

Panasonic Security Systems

2010 video surveillance systems



The best in technology, performance and value...
that's the Panasonic difference.



Panasonic delivers more than just video surveillance solutions – they're the best solutions available. With performance, versatility, value and proven reliability you can trust your security to every day. And Panasonic recognizes the diverse needs of the changing technology landscape with end-to-end solutions for IP-video, analog and hybrid systems – all packed with Intelligent Technology to deliver advanced functionality for faster and more efficient operations.





The relationship between the world economy and new technology has created a new climate for the security industry over the past several years. As security professionals are required to deliver improved means of protecting people, property and assets, the challenge comes with a new mandate for accountability and cost-efficiency.

At Panasonic, we deliver a broad spectrum of video surveillance solutions for the diverse needs of security professionals. With a proven history of innovation, Panasonic is recognized as a world leader in broadcast, professional and consumer electronics products. This puts us in the enviable position of developing industry-leading imaging and communications solutions for incorporation into our video surveillance line. Our new line of video surveillance solutions for 2010 perhaps best exemplifies this to date.

But technology alone is not the answer. Our connection to customers and reseller partners is essential to assure we offer the best solutions possible for the market's present needs and anticipates its future needs. Programs developed to engage and educate industry professionals play a vital role in this process, and help to ensure that Panasonic continues to deliver solutions that integrate with other suppliers' devices and provide added value over time.

There's no doubt challenges lie ahead – and you can count on Panasonic for the video surveillance solutions you'll need to overcome them.

Bill Taylor, President, Panasonic Systems Network Company of America

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Our line of i-Pro network cameras just keeps getting better with new additions to our selection of advanced dome and fixed megapixel H.264 cameras. And we've further enhanced i-Pro performance with our exclusive Super Dynamic camera technology – plus features like digital slip rings on our PTZ cameras, improved weather and vandal resistant solutions, and advanced Auto Back Focus cameras. That's the Panasonic difference.



WV-NW964
Super Dynamic III Weather Proof Day/Night
Dome Network Camera




- All-in-one outdoor unit
- Super Dynamic III (SDIII) technology delivers 128x wider dynamic range and Intelligent Technology features for exceptional images in virtually any lighting condition
- High sensitivity with Day/Night function: 0.5 lux (color) at f1.4, 0.04 lux (B/W) at f1.4
- 30x optical zoom lens: 3.8 mm ~ 114 mm (300x with digital zoom)
- Pan/Tilt speed of max. 400°/sec at preset mode and 0.065°/sec super fine control at manual mode
- Auto tracking: camera automatically pans and tilts to follow a moving subject and keep it in the center of the image
- Built-in Video Motion Detection with 4 programmable detection areas and 6 sensitivity levels
- Scene Change Detection alarms when lens is covered, spray painted, removed or defocused
- SD memory card slot for manual, alarm or network failure recording
- Auto Image Stabilization for applications where vibration or wind is a concern
- Built-in MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips
- MPEG-4 and JPEG dual stream output for simultaneous live monitoring and high resolution recording
- Progressive output with motion adaptive interlace/progressive conversion allows every image to be clear even when the object is moving
- “Drag and Zoom” operation enabling finer PTZ control
- Digital slip-ring transmission delivers higher image quality since data travels through compact slip-ring without any DA/AD conversion



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	540 lines in color, 570 lines in B/W
Minimum Illumination	0.5 lux in color, 0.04 lux in B/W (Sens up = OFF)
Dynamic Range	Super Dynamic III, 52dB
Ambient Temperature	-40° ~ 122°F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	SDIII, IP66, Day/Night, Auto Tracking, Image Stabilizer, Scene Change Detection, 360° map
Lens	3.8mm ~ 114mm/30x optical + 10x electronic (300x total)
Pan Range/Speed	360° endless/0.065° ~ 120°/sec
Presets	256
I/O Terminals	6
Power/Consumption	24V AC/19W camera, 85 W heater
Dimensions	9 7/16" x 15 9/16" (239mm x 395.5mm)
Weight (camera)	10.34 lbs (4.7kg)

Popular Accessories

MOUNTING BRACKETS							
Model No.	PWM20G	PWM20GB	PWM20GS	PWM30G	PWM30GB	PPRM30G	PPRM30GB
Description	Gooseneck – wall, Black	Gooseneck – wall, Beige	Gooseneck – wall, Silver	Parapet, Black	Parapet, Beige	Extended Parapet, Black	Extended Parapet, Beige
Page Ref.	98	98	98	98	98	98	98



WV-NS954

Super Dynamic III Day/Night Dome Network Camera

- Super Dynamic III (SDIII) technology delivers 128x wider dynamic range and Intelligent Technology features for exceptional images in virtually any lighting condition
- High sensitivity with Day/Night function: 0.5 lux (color) at f1.4, 0.04 lux (B/W) at f1.4
- IR cut filter switches on and off to ensure optimal picture quality in both color and B/W
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise and motion blur
- 30x optical zoom lens: 3.8 mm ~ 114 mm (300x with digital zoom)
- Pan/Tilt speed of max. 400°/sec at preset mode and 0.065°/sec super fine control at manual mode
- Auto tracking: camera automatically pans and tilts to follow a moving subject and keep it in center of image
- Built-in Video Motion Detection with 4 programmable detection areas and 6 sensitivity levels
- Scene Change Detection alarms when lens is covered, spray painted, removed or defocused
- SD memory card slot for manual, alarm or network failure recording
- Auto Image Stabilization for applications where vibration or wind is a concern
- Built-in MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips
- MPEG-4 and JPEG dual stream output for simultaneous live monitoring and high resolution recording
- Progressive output with motion adaptive interlace/progressive conversion allows every image to be clear even when the object is moving
- Digital slip-ring transmission delivers higher image quality since data travels through compact slip-ring without any DA/AD conversion
- "Drag and Zoom" operation enabling finer PTZ control
- 360° map shot: 8 thumbnail images at 45° intervals
- Full duplex 2-way audio



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	540 lines in color, 570 lines in B/W
Minimum Illumination	0.5 lux in color, 0.04 lux in B/W (Sens up = OFF)
Dynamic Range	Super Dynamic III, 52dB
Ambient Temperature	-14°~ 122°F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	SDIII, IP66, Day/Night, Auto Tracking, Auto Image Stabilization, Scene Change Detection, 360° map
Lens	3.8mm ~ 114mm/30x optical + 10x electronic (300x total)
Pan Range/Speed	360° endless/0.065°~ 120°/sec
Presets	256
I/O Terminals	6
Power/Consumption	24V AC/15 W
Dimensions	6 1/16" x 9 3/16" (154.5mm x 233mm)
Weight (camera)	4.84 lbs (2.2kg)

Popular Accessories

HOUSINGS					
Model No.	PID9	POD9C	POD9CW	POD9CWT	POD9CT
Type	Ceiling	Pendant	Wall	Wall	Pendant
Location	Indoor	Outdoor	Outdoor	Outdoor	Outdoor
Description	Steel upper housing	Silver color/clear dome	Silver color/clear dome	White color/clear dome	White color/clear dome
Comments	Tinted dome	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower
Page Ref.	91	94	94	94	94

MOUNTING BRACKETS						
Model No.	PWM9	WV-Q118	WV-CS3S	WV-Q116	WV-Q117	WV-Q105
Type	Wall	Wall	Smoke cover	Embedded ceiling mount	Suspended ceiling mount	Direct ceiling mount
Location	Indoor	Indoor		Indoor	Indoor	Indoor
Comments	White color	1" cable opening				
Page Ref.	98	99	—	99	99	98

