

Analog Camera Series

Box Type Camera

- WV-CP624: D/N (IR) 24V AC or 12V DC
- WV-CP620: D/N (IR) 220V - 240V AC
- WV-CP604: D/N (Electrical) 24V AC or 12V DC
- WV-CP600 :D/N (Electrical) 220V - 240V AC



Indoor Dome Camera

- WV-CF634 :D/N (IR) 24V AC or 12V DC
- WV-CF614 :D/N (Electrical) 24V AC or 12V DC



Security & Networks Business Unit
Panasonic System Networks Company

- ◆ **SD6 Feature (Super Dynamic + Enhanced ABS)**
- ◆ **Horizontal Resolution 650 TV lines (Typ. @Color/BW)**
- ◆ **High Sensitivity 0.08lx(color)/0.008lx(BW)**
(CP620, CP624, CF634)
- ◆ **High Sensitivity 0.08lx(color)/0.05lx(BW)**
(CP600, CP604, CF614)
- ◆ Privacy zone (up to 8 areas can be selected)
- ◆ Day/Night function (IR cut filter removable)
(CP620,CP624,CF634)
- ◆ Video motion detection
- ◆ Ambient Operating Temperature
-10 deg C to +50 deg C (14 deg F to 122 deg F)
- ◆ Reduce Power Consumption
2.8W (CP600) , 3.7W(CP500L: conventional) *220-240V AC 50Hz
2.5W (CF614) , 3.4W(CF504: conventional) *24V AC 50Hz

SD6
Super Dynamic



WV-CP600 series



WV-CF600 series

Product Concept

SR series concept

High Picture Quality

SR(Superior Reality) 1 chip solution

- Intelligent Resolution(650 TV line)
- High sensitivity

Versatile

- Advanced features
- Each camera has unique functions that allow more safer surveillance system.
- Electrical Sense Up 512x
 - Enhanced ABS
 - Lens Distortion Compensation and more...

SD6
SuperDynamic

Eco friendly Design

- Compact and Eco friendly design
- Using small and Eco designed camera makes camera to use less material and consume less electric power to save energy



New SR chip

What is SR image Processor (Panasonic Original DSP)

- SR image processor is designed for new lineup of analog camera.
- New DSP enables all models to have both superior realistic image and high cost performance.



Superior feature

SD6
Super Dynamic

◆ Super Dynamic
+
Enhanced ABS

Advanced features

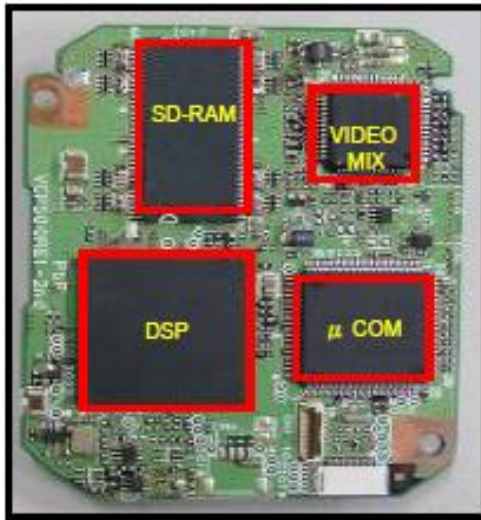
- ◆ Intelligent Resolution
- ◆ Color Reproducibility
- ◆ Proactive 2D/3D-DNR
- ◆ Enhanced ABS
- ◆ Lens Distortion Compensation
- ◆ Electrical Sense Up 512x
- ◆ On Screen Display Menu
- ◆ Auto Tracking
- ◆ Scene Change Detection
- ◆ Auto Image Stabilizer

Basic features

- ◆ Horizontal resolution 650 TV lines
- ◆ Min. illumination 0.08 lx

Developed High Density Processor currently used 4 IC's became Single processor.

Former Analog Camera



SR image Processor



SR chip makes new analog cameras to be smaller and save further energy consumption.

*Strong Key feature
Delivered by
SR Image Processor*

- ◆ Horizontal resolution 650 TV lines
- ◆ Min. illumination 0.08 lx
- ◆ Intelligent Resolution
- ◆ Color Reproducibility
- ◆ Proactive 2D/3D-DNR
- ◆ Enhanced ABS
- ◆ Lens Distortion Compensation
- ◆ Electrical Sense Up 512x
- ◆ On Screen Display Menu
- ◆ Auto Tracking
- ◆ Scene Change Detection
- ◆ Auto Image Stabilizer



SD5
Super Dynamic

Advanced features <ul style="list-style-type: none">*Electrical Sense up x32*ABS* Adaptive digital noise reduction
Basic features <ul style="list-style-type: none">*650 TV Line*Min. Illumination 0.01lx

500 series



SD6
Super Dynamic

Enhanced ABS
Color Reproducibility
Advanced Features <ul style="list-style-type: none">*Electrical Sense up x512*Lens distortion*Proactive 2D/3D-DNR
Basic features <ul style="list-style-type: none">*650 TV Line*Min. Illumination 0.008lx

600 Series (SR)

Box Type Camera

- WV-CP624: D/N (IR) 24V AC or 12V DC
- WV-CP620: D/N (IR) 220V - 240V AC
- WV-CP604: D/N (Electrical) 24V AC or 12V DC
- WV-CP600 :D/N (Electrical) 220V - 240V AC



SD5
SuperDynamic



WV-CP500
SD5 On

SD6
SuperDynamic



WV-CP600
SD6 On

Compared to SD5 models, SD6 has improved its picture quality due to new SR chip. It improved **Color reproducibility**, **Enhanced ABS** that are better than SD5 models.

