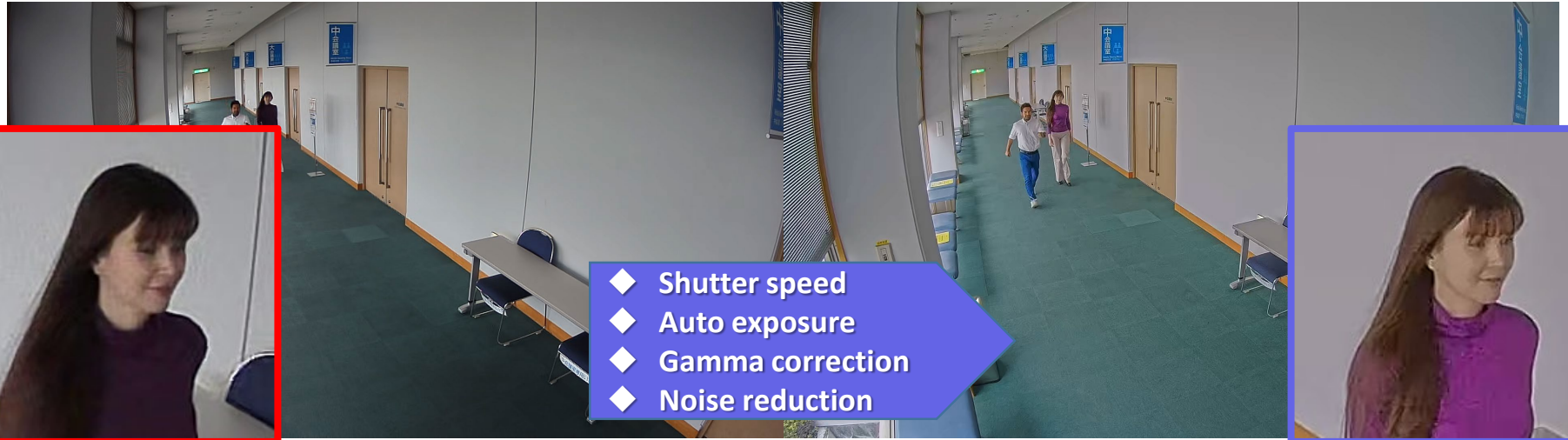
Conventional i-PRO camera  
IR-LED: ON



New i-PRO Full HD S-Series  
IR-LED: ON

## ■ Advanced intelligent Auto

Improving visibility of monitoring objects by optimizing image quality utilizing AI intelligent Auto feature.



**Conventional i-PRO camera**  
Intelligent Auto: ON

**New i-PRO Full HD S-Series**  
AI intelligent Auto : ON

## ■ Super Dynamic for better visibility in back light condition

Ensuring visibility in back light condition by Super Dynamic function. It achieves 144dB in dynamic range.

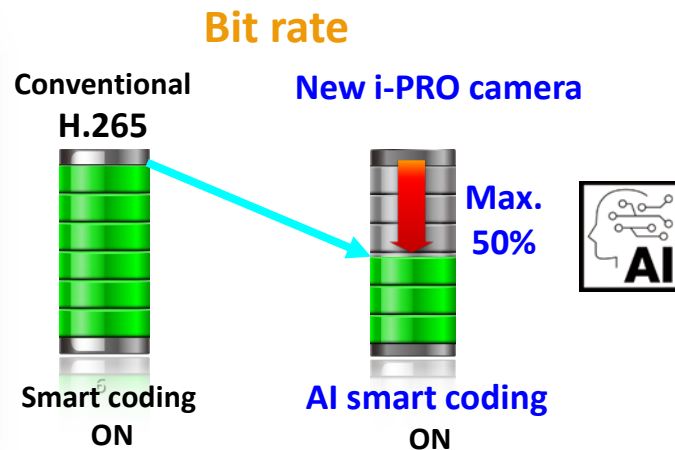
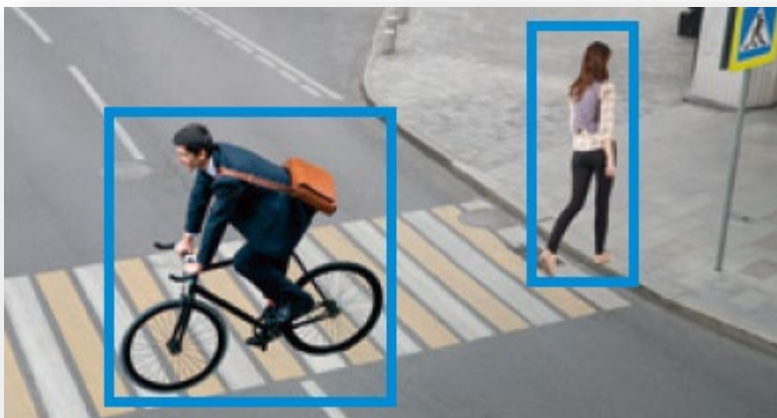