WV-NS202A
Super Dynamic III Day/Night Dome Network Camera

- Super Dynamic III (SDIII) technology delivers 128x wider dynamic range and Intelligent Technology features for exceptional images in virtually any lighting condition
- Built-in MPEG-4 and JPEG digital signal output at VGA image size with up to 30 ips
- MPEG-4/JPEG dual stream output for simultaneous live monitoring and high resolution recording
- Progressive output with motion adaptive interlace/progressive conversion allows every frame to be clear even when the object is moving
- Power over Ethernet (PoE) IEEE 802.3af
- High sensitivity: Color: 0.7 lux (Sens up OFF), B/W: 0.5 lux (Sens up OFF)
- Simple Day/Night function (no IR cut filter)
- Up to 32x automatic electronic sensitivity enhancement
- Video Motion Detector with 4 programmable detection areas and 3 sensitivity levels
- 22x zoom lens with 10x digital zoom (220x total)
- Auto tracking: Pan and tilt automatically controlled to keep moving objects centered in screen
- "Drag and Zoom" operation enables finer control
- Multiple camera views from browser
- 64 presets
- 360 map shot: 8 thumbnail images at 45° intervals
- FTP client function enables periodic image data transfer or transfer upon alarm
- Alarm notification via e-mail
- SD memory card slot for manual, alarm or network failure recording
- One-touch fitting mechanism for easy installation
- Desktop/ceiling position choice for versatile installations
- 2-way audio (G.726, 32/16kbps)



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	VGA (640 x 480), QVGA (320 x 240)
Minimum Illumination	0.7 lux color, 0.5 lux b/w
Dynamic Range	Super Dynamic III, 52dB
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Progressive output/768 (H) x 494 (V)
Special Features	SDIII, MPEG-4/JPEG, SD card slot, PoE, Auto Tracking, 360° Map Shot
Lens	3.79mm ~ 83.4mm/22x optical + 10x electronic/F1.6 ~ 22
Pan Range/Speed/Angle	0° ~ 350°/100°/sec up to approx. 300°/sec
Presets	64
I/O Terminals	4
Power	12V DC, PoE (IEEE802.3af)
Dimensions	4 17/32" x 6 1/16" (115mm ~ 154mm)
Weight (camera)	1.87 lbs (850g)

Popular Accessories

HOUSINGS								
Model No.	PID5CN	PID5SN	PODV7CPNS	PODV7CWNS	POD9C	POD9CT	POD9CW	POD9CWT
Placement	Ceiling	Ceiling	Pendant	Wall	Pendant	Pendant	Wall	Wall
Style	Indoor	Indoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Description	Clear Dome Recessed Ceiling	Smoke Dome Recessed Ceiling	Clear Dome w/ 24VAC Heater/Blower	Clear Dome w/ 24VAC Heater/Blower	Silver color/clear dome, includes Heater/Blower	White color/clear dome, includes Heater/Blower	Silver color/clear dome, includes Heater/Blower	White color/clear dome, includes Heater/Blower
Page Ref.	90	90	95	95	94	94	94	94

MOUNTING BRACKETS					
Model No.	WV-Q105	WV-Q150S	WV-Q151S	WV-Q152S	WV-Q153
Type	Direct Ceiling	Wall	Embedded Ceiling	Ceiling	Dome Cover
Location	Indoor	Indoor	Indoor	Indoor	Indoor
Description		Smoke Dome (also available in Clear Dome, WV-Q150C)	Smoke Dome (also available in Clear Dome, WV-Q151C)	Smoke Dome (also available in Clear Dome, WV-Q152C)	
Page Ref.	98	99	99	99	—

i - P r o C A M E R A S



*Models WV-SF336/WV-SF335 only

Available: July 2010

**WV-SF336/WV-SF335/WV-SF332
Megapixel* Fixed Mini Dome Network Camera Series**



- Progressive scan ensures clear images with motion blur and no tearing
- Supports H.264/MPEG-4/JPEG video streams
- High sensitivity with automatic calibration for more details
- Panasonic uniphier technology for optimal performance
- Face detection for better subject identification
- Minimum illumination:
 - WV-SF336/WV-SF335: 0.3 lux in color, 0.2 lux in B/W
 - WV-SF332: 0.2 lux in color, 0.13 lux in B/W
- Auto Back Focus ensures easy installation and perfect focus in color and B/W modes (WV-SF336 only)
- Focus assist for on screen adjustments (WV-SF335/WV-SF332)
- Simple Day/Night for 24 hour viewing
- Power over Ethernet (PoE) IEEE 802.3af
- Two-way audio
- Analog video out
- IPv4/IPv6 protocol supported



Specs

Image sensor	1/3" MOS sensor
Resolution	1,280 x 960 (H.264, JPEG), 640 x 480 (VGA), 320 x 240 (QVGA) for models WV-SF336/335 / 800 x 600 (H.264), 640 x 480 (VGA), 320 x 240 (QVGA) for model WV-SF332
Min. Illum.	0.3 lux in color, 0.2 lux in B/W (WV-SF336/WV-SF335), 0.2 lux in color, 0.13 lux in B/W (WV-SF332)
Ambient Temp	14° ~ 122° F
Scan Method/Pixels	Progressive
Special Features	Face detection, Simple Day/Night, SDHC/SD, Adaptive Black Stretch, Auto Back Focus (WV-SF336 only)
Lens	2.8x vari-focal / 2.8 ~ 10mm
I/O Terminals	3
Power	12V DC, 630 mA / PoE IEEE 802.3af, 7.6W
Dimensions	5 1/8" x 3 5/8"
Weight (camera)	0.9 lbs (410g)

Popular Accessories

		
Model No.	WV-Q168	WV-CS5S
Description	Embedded ceiling mount	Smoked dome cover
Page Ref.	—	—

WV-NF302
Ruggedized Megapixel Day/Night Fixed Dome Network Camera

- 1280 x 960 megapixel high quality image for superior identification (JPEG)
- MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips
- Power over Ethernet (PoE) IEEE 802.3af
- MPEG-4 and JPEG dual stream output for simultaneous live monitoring and high resolution recording
- Progressive output provides clear images even when the subject is moving
- High sensitivity: 1.5 lux at f1.3 (wide) when used with clear dome cover
- Adaptive Black Stretch enhances the visibility of dark areas without compromising the bright areas
- Superior color reproduction by primary (RGB) color filter
- Up to 16x automatic electronic sensitivity enhancement
- Built-in 2.8 x 10mm, 3.6x vari-focal lens (plus up to 4x digital zoom)
- Video motion detection with 4 programmable detection areas and 15 step sensitivity
- Privacy Zone can mask up to 8 private areas
- Full duplex bi-directional audio allows interactive communication between camera and monitoring sites
- Focus assist: best focus position can be achieved with focus adjustment position on the screen
- SD memory card slot for manual recording, alarm recording and backup due to network failure
- Analog monitor output for easy installation
- Three-way hinge (horizontal, vertical and swivel rotation) for versatile installation
- Heavy duty metal body ensures 24/7 operation
- IPv4/IPv6 protocol supported
- Outdoor/indoor selectable light controls
- Prioritized stream control





Clear dome standard; smoked dome optional



Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	4VGA (1280 x 960), VGA (640 x 480), QVGA (320 x 240)
Minimum Illumination	1.5 lux w/clear dome (color), 0.9 lux w/clear dome (B/W)
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Progressive/1.296 (H) x 976 (V)
Special Features	MPEG-4/JPEG, SD card slot, PoE
Lens	3.6x vari-focal/2.8 ~ 10mm
I/O Terminals	3
Power	12V DC, 510mA, PoE (IEEE802.3af), 6.4 W
Dimensions	4 7/8" x 5 5/16"
Weight (camera)	2.05 lbs (930g)

