

Outdoor Fixed Network Camera



Security Systems Business Division

Panasonic System Networks Co., Ltd.

Panasonic

Outdoor Fixed Network Camera

SmartHD





WV-SPW532L (1080p, 30fps)

WV-SPW312L (720p, 30fps)

Wide Dynamic Fixed Network camera

- \checkmark Outdoor-ready with integrated IR
- \checkmark Clear images in a wide range of lighting conditions
- ✓ Full HD/HD at up to 30fps
- ✓ IP-Network friendly
- ✓ Optional intelligent VMD (i-VMD)

3 Outdoor-ready with integrated IR

Quick and Easy Installation

The IP66- and NEMA 4X-rated weather-resistant WV-SPW532L/SPW312L outdoor cameras are ready for mounting outdoor and save installation time and costs. The WV-SPW532L/312L can be mounted directly on the wall. Don't need the base bracket.



Wall mount

Built-in IR illumination

Infrared (IR) illumination is an option for low light or complete darkness conditions. The WV-SPW532L/SPW312L outdoor cameras are equipped with built-in long range IR LEDs which illuminate around 30m (100feet).



Ceiling mount

Clear images

Clear images in a wide range of Lighting conditions

Even a single image can include complex lighting conditions such as bright, glaring, dark and backlight situations. Incorporating advanced image processing technologies, WV-SPW532L/SPW312L camera enables clear and easy identification in a wide range of lighting conditions.

-Multi-process Noise Reduction (MNR)
-Frequency Divided Filter (FDF)
-Super Chroma Compensation (SCC)
-Fog and sandstorm compensation
-High Light Compensation (HLC)

and more ...

Full HD / HD at up to 30fps

Combining Full HD 1080p / HD 720p resolution and 30fps high frame rate, WV-SPW532L/SPW312L fixed camera enables easy and clear identification of rapid moving objects such as people moving chips and cards in casino, and a vehicle plate on the road.



Panasonic image processing technologies

High sensitivity image sensor with **3D-MNR** enables easy identification, capturing color images with low noise in low light conditions.

3D-MNR: 3D Multi process Noise Reduction.

Frequency Divided Filter (FDF)

divides the images into multiple frequency ranges, removes the fine noise generated under low illumination for achieving a low bit rate without eliminating edge components.





Without FDF

Without SCC

conditions.

With SCC

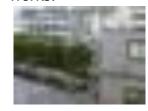
High-speed Auto Back Focus (ABF) keeps fine focus, controlling precise image sensor position automatically. It streamlines installation and maintenance works.

Super Chroma Compensation

(SCC) recovers the colors of images,

enhance light-sensitivity in low light

when built-in IR cut filter is removed to





Before ABF

After ABF

A previous model at 0.04lx

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5-series camera at 0.04lx

Fog compensation improves visibility in difficult weather conditions such as fog, sandstorms and more.



Without fog compensation



With fog compensation

High Light Compensation (HLC) produces clear images, reducing the effect from strong lights such as headlight glare.



Without HLC



With HLC

Panasonic image processing technologies

SmartHD

Lens Distortion Compensation

(LDC) removes the distortion from images caused by wider lens.





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With LDC

Intelligent Resolution Technology

generates 3M-pixel grade pictures, detecting outlines, detailed texture areas and soft gradation areas and performing optimum processes to each area. (WV-SPW532L)



Variable Image Quality on Specified

Without intelligent resolution technology

With intelligent resolution technology

Face Wide Dynamic enables clear identification of a person's face, detecting a facial part in the picture and performing Wide Dynamic automatically.



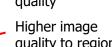
Without Face Wide Dynamic



With Face Wide Dvnamic



area (VIQS) saves the network



quality to region of interest

IP-Network friendly

Appropriate-sized video stream

Monitors, recorders, smartphones and remote sites such as branches have different requirements for image quality and network bandwidth. WV-SPW532L/SPW312L camera saves the network bandwidth, sending out up to four H.264 (High profile) streams and JPEG streams sized appropriately for each device requirement.