SD5
Super Dynamic



WV-CP500
SD5 On

SD6
Super Dynamic

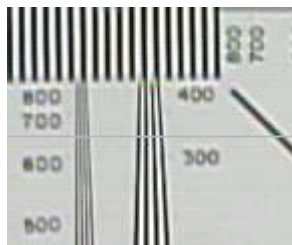
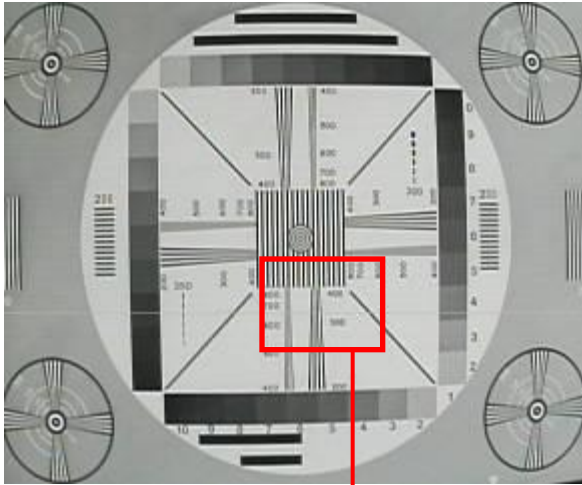


WV-CP600
SD6 On

Compared to SD5 models, SD6 has improved its picture quality due to new SR chip. It improved **Color reproducibility**, **Enhanced ABS** that are better than SD5 models.

1.Horizontal 650 TV lines

650 TV lines (Color HIGH mode, B/W mode) high resolution Image allows precise identification



2.Sensitivity

All SR series Camera have Electric Sensitivity Capability

CP500

Sensitivity (B/W)
0.01 lx (F1.4)

Electrical Sense Up x32

Sensitivity (B/W)
0.0003 lx (F1.4)

CP620

Sensitivity (B/W)
0.008 lx (F1.4)

Electrical Sense Up x512

Sensitivity (B/W)
0.000016 lx (F1.4)

Compared to current models,
SR models improved sensitivity significantly

2.Sensitivity

All SR series Camera have Electric Sensitivity Capability

	Models	Type	Day and Night	Sensitivity (color)	Sensitivity (B/W)	Electric Sensitivity enhancement			
						X32 Color	X32 B/W	X512 Color	X512 B/W
Conventional (F1.4)	WV-CP500L Series	BOX	Electrical	0.1 lx	0.07 lx	0.003 lx	0.002 lx	-	-
	WV-CP500 Series	BOX	IR	0.1 lx	0.01 lx	0.003 lx	0.0003 lx	-	-
(F1.4)	WV-CP600, 604	BOX	Electrical	0.08 lx	0.05 lx	0.0025 lx	0.0016 lx	0.00016 lx	0.000097 lx
	WV-CP620, 624	BOX	IR	0.08 lx	0.008 lx	0.0025 lx	0.00025 lx	0.00016 lx	0.000016 lx
(F1.2)	WV-CP600, 604	BOX	Electrical	0.07 lx	0.04 lx	0.002 lx	0.001 lx	0.00014 lx	0.000078 lx
	WV-CP620, 624	BOX	IR	0.07 lx	0.007 lx	0.002 lx	0.0002 lx	0.00014 lx	0.000014 lx
(F0.95)	WV-CP600, 604	BOX	Electrical	0.05 lx	0.03 lx	0.0016 lx	0.0009 lx	0.0001 lx	0.00006 lx
	WV-CP620, 624	BOX	IR	0.05 lx	0.005 lx	0.0016 lx	0.00016 lx	0.0001 lx	0.00001 lx

3.Color reproducibility

Temperature : 5100K
illuminance:110lx

SD5 (CP500 series)



SD6 (CP600 series)