Popular Accessories

		
Model No.	WV-Q173	WV-NF5S
Description	Recessed ceiling mount bracket	Smoked dome cover
Page Ref.	100	—



**WV-NF284
Color Fixed Mini Dome Network Camera**

- MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips
- Power over Ethernet (PoE) IEEE 802.3af
- MPEG-4 and JPEG dual stream output for simultaneous real time monitoring and high resolution recording
- Progressive output provides clear images even when the subject is moving
- High sensitivity: 1.5 lux at f1.3 (Wide)
- Electronic sensitivity enhancement: auto (up to 16x) / OFF
- 2.8 ~ 10 mm, 3.6x vari-focal Auto Iris lens
- Electronic shutter for anti-flicker
- Video Motion Detector (VMD) with 4 programmable detection areas and 6 sensitivity levels
- Monitor output for easier installation
- Up to 3x digital zoom controlled by browser
- SD Memory card slot for alarm recording and backup due to network failure
- Built-in microphone for audio (1-way)
- Alarm e-mail notification
- Multi-screen: images from 8 cameras can be displayed in 2 separate quad screens (JPEG only)
- Built-in network interface (10Base-T / 100Base-TX)
- FTP client function enables periodic image data transfer or transfer upon alarm



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	VGA (640 x 480), QVGA (320 x 240)
Minimum Illumination	1.5 lux with clear dome
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Progressive/659 (H) x 494 (V)
Special Features	MPEG-4/JPEG, SD card slot, PoE
Lens	3.6x vari-focal/2.8 ~ 10mm
I/O Terminals	3
Power	24V AC, 12V DC, PoE (IEEE802.3af)
Dimensions	4 13/16" x 5 3/8"
Weight (camera)	1.4 lbs (640g)

Popular Accessories

		
Model No.	WV-Q167	WV-CF4S
Description	Recessed ceiling mount bracket	Smoked dome cover
Page Ref.	100	—

WV-NW502S Super Dynamic Megapixel Vandal-Resistant Fixed Dome Network Camera

- Multiple H.264 high profile streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording
- Up to 30 fps full frame transmission at 1,280 x 960 image size (1.3 Megapixel mode)
- Super Dynamic and Adaptive Black Stretch (ABS) technologies deliver 128x wider dynamic range for exceptional images in virtually any lighting condition
- Up to 3 Megapixel (2,048 x 1,536) JPEG stream (3 Megapixel mode, JPEG only)
- High sensitivity with Day/Night function: 1.0 lux (Color), 0.08 lux (B/W) at f1.4 (1.3 Megapixel mode)
- Auto Back Focus (ABF) ensures easy installation and stable focus in both color and B/W modes
- Adaptive Digital Noise Reduction: integration of 2D-DNR and 3D-DNR ensures noise reduction in various conditions
- Progressive scan ensures clear images with less motion blur and no tearing even when the subject is moving
- Superior color reproduction
- Face detection technology detects the position of human face and sends information by XML or video stream
- Electronic sensitivity enhancement: auto (up to 16x) / off
- Video Motion Detector (VMD) with 4 programmable detection areas, 15 step sensitivity level and 10 step detection size
- Privacy Zone can mask up to 8 private areas
- 2.8 ~ 8.0 mm, 2.8x vari-focal Auto Iris lens
- Dehumidification device for use in various weather conditions
- Alarm sources including 3 terminal input, VMD and Panasonic alarm command
- Full duplex bi-directional audio
- Prioritized stream control
- SD/SDHC memory card slot for manual recording, alarm recording and backup upon network failure
- H.264/MPEG-4 max. bit rate/client and total bit rate control for flexible network traffic management
- Supplied meta data for VMD works with WJ-ND400 NVR
- IPv4/IPv6 protocol supported
- IP66 rated



Clear dome standard; smoked dome optional

Other Models Available

WV-NW502S/09	with 9-22mm lens
WV-NW502S/15	with 15-50mm lens
WV-NW502S/22	with 2.2mm lens



Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	2,048 x 1,536 (JPEG), 1,280 x 960 (H.264), 640 x 490 (MPEG-4)
Minimum Illumination	1.0 lux (1.3 megapixel), 2.0 lux (3 megapixel)
Ambient Temperature	-22° ~ 122° F
Scan Method/Pixels	Progressive scan/1,296 (H) x 976 (V) x2
Special Features	MEGA Super Dynamic w/Adaptive Black Stretch, H.264, Vandal Auto Back Focus, Face Detection, IPv4/IPv6
Lens	2.8x vari-focal/2.8 ~ 8mm
Power	12V DC, PoE
Dimensions	6 7/16" x 5 3/4" x 7 9/16" (164mm x 146mm x 191.5mm)
Weight (camera)	3.74 lbs (1.7kg)

Visit www.panasonic.com/megaSD for more details on Mega Super Dynamic technology including video demonstrations.

Popular Accessories

MOUNTING BRACKETS*

Model No.	PCM484S	PHM484S	PPM484S	PWM484S
Type	Corner	Hanging	Pole	Wall
Location	Outdoor	Outdoor	Outdoor	Outdoor
Page Ref.	100	100	100	100

*Note: Brackets are designed for surface mount cameras only

MISCELLANEOUS

Model No.	WV-CW4S	WV-Q169
Description	Smoked Dome Cover	Recessed Ceiling Mount
Page Ref.	—	100



WV-NW484S
Super Dynamic III Vandal-Resistant Day/Night Fixed Dome Network Camera

- Built-in MPEG-4 and JPEG digital signal output at VGA image size with up to 30 ips
- MPEG-4/JPEG dual stream output for simultaneous live monitoring and high resolution recording
- Vandal Auto Back Focus automatically adjusts camera focus when switching from color to B/W
- Progressive output with motion adaptive interlace/progressive conversion allows every frame to be clear even when the object is moving
- Super Dynamic III (SDIII) technology delivers 128x wider dynamic range and Intelligent Technology features for exceptional images in virtually any lighting condition
- High sensitivity with Day/Night function: 0.6 lux (Color), 0.08 lux (B/W) with clear dome cover at f1.4 (wide)
- Power over Ethernet (PoE) IEEE 802.3af (including optional heater)
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR ensures noise reduction in various conditions
- 3.8 ~ 8.0mm, 2x vari-focal lens with 3x digital zoom
- Scene Change Detection alarms when lens is covered, spray painted, removed or defocused
- Video motion detection with 4 programmable detection areas and 3 sensitivity levels
- Auto Image Stabilization for applications where vibration or wind is a concern
- Up to 32x automatic electronic sensitivity enhancement
- SD memory card slot for manual, alarm or network failure recording
- FTP client function enables periodic image data transfer or transfer upon alarm
- IP66 rated for water and dust resistance
- Dehumidification device for use in various weather conditions
- Three-way hinge (horizontal, vertical and swivel rotation) for easy installation
- Optional heater maintains operating temperature -22 °F ~ 122 °F



Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	VGA (640 x 480), QVGA (320 x 240)
Minimum Illumination	0.6 lux (DNR on) w/ clear dome
Ambient Temperature	-22° ~ 122° F (with optional heater WV-CW4H)
Scan Method/Pixels	Progressive output/768 (H) x 494 (V)
Special Features	SDIII, Vandal Auto Back Focus, MPEG-4/JPEG, Day/Night, IP66 rated
Lens	2x vari-focal/3.8 ~ 8mm
Power	24V AC, 12V DC, PoE (IEEE802.3af)
Dimensions	6 1/4" x 6" (159mm x 152.5mm)
Weight (camera)	4.9 lbs (1.92kg)