**Conventional i-PRO camera**  
Super Dynamic : OFF

**New i-PRO Full HD S-Series**  
Super Dynamic : ON

## ■ Optimizing video compression – AI Smart Coding

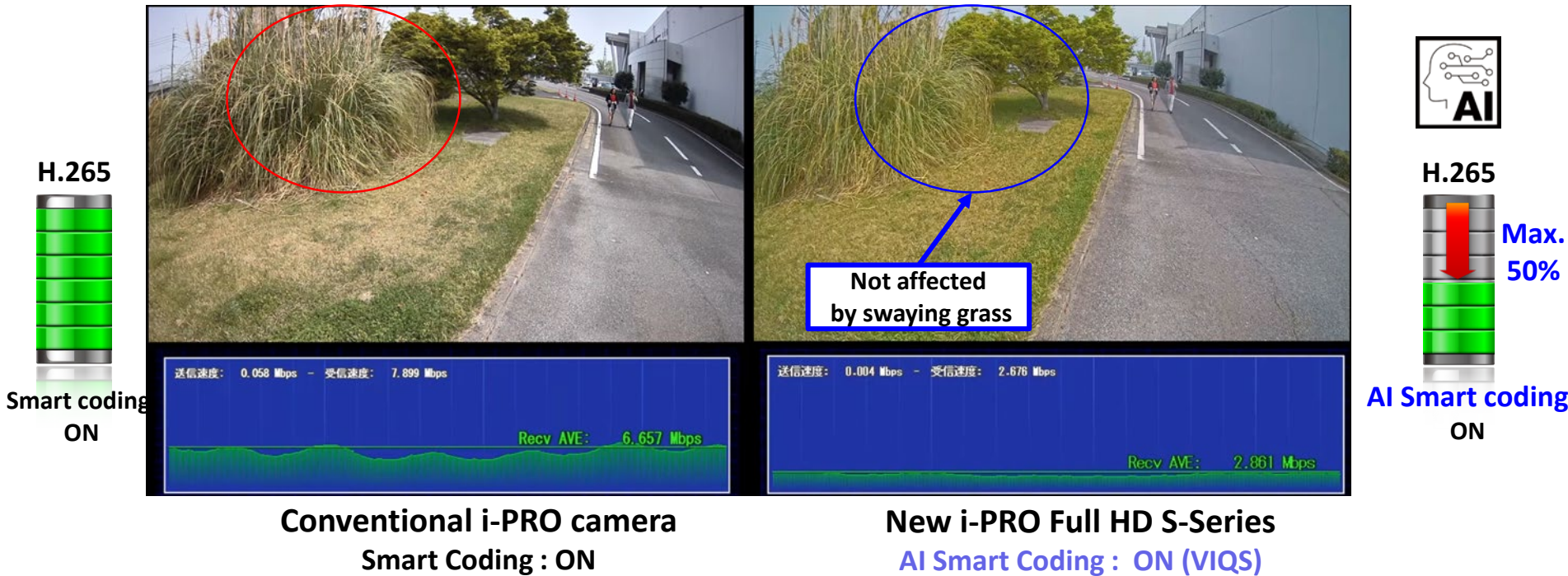
AI Smart Coding optimizes video compression to conserve network bandwidth and server storage capacities.