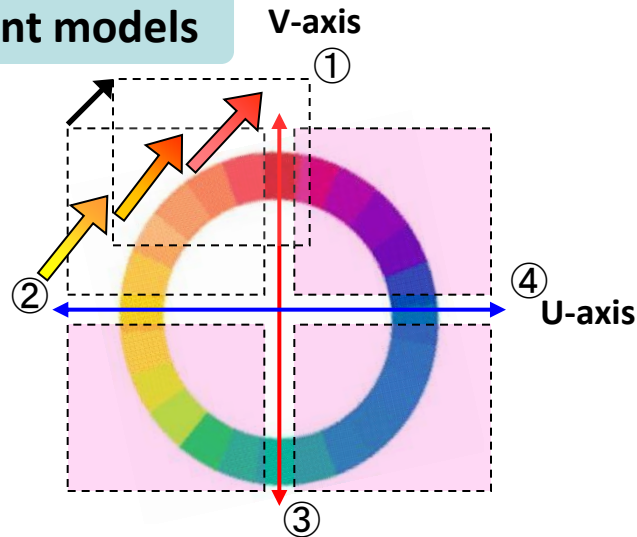
Clear and vivid color

3.Color reproducibility

Color temperature 2500K

By the wider range of color adjustment with 16 axis matrix, the color reproducibility has improved.

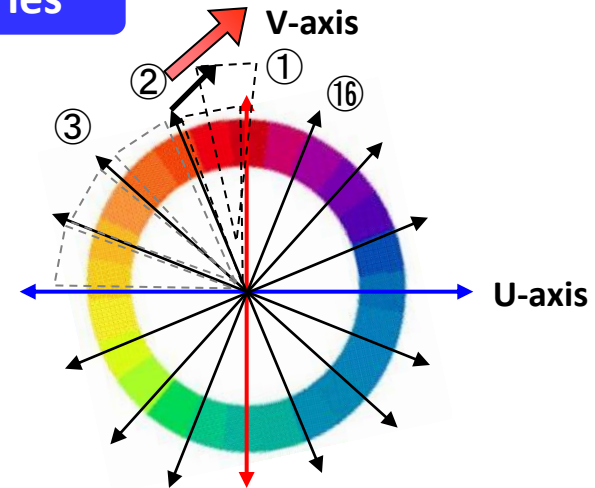
Current models



4 axis matrix color compensation

For example, to adjust red, it is necessary to convert the orange and yellow as same, because the entire color space from yellow to red has to be converted. Therefore, the range of the color adjustment is limited.

SR series

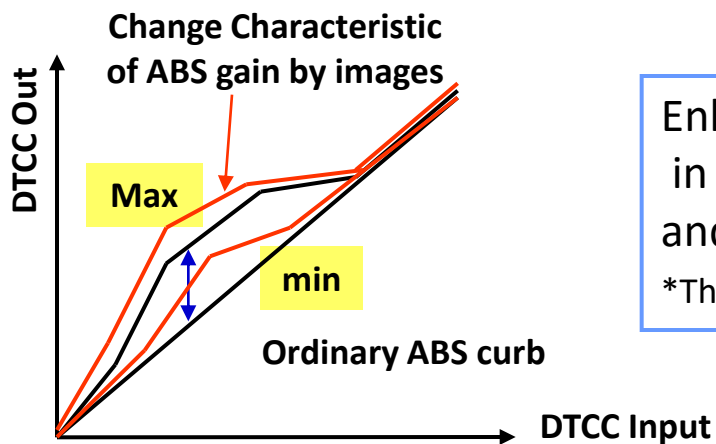


16 axis matrix color compensation

In new color reproducibility algorithm, to adjust red, it doesn't influence orange and yellow. Because the red color space is separated from orange and yellow. Therefore, this provides the wider range of color adjustment naturally.

1.Enhanced ABS

Enhanced ABS (Adaptive Black Stretch) provide more natural bright and dark graduation by DTCC (Dynamic Tone Curve Control).



Enhanced ABS in real time compensates the graduation in each pixel according to changes in the environment, and provide the best brightness for image object.

*The conventional model only processed a fixed gain to the image.

2.Lens distortion compensation

Distortion compensation function will create distortion free images



When used with Wide Angle Lens
image became Fish Eye Effects



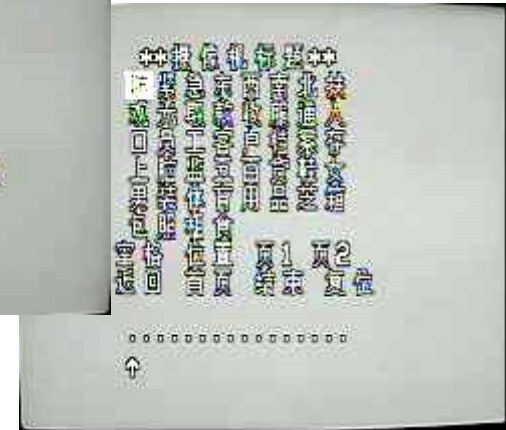
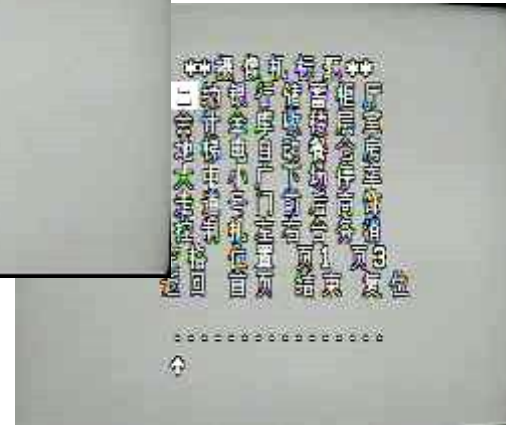
Distortion free image