Popular Accessories

MOUNTING BRACKETS*

Model No.	PCM484S	PHM484S	PPM484S	PWM484S
Type	Corner	Hanging	Pole	Wall
Location	Outdoor	Outdoor	Outdoor	Outdoor
Page Ref.	100	100	100	100

*Note: Brackets are designed for surface mount cameras only

LENSES

Model No.	PLA22T3DN	PLZ15/33
Size	1/3"	1/3"
Iris	Auto	Auto
Type	Wide	Wide
Focal Length	2.2mm	15 - 50mm
Aperture	f1.2	f1.5
Page Ref.	87	87

MISCELLANEOUS

Model No.	WV-CW4H	WV-CW4C	WV-Q169
Description	Heater Unit	Clear Dome Cover	Recessed Ceiling Mount
Page Ref.	—	—	100

**WV-SP306/WV-SP305/WV-SP302
Megapixel* Fixed Network Camera Series**

- Progressive scan ensures clear images with motion blur and no tearing
- Supports H.264/MPEG-4/JPEG video streams
- High sensitivity with automatic calibration for more details
- Panasonic Uniphier technology for optimal performance
- Face detection for better subject identification
- Minimum illumination:
 - WV-SP306: 0.3 lux in color, 0.05 lux in B/W
 - WV-SP305: 0.3 lux in color, 0.2 lux in B/W
 - WV-SP302: 0.2 lux in color, 0.13 lux in B/W
- Auto Back Focus ensures easy installation and perfect focus in color and B/W modes (WV-SP306 only)
- Focus assist for on screen adjustments (WV-SP305/WV-SP302)
- Day/Night for 24 hour viewing (WV-SP306), simple Day/Night (WV-SP305/WV-SP302)
- Power over Ethernet (PoE) IEEE 802.3af
- Two-way audio
- Analog video out
- IPv4/IPv6 protocol supported



*Models WV-SP306/WV-SP305 only
Lens optional




Available: June 2010



Specs

Image sensor	1/3" MOS sensor
Resolution	1,280 x 960 (H.264, JPEG), 640 x 480 (VGA), 320 x 240 (QVGA) for models WV-SP306/305 / 800 x 600 (H.264), 640 x 480 (VGA), 320 x 240 (QVGA) for model WV-SP302
Min. Illum.	0.3 lux in color, 0.05 lux in B/W (WV-SP306), 0.3 lux in color, 0.2 lux in B/W (WV-SP305), 0.2 lux in color, 0.13 lux in B/W (WV-SP302)
Ambient Temp	14° ~ 122° F
Scan Method/Pixels	Progressive
Special Features	Face detection, Day/Night & Simple Day/Night, Adaptive Black Stretch, SDHC/SD, Auto Back Focus (WV-SP306 only)
I/O Terminals	3
Power	12V DC, 350 mA / PoE IEEE 802.3af, 4.4W
Dimensions	2 15/16" x 2 9/16" x 5 3/16"
Weight (camera)	0.9 lbs (approx. 400g)

Popular Accessories

LENSES			
Model No.	PLAMP2206	PTVR0916DC	WV-LZA62/2
Size	1/3"	1/3"	1/3"
Iris	Auto	Auto	Auto
Type	Wide	Vari-focal	2x Vari-focal
Focal Length	2.2mm	9-22mm	2.8-6mm
Aperture	f1.3	f1.6	f1.4(W), f2.1(T)
Page Ref.	87	87	86



*Lens Optional

WV-NP502 Super Dynamic Megapixel Network Camera*

- Multiple H.264 high profile streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording
- Up to 30 fps full frame transmission at 1,280 x 960 image size (1.3 Megapixel mode)
- Super Dynamic and Adaptive Black Stretch (ABS) technologies deliver 128x wider dynamic range for exceptional images in virtually any lighting condition
- Up to 3 Megapixel (2,048 x 1,536) JPEG stream (3 Megapixel mode, JPEG only)
- High sensitivity with Day/Night function: 1.0 lux (Color), 0.08 lux (B/W) at f1.4 (1.3 Megapixel mode)
- Auto Back Focus (ABF) ensures easy installation and stable focus in both color and B/W modes
- Adaptive Digital Noise Reduction: integration of 2D-DNR and 3D-DNR ensures noise reduction in various conditions
- Progressive scan ensures clear images with less motion blur and no tearing even when the subject is moving
- Superior color reproduction by primary color filter
- Electronic sensitivity enhancement: auto (up to 16x) / off
- Selectable light control modes
- Video Motion Detector (VMD) with 4 programmable detection areas, 15 step sensitivity level and 10 step detection size
- Face detection technology detects the position of human face and sends information by XML or video stream
- Privacy Zone can mask up to 8 private areas
- Full duplex bi-directional audio
- Prioritized stream control
- SD/SDHC memory card slot for manual recording, alarm recording and backup upon network failure
- H.264/MPEG-4 max. bit rate/client and total bit rate control offers flexible network traffic management
- IPv4/IPv6 protocol supported
- Analog monitor output for easier installation



Visit www.panasonic.com/megaSD for more details on Mega Super Dynamic technology including video demonstrations.

Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	2,048 x 1,536 (JPEG), 1,280 x 960 (H.264), 640 x 490 (MPEG-4)
Minimum Illumination	1.0 lux (1.3 megapixel), 2.0 lux (3 megapixel)
Ambient Temperature	22° ~ 122° F
Scan Method/Pixels	Progressive scan/1,296 (H) x 976 (V) x2
Special Features	MEGA Super Dynamic w/ Adaptive Black Stretch, H.264, Face Detection, IPv4/IPv6
I/O Terminals	3
Power	12V DC, PoE
Dimensions	2 15/16" x 2 9/16" x 5 3/16" (75mm x 65mm x 132.5mm)
Weight (camera)	0.95 lbs (430g)

Popular Accessories

LENSES				
Model No.	PLAMP0550	PLAMP2406	PLAMP2812	WV-LZA62/2
Size	1/3"	1/3"	1/3"	1/3"
Iris	Auto	Auto	Auto	Auto
Type	10x	2.5x	4x	2x Vari-focal
Focal Length	5-50mm	2.4-6mm	2.8-12mm	2.8-6mm
Aperture	f1.4	f1.2	f1.4	f1.4(W), f2.1(T)
Page Ref.	87	87	87	86

HOUSINGS		
Model No.	POH1000	POH1500
Placement	Outdoor	Outdoor
Style	Bullet	Bullet
Description	10" - Ltwt. Aluminum	15" - Ltwt. Aluminum
Comments		Available with Heater/Blower (POH1500HB)
Page Ref.	96	96

WV-NP304
Megapixel Day/Night Network Camera*

- 1280 x 960 megapixel high quality image for superior identification (JPEG)
- MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips
- MPEG-4 and JPEG dual stream output for simultaneous live monitoring and high resolution recording
- Progressive output provides clear images even when the subject is moving
- High sensitivity: 1.5 lux (color) at f1.4
- Adaptive Black Stretch enhances the visibility of dark areas without compromising the bright areas
- Flexible power sources: Power over Ethernet (PoE) IEEE 802.3af, 12 V DC
- Superior color reproduction by primary (RGB) color filter
- Up to 16x automatic electronic sensitivity enhancement
- Video Motion Detection with 4 programmable detection areas and 15 step sensitivity
- Up to 4x digital zoom
- Full duplex bi-directional audio allows interactive communication between camera and monitoring sites
- Focus assist: best focus position can be achieved with focus adjustment position on the screen
- SD memory card slot for manual, alarm or network failure recording
- Analog monitor output for easier installation
- IPv4/IPv6 protocol supported
- Priority stream control
- Privacy zone can mask up to 8 areas
- Selectable light controls