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

## ■ AI Smart Coding

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





- AI analytical applications capability
  - AI-VMD (Video Motion Detection)
  - Pre-installed human/vehicle detection
  - Up to two AI applications installable per camera
  - Detecting suspicious sound with external mic



## ■ AI-VMD (Video Motion Detection)

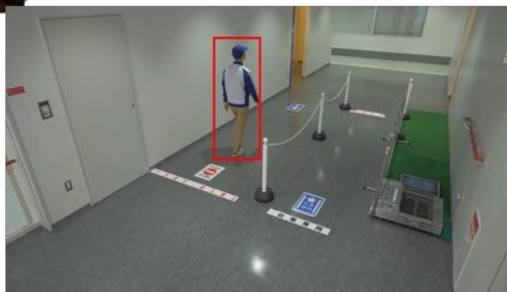
### Loitering Detection

Detecting loitering objects



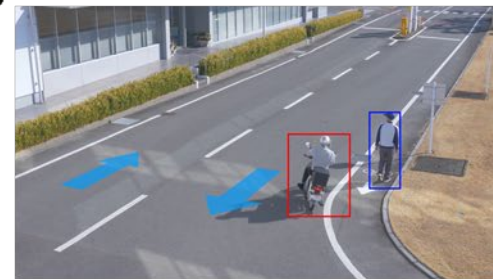
### Cross Line Detection

Detecting crossed a line



### Direction Detection

Detecting wrong direction

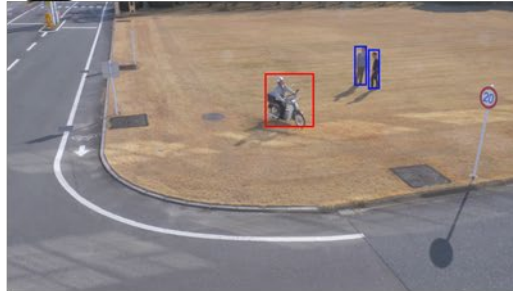


\*This video clips just shows to imagine how the detection functions activate are.

## ■ AI-VMD (Video Motion Detection)

### Intruder Detection

Detecting moving objects intrudes specified areas.



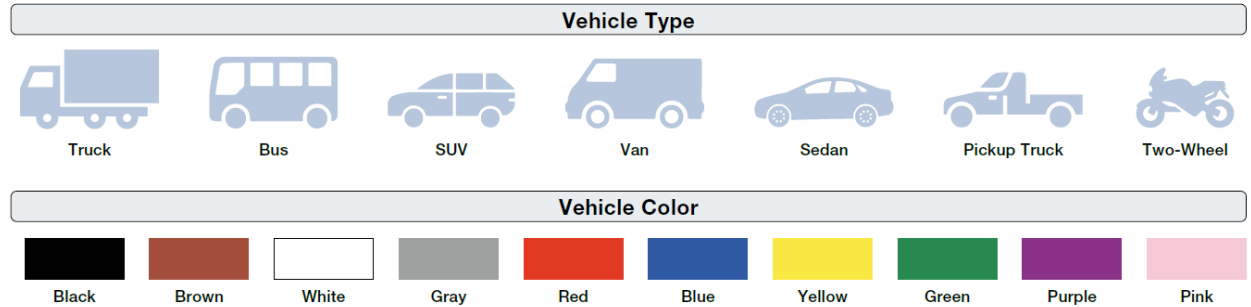
\*This video clips just shows to imagine how the detection functions activate are.

## ■ People detection

Classifying characteristics of the human face and clothing into useful categories such as gender, age, clothing color, and wearing etc.

## ■ Vehicle detection

Classifying vehicle characteristics into useful categories such as types and color.



## ■ Detecting suspicious sound

Detecting suspicious sound like Gunshot, Yell, Vehicle horn, and Glass break, with external microphones



Gunshot



Yell



Vehicle horn



Glass break

## ■ Up to two video analytics applications per camera

With AI engine to enable to install and activate

up to two (2) video analytical applications.