3. OSD Capability

SR models have On Screen Display function & have 16 words Camera Title



Jog switch in the Bottom

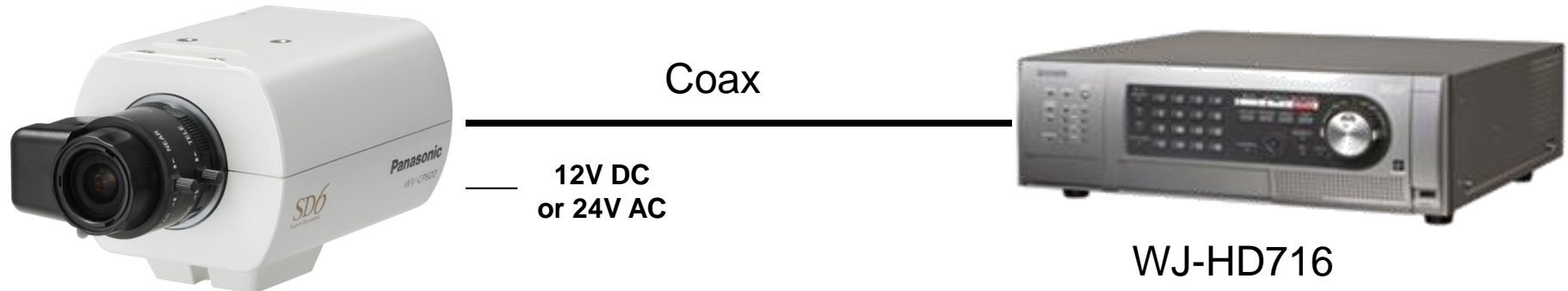


In the Bottom of Camera Jog SW (Set Up SW) is Available. Push 3 sec In the Center of SW. Then, you can use Camera menu. When you push less than 3 sec, you will enter Focus Assist menu.

Multi Language Menu available
Chinese、JAPANESE、ENGLISH、FRANÇAIS、ESPAÑOL、
DEUTSCH、ITALIANO、РУССКИЙ

4. Single Wire Communication Function

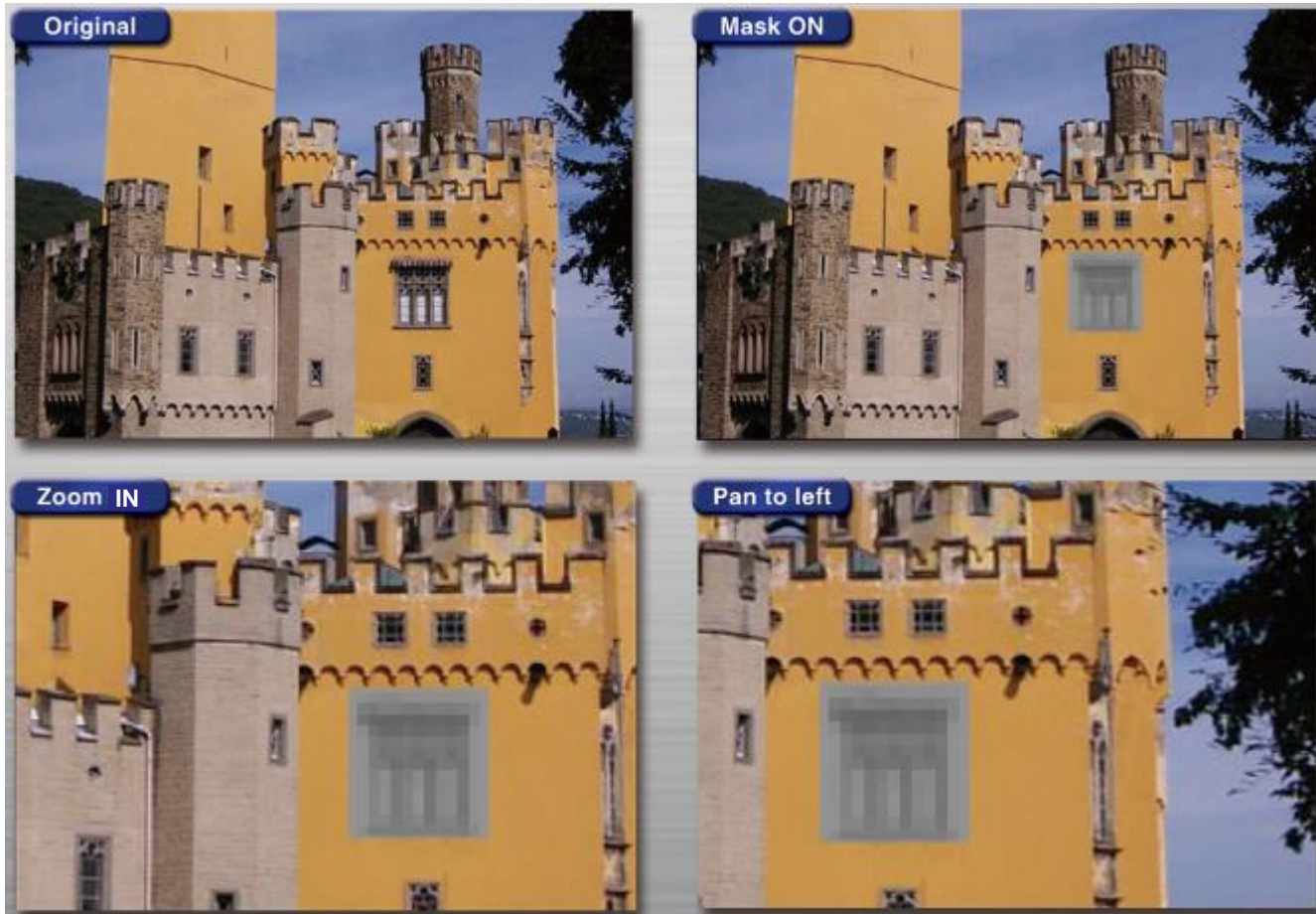
All SR models have a single wire control (Over the Coax) Capability. After finishing installation you can access Set Up menu from Monitoring site.