*Lens Optional



Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	4VGA (1280 x 960), VGA (640 x 480), QVGA (320 x 240)
Minimum Illumination	1.5 lux (color)
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Progressive/1,296 (H) x 976 (V)
Special Features	MPEG-4/JPEG, SD card slot, PoE
I/O Terminals	3
Power	12V DC, 530mA, PoE (IEEE802.3af), 6.4W
Dimensions	2 13/16" x 2 9/16" x 6 1/4"
Weight (camera)	1.03 lbs (470g)

Popular Accessories

LENSES				
Model No.	PLAMP0550	PLAMP2406	PLAMP2812	WV-LZA62/2
Size	1/3"	1/3"	1/3"	1/3"
Iris	Auto	Auto	Auto	Auto
Type	10x	2.5x	4x	2x Vari-focal
Focal Length	5-50mm	2.4-6mm	2.8-12mm	2.8-6mm
Aperture	f1.4	f1.2	f1.4	f1.4(W), f2.1(T)
Page Ref.	87	87	87	86

HOUSINGS	
Model No.	POH1000 POH1500
Placement	Outdoor Outdoor
Style	Bullet Bullet
Description	10" - Ltwt. Aluminum 15" - Ltwt. Aluminum
Comments	Available with Heater/Blower (POH1500HB)
Page Ref.	96 96



*Lens Optional

WV-NP244
Color Network Camera*

- MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips
- Power over Ethernet (PoE) IEEE 802.3af
- MPEG-4 and JPEG dual stream output for simultaneous real time monitoring and high resolution recording
- Progressive output provides clear images, even when the subject is moving
- High sensitivity: 1.1 lux at f1.2, 1.5 lux at f1.4
- Electronic sensitivity enhancement: auto (up to 16x) / OFF
- Video Motion Detector (VMD) with 4 programmable detection areas and 6 sensitivity levels Monitor output for easier installation
- Up to 3x digital zoom with controlled by browser
- SD Memory card slot for alarm recording and backup upon network failure
- Alarm sources including terminal input, VMD and Panasonic alarm command can trigger actions including SD memory recording/FTP image transfer, E-mail notification, alarm indication, terminal output and Panasonic protocol output
- Built-in microphone for audio (1-way)
- Electronic shutter for anti-flicker
- Multi-screen: images from 8 cameras can be displayed in 2 separate quad screens (JPEG only)
- FTP client function enables periodic image data transfer or transfer upon alarm
- Alarm e-mail notification



Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	VGA (640 x 480), QVGA (320 x 240)
Minimum Illumination	1.1 lux
Ambient Temperature	14° ~ 122° F
Scan Method	Progressive
Special Features	MPEG-4/JPEG, SD Card Slot, PoE
I/O Terminals	4
Power	24V AC, 12V DC, PoE (IEEE802.3af)
Dimensions	2 13/16" x 2 9/16" x 6 1/4" (72mm x 65mm x 158mm)
Weight (camera)	0.99 lbs (450g)

Popular Accessories

LENSES			
Model No.	WV-LA2R8C3B	WV-LZ62/8S	WV-LZA61/2S
Size	1/3"	1/3"	1/3"
Iris	Auto	Auto	Auto
Type	Super Wide	8x Vari-focal (ALC)	2x Vari-focal (ALC)
Focal Length	2.8mm	5-40mm	3.8-8mm
Aperture	f1.3	f1.6 (W) - f1.9 (T)	f1.4 (W) - f1.8 (T)
Page Ref.	86	86	86


HOUSINGS			
Model No.	POH1000	POH1500	PMEH8A
Placement	Outdoor	Outdoor	Indoor
Style	Bullet	Bullet	Wedge
Description	10" - Ltwt. Aluminum	15" - Ltwt. Aluminum	High impact metal
Comments	Available with Heater/Blower (POH1500HB)	Available with Heater/Blower (POH1500HB)	Vandal-Proof
Page Ref.	96	96	89

Super Dynamic Technology – the Panasonic difference.

Imaging performance is dependent on more than just chipsets. It's Intelligent Technology that sets superior cameras apart – with advanced signal processing that drives image sensors and enables innovative features. Cameras with Panasonic's Super Dynamic imaging technology deliver performance that's unparalleled in the industry. They're designed to capture high resolution images like the human eye – regardless of highly contrasted lighting conditions within a scene, in direct sunlight or the dim of night. With advanced features like Auto Back Focus, Adaptive Black Stretch, Auto Image Stabilization, Auto Tracking, and on-board video analytics that make ordinary images clearly extraordinary.

Super Dynamic Intelligent Technology only available from Panasonic.

Super Dynamic Technology Comparison Chart

Features/Technology	Super Dynamic III	SD5	Mega Super Dynamic
			
Camera Type	Analog and Network	Analog	Network
Models	WV-CW974, WV-CW964, WV-CS954, WV-CW384, WV-CP484, WV-CP480, WV-NW964, WV-NS954, WV-NS202A, WV-NW484S	WV-CW504S, WV-CW504F, WV-CP504, WV-CP500	WV-NW502S, WV-NP502
Dynamic Range	128x	128x	128x (@ 1.3 megapixel)
Auto Back Focus (ABF)*	Yes	Yes	Yes
Adaptive Black Stretch (ABS)	Yes	Yes	Yes
Sensitivity (Color)	0.6 lux	0.3 lux	1.0 lux
Digital Noise Reduction	Yes	Yes	Yes
Resolution	540 lines (horizontal), 640 x 480 (VGA)	650 lines (horizontal)	2,048 x 1,536 (@ 3 megapixel)
Video Motion Detection (VMD)	Video Motion Detection and scene change detection when lens is covered, defocused, removed or spray painted	intelligent VMD (i-VMD) including Video Motion Detection, object detection (removal and left behind), scene change detection when lens is covered defocused, removed or spray painted	Video Motion Detection
Face Detection	No	No	Yes
Auto Image Stabilization	Yes	Yes	Yes

*Refer to individual spec sheets for specific camera performance.