**New S series i-PRO cameras  
with AI engine**



(Example)

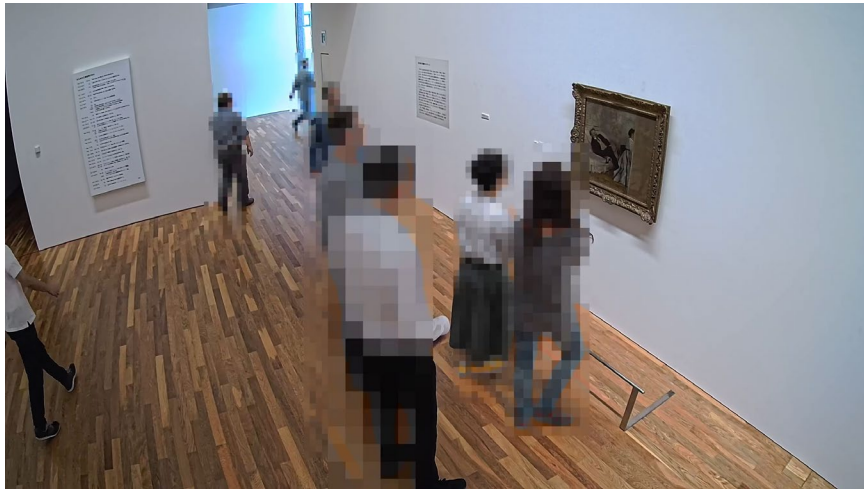


**Privacy Guard**

**Up to 2 video analytics applications  
to install and activate**

## ■ AI Privacy Guard Optional extension software WV-XAE201W

Detecting and recognizing human figures in a scene and automatically pixelating figures or faces for protect privacy and portrait rights.

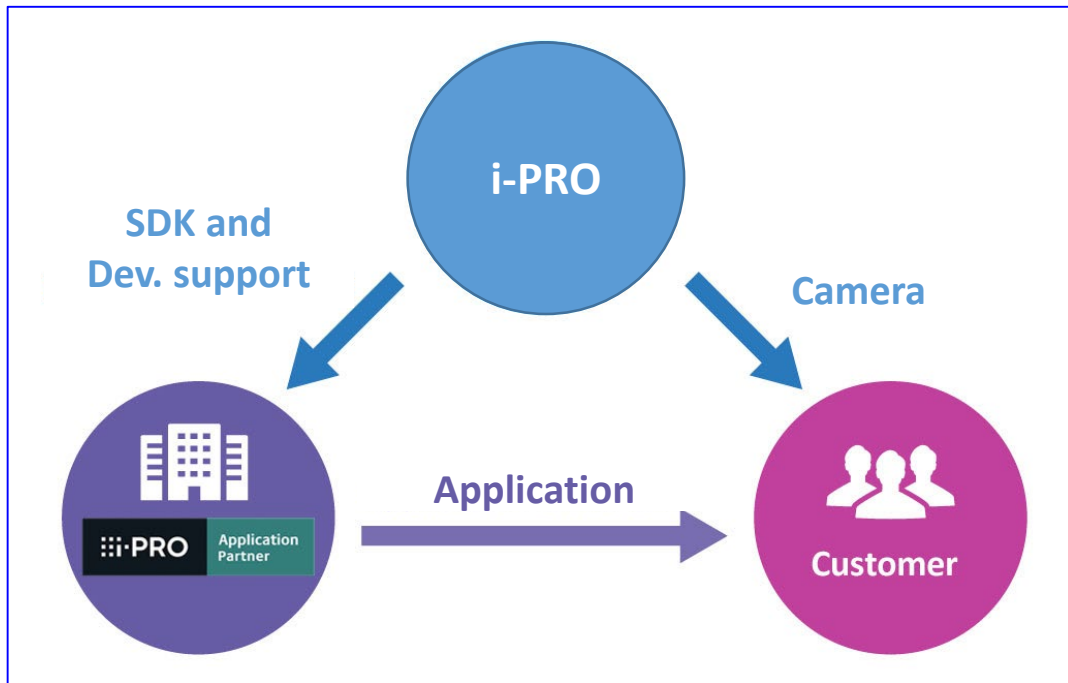


Indoor (Museum)



Outdoor in the office building

## ■ i-PRO camera application platform for 3rd party AI application



**Partner companies that provide unique applications through the i-PRO Camera Application Platform.**



## ■ Easy Kitting Package for easy and quick installation

Do not even need to remove the camera from the box to setup multiple number of cameras.