5. Privacy Masking zone

SR series can mask up to 8 areas.

***Conventional models can mask only one area**



1. Eco design

Downsized design

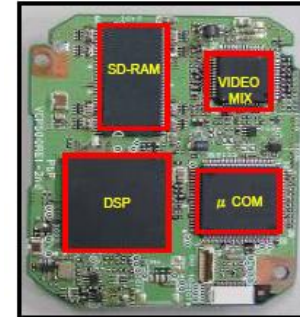
SR series



24V AC / 12V DC Model – 81 mm
Line Voltage Model – 101 mm

Device

Former Analog Camera



SR Chip



SR chip makes new analog cameras to be smaller and save further energy consumption.

2. Less electric energy consumption

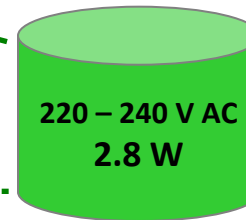
Compared to CP500 series, CP600 series can reduce the electric energy consumption.

Less energy consumption

WV-CP500 series







SR series
WV-CP600



reduce

24V AC/12V DC Model - **29 - 30 % smaller than former models**
Line Voltage Model - **24 % smaller than former models**

BOX Camera		Panasonic				
		WV-CP600	WV-CP500L	WV-CP620	WV-CP500D	
PHOTO						
Basic Features	Sensor		1/3" CCD	1/3" CCD	1/3" CCD	1/3" CCD
	Resolution	Color	650 TV lines typ.	650 TV lines typ.	650 TV lines typ.	650 TV lines typ.
	Minimum Illumination	Color	0.08 lx	0.1 lx	0.08 lx	0.1 lx
		B/W	0.05 lx	0.07 lx	0.008 lx	0.01 lx
	D/N		Electrical	Electrical	IR	IR
	Super Dynamic		SD6	SD5	SD6	SD5
S/N		52 dB	50 dB	52 dB	50 dB	
Functions	White Balance		ATW1,ATW2,AWC (Area Selectable)	ATW1,ATW2,AWC	ATW1,ATW2,AWC (Area Selectable)	ATW1,ATW2,AWC
	Lens Distortion Compensation		✓		✓	
	Mask Area		48 areas	48 areas	48 areas	48 areas
	Electronic Shutter (sec.)		1/50 - 1/120000	1/50 - 1/10000	1/50 - 1/120000	1/50 - 1/10000
	Electronic Sensitivity UP		to 512x	to 32x	to 512x	to 32x
	DNR		High/Low (3D)	High/Low (3D)	High/Low (3D)	High/Low (3D)
	Digital Zoom		2x	2x	2x	2x
	Privacy		Gray/Mosaic (8 Area)	Gray/Mosaic	Gray/Mosaic (8 Area)	Gray/Mosaic
	VMD		✓	✓	✓	✓ (i-VMD)
ABS		✓ (new ABS)	✓	✓ (new ABS)	✓	
I/F	LENS Drive		DC	DC	DC	DC
	Controller Interface		Coaxial Multiplex System	Coaxial Multiplex System	Coaxial Multiplex System	Coaxial Multiplex System
	ALARM		ALARM IN/OUT	ALARM OUT	ALARM IN/OUT	ALARM IN/OUT
POWER (220V - 240V AC 50/60 Hz)		2.8 W	3.7 W	2.8 W	3.7 W	
Dimension(mm)		72x 65 x 101 (LONG:AC) 72 x 65 x 81 (SHORT:DC)	75 x 65 x 132.5 (LONG:AC) 72 x 65 x 103.5 (SHORT:DC)	72x 65 x 101 (LONG:AC) 72 x 65 x 81 (SHORT:DC)	75 x 65 x 132.5 (LONG:AC) 72 x 65 x 103.5 (SHORT:DC)	