i-Pro Network Camera Lineup Chart



Model	WV-NW964	WV-NS954	WV-NS202A	WV-NW502S	WV-NW484S	WV-SF336/335/332
Camera Type	Outdoor PTZ	PTZ	PTZ	3.0 Megapixel vandal	Vandal dome	1.3 Megapixel* dome
Super Dynamic	SDIII	SDIII	SDIII	Mega Super Dynamic	SDIII	ABS**
Imaging Device	1/4" Progressive Output	1/4" Progressive Output	1/4" Progressive Output	1/3" Progressive Scan	1/3" Progressive Output	1/3" MOS Sensor Progressive Scan
Compression	MPEG-4/JPEG	MPEG-4/JPEG	MPEG-4/JPEG	H.264/MPEG-4/JPEG	MPEG-4/JPEG	H.264/MPEG-4/JPEG
Day/Night	Yes	Yes	Yes (Simple)	Yes	Yes	Yes (Simple)
Auto Back Focus	Auto focus	Auto focus	Auto focus	Yes	Yes	Yes (WV-SF306)
PoE	No	No	Yes	Yes	Yes	Yes
Minimum Illumination <small>(w/clear dome when applicable)</small>				megapixel-1.3: 1.0lux; 3: 2.0lux		WV-SF336/335: 0.3lux in color, 0.2lux in B/W 0.019lux in color, 0.013lux in B/W
Color	0.5lux	0.5lux	0.7lux	megapixel-1.3: 0.06lux; 3: 0.12lux 16x sens up (16/30 s)	0.6lux	
Color w/enhancement	0.02lux @ 32x sens up	0.02lux @ 32x sens up	0.02lux @ 32x sens up	megapixel-1.3: 0.08lux; 3: 0.16lux	0.019lux @ 32x sens up	WV-SF332: 0.2lux in color, 0.13lux in B/W 0.013lux in color, 0.009lux in B/W
B/W	0.04lux	0.04lux	0.5lux	megapixel-1.3: 0.005lux; 3: 0.001lux 16x sens up (16/30 s)	0.08lux	
B/W w/enhancement	0.0013lux @ 32x sens up	0.0013lux @ 32x sens up	0.015lux @ 32x sens up		0.003lux @ 32x sens up	
Key Features	Auto Tracking Drag and Zoom 360° map shot Auto Image Stabilization Motion detection Digital slip ring	Auto Tracking Drag and Zoom 360° map shot Auto Image Stabilization Motion detection Digital slip ring	Auto Tracking Drag and Zoom 360° map shot Alarm function Motion detection	H.264 Adaptive Black Stretch 3D Digital Noise Reduction Face Detection IP v4/v6	Vandal ABF Alarm function Motion detection Dehumidification device Heater PoE***	SmartHD Adaptive Black Stretch Face Detection Auto Back Focus (WV-SF336 only)
fps JPEG	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA, 5fps@2,048 x 1,536	Up to 30fps@VGA	Up to 30fps@VGA
fps MPEG-4	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA
fps H.264	—	—	—	Up to 30fps@1,280 x 960	—	Up to 30fps@VGA
Image Resolution	max 640 x 480 (JPEG & MPEG-4)	max 640 x 480 (JPEG & MPEG-4)	max 640 x 480 (JPEG & MPEG-4)	max 2,048 x 1,536 (JPEG) max 1,280 x 960 (H.264) max 640 x 480 (MPEG-4)	max 640 x 480 (JPEG & MPEG-4)	max 1,280 x 960 (H.264) max 800 x 600 (WV-SF332)
Audio Capability	2-way	2-way	2-way (half-duplex)	2-way	No	2-way
SD Memory Card Slot	Yes (mini)	Yes	Yes	Yes (SDHC)	Yes	Yes (SDHC)
Lens Type	3.8mm~114mm	3.8mm~114mm	3.8mm~83mm	2.8x vari-focal 2.8mm~8mm	2x vari-focal 3.8mm~8.0mm	2.8x vari-focal 2.8mm~10.0mm
Zoom	30x optical 10x electronic	30x optical 10x electronic	22x optical 10x electronic	2.8x optical 4x electronic	2x optical 4x electronic	2.8x optical
Network	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)
Power	24VAC	24VAC	12VDC/PoE	12VDC/PoE	24VAC/12VDC/PoE	12VDC/PoE
I/O Terminals	3	3	3	3	3	3
Power Consumption	~85 W (heater on)	~15 W	DC 1,000 mA PoE 12.0 W	12VDC: 630 mA PoE 7.6W	AC ~16 W DC 920 mA PoE 12.0 W	12VDC: 630 mA PoE 7.6W

*Models WV-SF336/WV-SF335 only **Adaptive Black Stretch ***Heater optional

i-Pro Network Camera Lineup Chart



Model	WV-NF302	WV-NF284	WV-NP502	WV-SP306/305/302	WV-NP304	WV-NP244
Camera Type	1.3 Megapixel ruggedized fixed dome	Fixed dome	3.0 Megapixel box	1.3 Megapixel* box	1.3 Megapixel box	Fixed box
Super Dynamic	ABS**	No	Mega Super Dynamic	ABS**	ABS**	No
Imaging Device	1/3" Progressive Scan	1/4" Progressive Scan	1/3" Progressive Scan	1/3" MOS Sensor Progressive Scan	1/3" Progressive Scan	1/3" Progressive Scan
Compression	MPEG-4/JPEG	MPEG-4/JPEG	H.264/MPEG-4/JPEG	H.264/MPEG-4/JPEG	MPEG-4/JPEG	MPEG-4/JPEG
Day/Night	Yes (Simple)	No	Yes	Yes (Simple)	Yes (Simple)	No
Auto Back Focus	Focus assist	No	Yes	Yes (WV-SP306)	Focus assist	No
PoE	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Illumination (w/clear dome when applicable)			megapixel-1.3: 1.0lux; 3: 2.0lux	WV-SP306: 0.3 lux in color, 0.05 lux in B/W		
Color	1.5lux	1.5lux	megapixel-1.3: 0.06lux; 3: 0.12lux 16x sens up (16/30 s)	WV-SP306: 0.019 lux in color, 0.003 lux in B/W WV-SP305: 0.3 lux in color, 0.2 lux in B/W	1.5lux	1.1lux
Color w/enhancement B/W	0.09lux @ 16x sens up 0.9lux	0.19lux @ 8x sens up	megapixel-1.3: 0.08lux; 3: 0.16lux	WV-SP305: 0.019 lux in color, 0.013 lux in B/W	0.09lux @ 16x sens up 0.9lux	0.07lux @ 16x sens up
B/W w/enhancement	0.05lux @ 16x sens up		megapixel-1.3 : 0.005lux; 3: 0.001lux 16x sens up (16/30 s)	WV-SP302: 0.2 lux in color, 0.13 lux in B/W WV-SP302: 0.013 lux in color, 0.009 lux in B/W	0.05lux @ 16x sens up	
Key Features	Focus assist Alarm function Motion detection Stream priority mode IP v4/v6	Alarm function Motion detection	H.264 Adaptive Black Stretch 3D Digital Noise Reduction Face Detection IP v4/v6	SmartHD Adaptive Black Stretch Face Detection Auto Back Focus (WV-SF336 only)	Focus assist Alarm function Motion detection Stream priority mode IP v4/v6	Alarm function Motion detection
fps JPEG	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA, 5fps@2,048 x 1,536	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA
fps MPEG-4	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA	Up to 30fps@VGA
fps H.264	—	—	Up to 30fps@1,280 x 960	Up to 30fps@VGA	—	—
Image Resolution	max 1,280 x 960 (JPEG) max 640 x 480 (MPEG-4)	max 640 x 480 (JPEG & MPEG-4)	max 2,048 x 1,536 (JPEG) max 1,280 x 960 (H.264) max 640 x 480 (MPEG-4)	max 1,280 x 960 (H.264) max 800 x 600 (WV-SP302)	max 1,280 x 960 (JPEG) max 640 x 480 (MPEG-4)	max 640 x 480 (JPEG & MPEG-4)
Audio Capability	2-way	1-way	2-way	2-way	2-way	1-way
SD Memory Card Slot	Yes	Yes	Yes (SDHC)	Yes (SDHC)	Yes	Yes
Lens Type	3.6x vari-focal 2.8~10mm	3.6x vari-focal 2.8~10mm	Optional	Optional	Optional	Optional
Zoom	3.6x optical 4x electronic	3.6x optical 3x electronic	4x electronic	—	4x electronic	3x electronic
Network	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)	10BASE-T/ 100BASE-TX (RJ-45)
Power	12VDC/PoE	24VAC/12VDC/PoE	12VDC/PoE	12VDC/PoE	24VAC/12VDC/PoE	24VAC/12VDC/PoE
I/O Terminals	3	3	3	3	3	3
Power Consumption	DC 510 mA PoE 6.4 W	AC ~4.2 W DC 350 mA PoE 4.0 W	12VDC: 630 mA PoE 7.6W	12VDC: 350 mA PoE 4.4W	AC ~5.2 W DC 530 mA PoE 6.4 W	AC ~4.8 W DC 4.8 W PoE 4.2 W