Other camera brand package



Easy Kitting package

## High endurance under tough indoor conditions

### ■ Vandal Resistant \*WV-S2236L only

- ✓ Highly impact resistant
- ✓ IEC 62262 IK10



## High endurance and long life usage under extreme conditions

■ Dustproof Test



■ High-Temperature Test



■ Pressure Test



■ Earthquake Test



■ Waterproof Test



■ Lifetime Test



■ Thunder Test



■ Static Electricity Test



■ Drop Test



■ Box Shaking Test



## Secure communication with GlobalSign certification



### Vulnerability Assessment

- 3<sup>rd</sup> party assessment and penetration tests made to achieve higher security standards



### GlobalSign Device Certification

- Pre-installed GlobalSign Certification
- Video tampering detection



### End-to-End Data Encryption

- Support full encryption communication
- Camera encryption recording on-the-edge



### FIPS140-2 Level 1 CAVC compliant

(Federal Information Processing Standardization)

- For federal/public safety usage






# Specifications



		WV-S2236L	WV-S2136/S2136L	WV-S1136
Image sensor		1 / 2.8 type CMOS		
Max. video resolution (pixel)		1920 x 1080		
Max. frame rate		60 fps		
Minimum Illumination *Shutter speed 1/30s	Color	0.007lx @F1.3		
	B/W	0.006lx @F1.3, 0 lx @ IR		
Angular Field of View *16:9 mode	Horizontal	36° (Tele) - 114° (Wide)	36° (Tele) - 115° (Wide)	Lens not included
	Vertical	20° (Tele) - 60° (Wide)	20° (Tele) - 61° (Wide)	Lens not included
Intelligent Auto / WDR / Smart coding		intelligent Auto / Super Dynamic (144dB) / AI Smart Coding		
IR-LED /Max.irradiation distance		Yes, / 50 m {Approx 164 ft} at 50 IRE	Yes, / 50 m {Approx 164 ft} at 50 IRE *WV-S2136L only	-
Audio Interface / Compression		Input (ø3.5 mm stereo mini jack x 1), Output(ø3.5 mm stereo mini jack x 1)(monaural output) / G.726, G.711, AAC-LC		
SD memory card slot		1slot (microSDXC/microSDHC/microSD)		
Secure communication		FIPS 140-2 Level 1 compliant		
External I/O Terminals		ALARM IN 1 (Black & white input, Auto time adjustment input) (x1), ALARM IN 2 (ALARM OUT) (x1), ALARM IN 3 (AUX OUT) (x1)		
Environmental		IK10	-	
Power Source / Ambient Operating Temperature		DC12V, PoE -10° C ~ +50° C (14° F ~ +122° F)		
Dimension (mm)		ø129.5 mm x 102.5 mm (H)	ø129.5 mm x 101 mm (H)	75 mm (W) x 57 mm (H) x 146 mm (D) (excluding lens / power cord plug)

It shows the maximum distance at which a camera's tele and wide can meet DORI. \*1