Higher H.264 compression

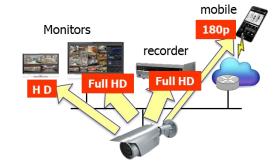
With the latest UniPhier system LSI, WV-SPW532L/SPW312L camera saves the network bandwidth and the recorder disk space, keeping high quality of images.

Smart coding Technology

Group of Pictures (GOP) control removes unnecessary information from the frame for realizing efficient encoding.

With the latest bitrate reducing technology, GOP control, 3D-MNR and FDF, WV-SPW532L/SPW312L camera saves the network bandwidth and the recorder disk space.

Scene	Without GOP	With GOP
Heavy traffic of people	3 Mbps	3 Mbps
Minimal traffic of people	2 Mbps	1 Mbps(-50%)



Cameras	WV-SP509	WV-SPW532L
Full HD at 30fps	4 Mbps	3 Mbps (-25%)
Full HD at 10fps	4 Mbps	2 Mbps (-50%)



inserted at regular intervals as usual.

When people are walking, I-frame is When there is no person walking, I-frames are thinned down to reduce the amount of data.

Higher accuracy with more intelligence

Equipped with advanced self-learning algorithm and the latest powerful UniPhier system LSI, WV-SPW532L/SPW312L camera provides high detection accuracy.

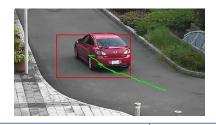
Intruder detection detects people or cars trespassing in restricted areas.



Loitering detection detects people who has loitered for too long in the ar<u>ea</u>.



Direction detection detects people or cars that go the wrong direction.



Scene change detection detects tampering with the camera view.



Object detection (left) detects something left behind that shouldn't be there.



Object detection (removed) detects objects disappearing that should be present.



Cross line detection detects people or objects crossing the imaginary lines.



... and other useful features

Secure SD memory recording

Equipped with a SD memory card slot, WV-SPW532L/SPW312L camera stores recordings locally. Recordings can be password-protected and alteration detection helps ensure credibility of data.

Central management

The WV-ASM200 and System970 i-PRO management software enables central management of the cameras,

recorders and monitors.



Viewing on smartphones and tablets

Panasonic Security Viewer enables viewing outside the surveillance center.



View and Setting with various browsers

When the camera is configured and checked, it does not have to be a specific browser such as only IE. Various browsers (Safari, Chrome*, Firefox and IE) can be used.

*The live display is supported only JPEG.

Alarm notification

When VMD, i-VMD, terminal alarm such as door alarm or command alarm is detected, the camera sends alarms to the operators based on preconfigured alert rule and/or saves images to the SD memory card or FTP server.

Privacy masking

The camera supports electronic privacy masking. Zones, the masked areas of the image, are easily defined.

Specifications

		WV-SPW532L	WV-SPW312L	
Appearance				
Туре		Outdoor		
Image sensor		1/3 type MOS Sensor		
Max. resolution 2,048 x 1,536		2,048 x 1,536	1,920 x 1,080 ^{*1} / 1,280 x 960 *1:Super resolution technology	
Max. frame rate		30 fps		
Day / Night		Yes (IR Cut filter Removal)		
Focus Adjustment		ABF		
Minimum Color Illumination B/W	Color	0.07 lx (F1.6)	0.02 lx (F1.6)	
	B/W	0.01 lx (F1.6)	0.006 lx (F1.6)	
Wide Dynamic		Yes		
IR LED irradiation dist	ance	Approx. 30m (98.43ft.)		
Vari Focal Length		2.8 mm – 10 mm		
Angular Field of View (16:9 Mode)	Horizontal	31° (TELE) – 112° (WIDE)	28° (TELE) – 102° (WIDE)	
	Vertical	17° (TELE) – 60° (WIDE)	16° (TELE) – 55° (WIDE)	
Audio		N/A		
SD memory card slot		1 slot (SDXC/SDHC/SD)		
Ambient Operating Te	emperature	-30°C ~ +50°C (-22 °F ~ 122 °F)		
Dimension		95 mm (W) x 99 mm (H) x 326 mm (L) {3-3/4 inches (W) x 3-57/64 inches (H) x 1ft 27/32 inches (L)}		