*Models WV-SP306/WV-SP305 only

**Adaptive Black Stretch

NETWORK CAMERAS



**BB-HCM581A/BB-HCM580A
PTZ Network Cameras**

- 42x zoom (21x optical)
- High-speed 350° pan / 210° tilt with presets
- Power over Ethernet (PoE) IEEE 802.3af compliant (BB-HCM581A only)
- Progressive scan
- Analog video output
- Simultaneous MPEG-4 and JPEG video streams
- SD card recording
- 0.09 lux color night view mode
- Up to 30 frames per second CCD
- Full screen monitoring
- Remote monitoring from cell phone
- 4-up, 9-up and 16-up multi-camera pages
- Up to 30 video users
- Built in web server/IP address (IPv4/v6)
- Two way audio capability (BB-HCM581A only)
- Sensor input to trigger movement (BB-HCM581A only)
- Email triggered by motion detection, sensor alert, timer
- Password protection
- Plug & play installation
- Multi-language interface
- Image date and time stamp

Popular Accessory

Photo Not Available

Model No.	BB-HCA3A
Description	AC power supply
Page Ref.	—

NETWORK CAMERAS

BB-HCM547A
Outdoor* Mini Dome Network Camera

- Ceiling mount
- Pan/Tilt/2.3 auto vari-focal lens
- Power over Ethernet (PoE) IEEE 802.3af compliant
- Progressive scan
- 2.3 optical, 2x digital zoom
- Analog video output
- Simultaneous MPEG-4 and JPEG video streams
- SD card recording with audio
- 0.2 lux color night view mode
- Up to 30 frames per second MAICO
- Full screen monitoring
- Remote monitoring from cell phone
- 4-up, 9-up and 16-up multi-camera pages
- Up to 30 video users
- Built in web server/IP address (IPv4/v6)
- Two way audio capability
- Built-in microphone



*Splash resistant body: camera placement under an eave is recommended

Popular Accessory

<i>Photo Not Available</i>	
Model No.	BB-HCA3A
Description	AC power supply
Page Ref.	—

BB-HCM527A
Mini Dome Network Camera

- Ceiling mount
- Pan/tilt/ 2.3 auto vari-focal lens
- Power over Ethernet (PoE) IEEE 802.3af compliant
- Progressive scan
- 2.3 optical, 2x digital zoom
- Analog video output
- Simultaneous MPEG-4 and JPEG video streams
- SD card recording with audio
- 0.2 lux color night view mode
- Up to 30 frames per second MAICO
- Full screen monitoring
- Remote monitoring from cell phone
- 4-up, 9-up and 16-up multi-camera pages
- Up to 30 video users
- Built in web server/IP address (IPv4/v6)
- Two way audio capability
- Built-in microphone



Popular Accessories

<i>Photo Not Available</i>		
Model No.	BB-HCA3A	BB-HCA10A
Description	AC power Supply	Flush Mount Ceiling Bracket
Page Ref.	—	—

NETWORK CAMERAS



*Splash resistant body: camera placement under an eave is recommended



**BB-HCM735A/BB-HCM715A
Megapixel Network Cameras**

- Sends H.264 or MPEG-4 and JPEG images simultaneously
- Power over Ethernet (PoE) IEEE 802.3af compliant
- Progressive scan
- Splash resistant body for outdoor* use (BB-HCM735A only)
- Image transfer by timer, alarm, motion, sound or shock
- Pan, tilt, 6x digital zoom with presets
- 0.07 lux color night view mode
- Up to 30 frames per second
- SD memory card recording
- Remote monitoring from cell phone
- 4-up, 9-up, 16-up multi-cameras pages
- Built-in web server/IP address (IPv4/v6)
- Two way audio capability
- Password protection
- Plug & play installation
- Multi-language interface
- Image date and time stamp

Popular Accessory

Photo Not Available

Model No.	BB-HCA7A
Description	AC power supply
Page Ref.	—

NETWORK CAMERAS

**BB-HCM531A/BB-HCM511A
PTZ Network Cameras**

- CPan/tilt/digital zoom with presets
- Power over Ethernet (PoE) IEEE 802.3af compliant
- Progressive scan
- Splash resistant for outdoor* use (BB-HCM531A only)
- Analog video output
- Simultaneous MPEG-4 and JPEG streams
- SD card recording with audio
- 0.2 lux color night view mode
- Up to 30 frames per second CCD
- Full screen monitoring
- Remote monitoring from cell phone
- 4-up, 9-up and 16-up multi-camera pages
- Up to 30 video users
- Built in web server/IP address (IPv4/v6)
- Two way audio capability
- Built-in microphone
- Dual sensor input to trigger movement
- Image transfer by motion detection, sensor alert, timer
- Password protection
- Plug & play installation
- Multi-language interface
- Image date and time stamp



*Splash resistant body: camera placement under an eave is recommended



Popular Accessory

Photo Not Available

Model No.	BB-HCA3A
Description	AC power supply
Page Ref.	—


NETWORK CAMERAS



**BB-HCM705A/BB-HCM701A
Mini Dome Network Cameras**

- Sends H.264 or MPEG-4 and JPEG images simultaneously
- Power over Ethernet (PoE) IEEE 802.3af compliant
- Progressive scan
- Compact size and flexible installation
- Image transfer by timer, alarm, motion, sound or shock
- Pan, tilt, 6x digital zoom with presets (BB-HCM705A), 3x digital zoom (BB-HCM701A)
- 0.07 lux color night view mode (BB-HCM705A), 0.04 lux (BB-HCM701A)
- Up to 30 frames per second
- SD memory card recording
- Remote monitoring from cell phone
- 4-up, 9-up, 16-up multi-cameras pages
- Built-in web server/IP address (IPv4/v6)
- Built-in microphone
- Password protection
- Plug & play installation
- Multi-language interface
- Image date and time stamp

Popular Accessories

	<i>Photo Not Available</i>		<i>Photo Not Available</i>
Model No.	BB-HCA7A	PRCM1	BB-HCA11A
Description	AC power Supply	Embedded Mount Bracket	Bracket
Page Ref.	—	98	—

Camera/Recorder Bundles

WJ-ND200/705A4	WJ-ND200 NVR with 320GB storage and (4) BB-HCM705A network cameras
WJ-ND200/701A4	WJ-ND200 NVR with 320GB storage and (4) BB-HCM701A network cameras

NETWORK CAMERAS

BB-HCM403A
Mini Dome Network Camera

- Ceiling mount with tilt motion
- Power over Ethernet (PoE) IEEE 802.3af compliant
- SD memory card recording
- 0.2 lux color night view mode
- Up to 30 frames per second CCD
- Remote monitoring from cell phone
- 4-up and 12-up multi-camera pages
- Up to 30 video users
- Built in web server/IP address (IPv4/v6)
- Two way audio capability
- Built-in microphone
- Sensor input to trigger movement
- Image transfer by motion detection, sensor alert, timer
- Password protection
- Plug & play installation



Popular Accessory

Photo Not Available	
Model No.	BB-HCA3A
Description	AC power supply
Page Ref.	—

BB-HCM371A
Wireless Pan/Tilt Network Camera

- 802.11g/b wireless
- Pan/tilt/digital zoom with presets
- Splash resistant for outdoor* use
- SD card recording
- 0.2 lux color night view mode
- Up to 30 frames per second CCD
- Remote monitoring from cell phone
- 4-up and 12-up multi-camera pages
- Up to 30 video users
- Built in web server/IP address (IPv4/v6)
- Two way audio capability
- Built-in microphone
- Dual sensor input to trigger movement
- Image transfer by motion detection, sensor alert, timer
- Password protection
- Plug & play installation