\*This value does not indicate the performance of the camera

 <p><b>WV-S2236L</b></p>	<b>Resolution</b>		<b>Tele 36°</b>		<b>Wide 114°</b>	
	<b>1920 x 1080</b>		<b>Distance (m)</b>	<b>Distance (ft)</b>	<b>Distance (m)</b>	<b>Distance (ft)</b>
	Detect	25ppm / 8ft	118.2	387.7	24.9	81.8
	Observe	62.5ppm / 19ft	47.3	155.1	10.0	32.7
	Recognize	125ppm / 38ft	23.6	77.5	5.0	16.4
Identify	250ppm / 76ft	11.8	38.8	2.5	8.2	
 <p><b>WV-S2136L</b></p>	<b>Resolution</b>		<b>Tele 36°</b>		<b>Wide 115°</b>	
	<b>1920 x 1080</b>		<b>Distance (m)</b>	<b>Distance (ft)</b>	<b>Distance (m)</b>	<b>Distance (ft)</b>
	Detect	25ppm / 8ft	118.2	387.7	24.5	80.3
	Observe	62.5ppm / 19ft	47.3	155.1	9.8	32.1
	Recognize	125ppm / 38ft	23.6	77.5	4.9	16.1
Identify	250ppm / 76ft	11.8	38.8	2.4	8.0	
 <p><b>WV-S2136</b></p>	<b>Resolution</b>		<b>Tele 36°</b>		<b>Wide 115°</b>	
	<b>1920 x 1080</b>		<b>Distance (m)</b>	<b>Distance (ft)</b>	<b>Distance (m)</b>	<b>Distance (ft)</b>
	Detect	25ppm / 8ft	118.2	387.7	24.5	118.2
	Observe	62.5ppm / 19ft	47.3	155.1	9.8	47.3
	Recognize	125ppm / 38ft	23.6	77.5	4.9	23.6
Identify	250ppm / 76ft	11.8	38.8	2.4	11.8	

\*1 It is calculated with the camera installed horizontally.

**Indoor  
Vandal Resistant Dome  
WV-S2236L**



**Dome Cover (Smoke type)  
WV-CR1S**

		Ceiling					
		1	2	3	4	5	
<b>Combination</b>		<b>WV-Q105A</b> 	<b>WV-QEM100-W</b> 	<b>WV-QCL501-W</b> 	3rd.parties pipe 	3rd.parties pipe 	
				<b>WV-QSR501-W</b> 	<b>WV-QCL100-W</b> <b>WV-QCL101-W (For U.S)</b> 	<b>WV-QAT500-W</b> <b>WV-QAT501-S (For U.S)</b> 	
						<b>WV-QSR501-W</b> 	
		Wall		Pole		Corner	
		1	2	1	2	1	2
<b>Combination</b>		<b>WV-QWL501-W</b> 	<b>WV-QJB500-W</b> 	<b>WV-QPL500-W</b> 	<b>PAPM4W</b> (For U.S) 	<b>WV-QCN500-W</b> 	<b>PACA4W</b> (For U.S) 
		<b>WV-QSR501-W</b> 	<b>WV-QWL500-W</b> 	<b>WV-QJB500-W</b> <b>WV-QWL500-W</b> 	<b>WV-QJB500-W</b> <b>WV-QWL500-W</b> 	<b>WV-QJB500-W</b> <b>WV-QWL500-W</b> 	<b>WV-QJB500-W</b> <b>WV-QWL500-W</b> 

**Indoor Dome**  
**WV-S2136L / S2136\***  
 \*Not available in U.S market



**Dome Cover(Smoke type)**  
**WV-CF5SA**

		Ceiling					
		1	2	3	4	5	
Combination		WV-Q105A 	WV-QEM100-W 	WV-QCL501-W 	3rd.parties pipe 	3rd.parties pipe 	
				WV-QSR501-W 	WV-QCL100-W WV-QCL101-W (For U.S) 	WV-QAT500-W WV-QAT501-S (For U.S) 	
						WV-QSR501-W 	
		Wall		Pole		Corner	
		1	2	1	2	1	2
Combination		WV-QWL501-W 	WV-QJB500-W 	WV-QPL500-W 	PAPM4W (For U.S) 	WV-QCN500-W 	PACA4W (For U.S) 
		WV-QSR501-W 	WV-QWL500-W 	WV-QJB500-W WV-QWL500-W 	WV-QJB500-W WV-QWL500-W 	WV-QJB500-W WV-QWL500-W 	WV-QJB500-W WV-QWL500-W 



-PRO