Indoor Dome Camera

- WV-CF634 :D/N (IR) 24 V AC or 12 V DC
- WV-CF614 :D/N (Electrical) 24 V AC or 12 V DC



Sensitivity

All SR series Camera have Electric Sensitivity Capability

CF504

Sensitivity (B/W)
0.01 lx (F1.4)

Electrical Sense Up x32

Sensitivity (B/W)
0.0003 lx (F1.4)

CF634

Sensitivity (B/W)
0.008 lx (F1.3)

Electrical Sense Up x512

Sensitivity (B/W)
0.000016 lx (F1.3)

Compared to current models,
SR models improved sensitivity significantly

Sensitivity

All SR series Camera have Electric Sensitivity Capability

	Models	Type	Day and Night	Sensitivity (Color)	Sensitivity (B/W)	Electric sensitivity enhancement			
						x32 Color	x32 B/W	x512 Color	x512 B/W
Conventional (F1.4)	WV-CF504	Dome	IR	0.1 lx	0.01 lx	0.003	0.0003	-	-
SR models (F1.3)	WV-CF614	Dome	Electrical	0.08 lx	0.05 lx	0.0025 lx	0.0015 lx	0.00016 lx	0.000097 lx
	WV-CF634	Dome	IR	0.08 lx	0.008 lx	0.0025 lx	0.00025 lx	0.00016 lx	0.000016 lx

Sensitivity

Halogen
illuminance:1.0lx

SD5 (CP500 series)






SD6 (CP600 series)

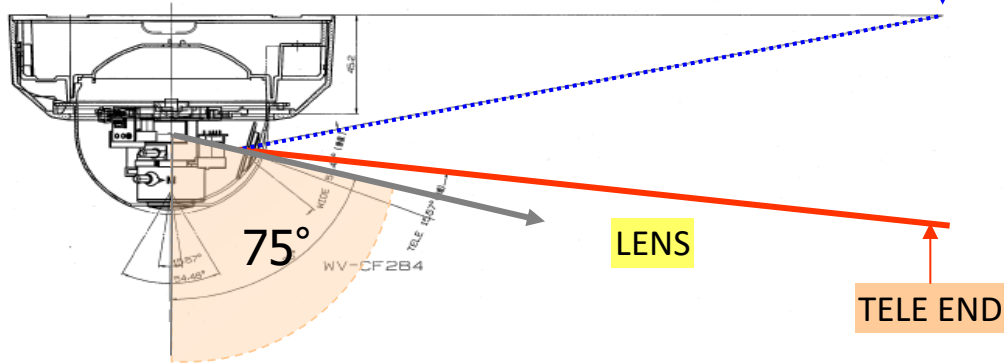


Almost same as CP500,
but it can express clear edge.

Comparison Chart

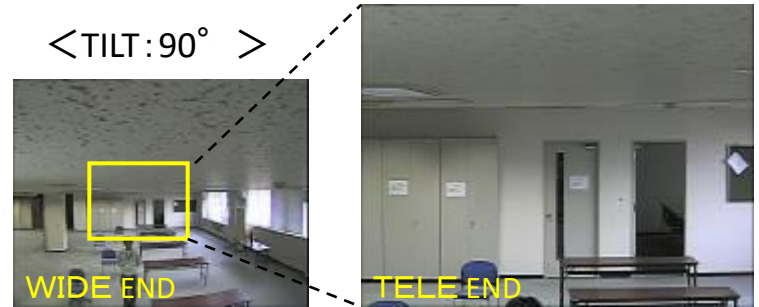
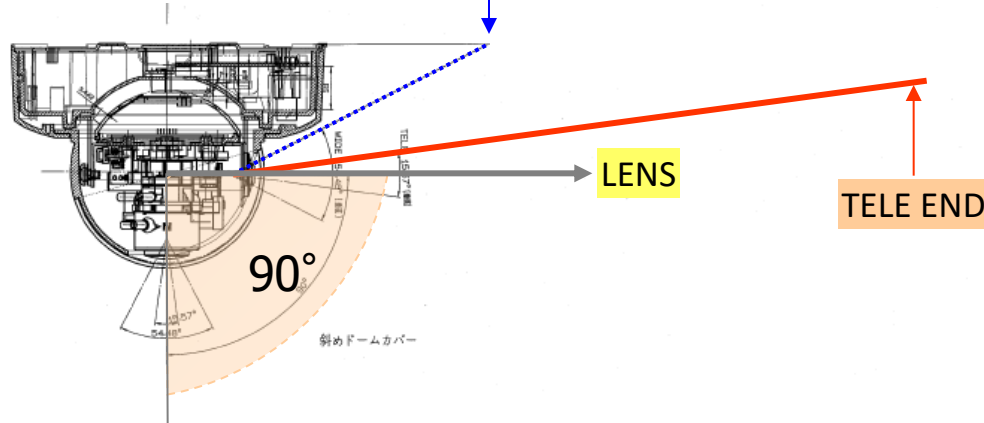
Fixed DOME			Panasonic WV-CF614	Panasonic WV-CF634	Panasonic WV-CF504
PHOTO					
Sensor	CCD	SIZE	1/3"	1/3"	1/3"
Basic Features	Resolution	Color	650 TV lines typ.	650 TV lines typ.	650 TV lines typ.
	Minimum Illumination	Color	0.08 lx	0.08 lx	0.1 lx
		B/W	0.05 lx	0.008 lx	0.01 lx
	D/N		Electrical	IR	Real
	Super Dynamic		SD6	SD6	SD5
	S/N		52 db	52 db	50 db
LENS	Aperture (Maximum)		F1.3	F1.3	F1.4
	Focal Length		2.8 - 10 mm (3.6x)	2.8 - 10 mm (3.6x)	3.8 - 8 mm (2.0x)
	Angular Field of View	WIDE (HxV)	100.3x73.4	100.8x73.8	73.6x53.4
		TELE (HxV)	27.8x20.9	27.6x20.7	35.6x26.6
Function	White Balance		ATW1,ATW2,AWC (Area Selectable)	ATW1,ATW2,AWC (Area Selectable)	ATW1/ATW2/AWC
	Lens Distortion Compensation		✓	✓	
	Mask Area		48 areas	48 areas	48 areas
	Electronic Shutter (sec.)		1/50 – 1/120000	1/50 – 1/120000	1/50 - 1/10000
	Electronic Sensitivity UP		to 512x	to 512x	to 32x
	DNR		High/Low (3D)	High/Low (3D)	High/Low (3D)
	Digital Zoom		2x	2x	2x
	Privacy		Gray/Mosaic 8 Area	Gray/Mosaic 8 Area	Gray/Mosaic
	VMD		✓	✓	✓ (i-VMD)
	ABS		✓ (new ABS)	✓ (new ABS)	✓
ABF		✓	✓	✓	
I/F	Controller Interface		Coaxial Multiplex System	Coaxial Multiplex System	Coaxial Multiplex System
POWER (24V AC)			2.5 W	2.5 W	3.4 W
Dimension (mm)			φ108x94(H)	φ108x94(H)	φ151x129(H)

former model: CF284
(TILT adjusted area 75°)

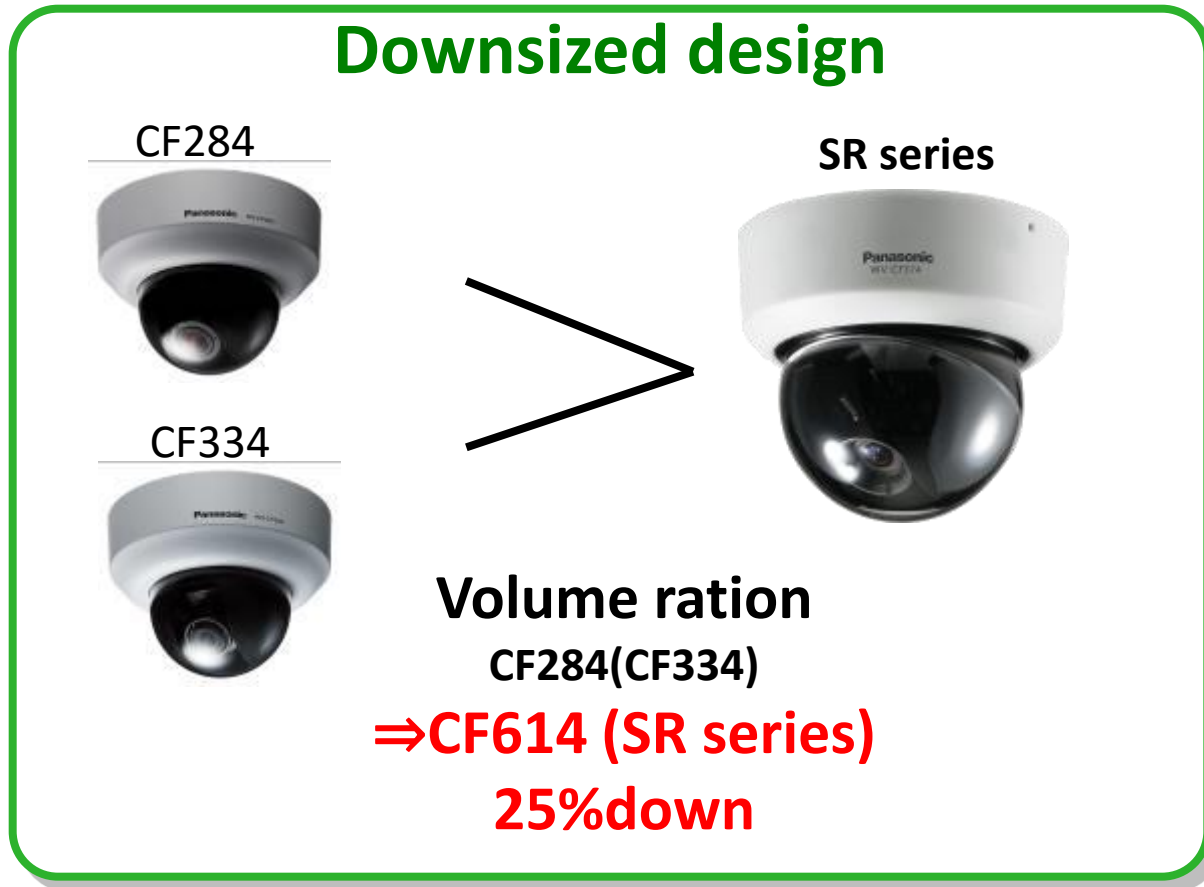


Wide TILT adjusted area (75° → 90°)
Rotation range: +180° to -170°

SR series
(TILT adjusted area 90°)

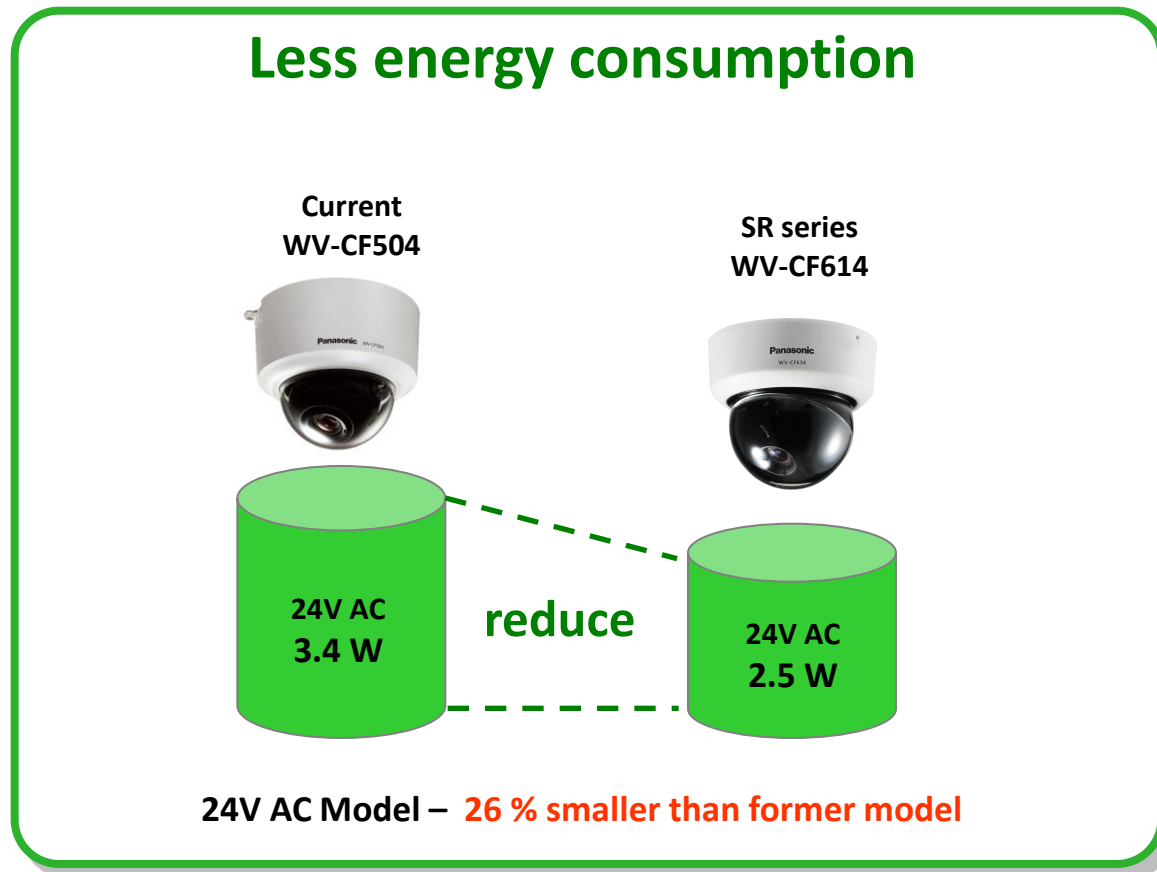


Eco design



Less electric energy consumption

Compared to current models, SR models cameras (dome) can reduce up to 26% of the electric energy consumption.



SR series concept

High Picture Quality

SR(Superior Reality) 1 chip solution

- Intelligent Resolution(650 TV line)
- High sensitivity

Versatile

▪ Advanced features
Each camera has unique functions that allow more safer surveillance system.

- Electrical Sense Up 512x
- Enhanced ABS
- Lens Distortion Compensation and more...

SD6
Super Dynamic

Eco friendly Design

▪ Compact and Eco friendly design
Using small and Eco designed camera makes camera to use less material and consume less electric power to save energy



New SR chip

Panasonic
ideas for life