*Splash resistant body: camera placement under an eave is recommended

RECORDING SOFTWARE



BB-HNP17A Camera Management Recording Software

- Images can be recorded for up to 64 cameras
- Record and play H.264, MPEG-4 and JPEG images
- Easy to use graphical user interface (GUI), simplified icons
- Customizable settings and browser screens
- Remote access by browser
- Alarm trigger recording
- Scheduled preset position recording
- E-mail alert when alarm is detected
- Search images quickly via keyword or date/time



BB-HNP15A Camera Management Recording Software

- Images for up to 64 cameras can be recorded
- Record and play images with audio
- Search images quickly via keyword or date/time
- Customizable settings and browser screens
- Motion detection function activates when moving objects/subjects are detected
- Recording capacity limit function sets the maximum amount of data to be recorded on the hard disk of the PC for each camera
- Automatic back-up

BB-HCS301A
Network Camera Server

- Convert nearly any video source to an internet video stream
- Analog video conversion to Motion JPEG
- SD memory card recording
- Up to 30 frames per second
- Remote monitoring from cell phone
- 4-up and 12-up multi-camera pages
- Up to 30 video users (stack up to 5 units for 150 users)
- Built in web server/IP address (IPv4/v6)
- Two way audio capability
- Sensor input
- Image transfer by motion detection, sensor alert, timer
- Password protection
- Plug & play installation



BB-HGW700A
Camera Management System

- Automatically configure up to 16 network cameras
- Flexible 802.11b/g wireless communication
- Connect multiple devices through a single line
- Built-in firewall protection
- Powerful 64/128/152-bit WEP encryption



Network Camera Lineup Chart



Model	BB-HCM705A	BB-HCM701A	BB-HCM715A	BB-HCM527A	BB-HCM581A	BB-HCM580A
Camera Type	1.3 Megapixel fixed dome	Fixed dome	1.3 Megapixel pan/tilt	PTZ	PTZ	PTZ
Imaging Device	1/3" MOS Progressive Scan	1/5" CMOS Progressive Scan	1/3" MOS Progressive Scan	1/3.6" MOS Progressive Scan	1/4" CCD Progressive Scan	1/4" CCD Progressive Scan
Compression	Motion JPEG, MPEG-4, H.264	Motion JPEG, MPEG-4, H.264	Motion JPEG, MPEG-4, H.264	Motion JPEG, MPEG-4	Motion JPEG, MPEG-4	Motion JPEG, MPEG-4
PoE	Yes	Yes	Yes	Yes	Yes	No
Minimum Illumination (color night view mode)	0.6lux (0.07lux) 2x2 Pixel Binning: 0.3lux (0.04lux)	1.5lux (0.4lux)	0.6lux (0.07lux) 2x2 Pixel Binning: 0.3lux (0.04lux)	2lux (0.2lux)	2lux (0.09lux)	2lux (0.09lux)
Key Features	Shock detection Sound detection Motion detection Cell phone monitoring ¹	Shock detection Sound detection Motion detection Cell phone monitoring ¹	Motion detection Cell phone monitoring ¹	Motion detection Cell phone monitoring ¹	Motion detection Cell phone monitoring ¹	Motion detection Cell phone monitoring ¹
Frames Per Second	Up to 30	Up to 30	Up to 30	Up to 30	Up to 30	Up to 30
Image Resolution	1,280 x 960 (Quad-VGA)	640 x 480 (VGA)	1,280 x 960 (Quad-VGA)	640 x 480 (VGA)	640 x 480 (VGA)	640 x 480 (VGA)
Audio Capability	1-way monitoring (camera to PC) Built-in microphone	1-way monitoring (camera to PC) Built-in microphone	2-way (half duplex) Built-in microphone External microphone input	2-way (half duplex) Built-in microphone External microphone input	2-way (half duplex) External microphone input ²	No
SD Memory Card Slot	Yes (SD/SDHC)	Yes (SD/SDHC)	Yes (SD/SDHC)	Yes (SD/SDHC)	Yes (SD/SDHC)	Yes (SD/SDHC)
Lens Type Viewing Angle (Horiz/Vert) Pan (Horiz/Vert) Tilt (Horiz/Vert)	f2.4 69°/51° 20°/104° 57°/114°	f2.0 66°/50° 20°/104° 57°/114°	f2.4 69°/51° 104° 53°	f1.9 (wide)-f2.8 (tele) 73°/55° 350° 82°	f1.6 (wide)-f3.6 (tele) 51°/38° 350° 120° on table/90° on ceiling	f1.6 (wide)-f3.6 (tele) 51°/38° 350° 120° on table/90° on ceiling
Zoom	6x zoom (2x Ex zoom, 3x digital zoom)	3x digital zoom	6x zoom (2x Ex zoom, 3x digital zoom)	4.6x (2.3x optical, 2x digital)	42x (21x optical, 2x digital)	42x (21x optical, 2x digital)
Network	10/100 Base-TX	10/100 Base-TX	10/100 Base-TX	10/100 Base-TX	10/100 Base-TX	10/100 Base-TX
I/O Terminals	1	1	3	3	3	3
Analog Video Output	No	No	NTSC/PAL	NTSC/PAL	NTSC/PAL ²	NTSC/PAL
Security	User ID/Password, SSL	User ID/Password, SSL	User ID/Password, SSL	User ID/Password, SSL	User ID/Password	User ID/Password
Operating Temperature	32°F – 104°F	32°F – 104°F	32°F – 104°F	32°F – 104°F	32°F – 104°F	32°F – 104°F
Operating Humidity	20% to 80% (No condensation)	20% to 80% (No condensation)	20% to 80% (No condensation)	20% to 80% (No condensation)	20% to 80% (No condensation)	20% to 80% (No condensation)

¹Only still images in JPEG format can be displayed on a cell phone.

²Connection with external devices requires the included Audio/Video Cable.

Network Camera Lineup Chart



Model	BB-HCM511A	BB-HCM403A	BB-HCM735A	BB-HCM547A	BB-HCM531A	BB-HCM371A
Camera Type	Pan/tilt	Fixed	Outdoor* 1.3 Megapixel pan/tilt	Outdoor* PTZ	Outdoor* Pan/tilt	Wireless Outdoor* Pan/tilt
Imaging Device	1/4" CCD Progressive Scan	1/4" CCD Progressive Scan	1/3" MOS Progressive Scan	1/3.6" MOS Progressive Scan	1/4" CCD Progressive Scan	1/4" CCD Progressive Scan
Compression	Motion JPEG, MPEG-4	Motion JPEG	Motion JPEG, MPEG-4, H.264	Motion JPEG, MPEG-4	Motion JPEG, MPEG-4	Motion JPEG
PoE	Yes	Yes	Yes	Yes	Yes	No
Minimum Illumination (color night view mode)	2lux (0.2lux)	3lux (0.2lux)	0.6lux (0.07lux) 2x2 Pixel Binning: 0.3lux (0.04lux)	2lux (0.2lux)	2lux (0.2lux)	3lux (0.2lux)
Key Features	Motion detection Cell phone monitoring ¹	Motion detection Cell phone monitoring ¹	Motion detection Cell phone monitoring ¹ Splash resistance (IP55)	Motion detection Cell phone monitoring ¹ Splash resistance	Motion detection Cell phone monitoring ¹ Splash resistance	Motion detection Cell phone monitoring ¹ Splash resistance
Frames Per Second	Up to 30	Up to 30	Up to 30	Up to 30	Up to 30	Up to 30
Image Resolution	640 x 480 (VGA)	640 x 480 (VGA)	1,280 x 960 (Quad-VGA)	640 x 480 (VGA)	640 x 480 (VGA)	640 x 480 (VGA)
Audio Capability	2-way (half duplex) Built-in microphone External microphone input	2-way (half duplex) Built-in microphone External microphone input	2-way (half duplex) Built-in microphone External microphone input	2-way (half duplex) Built-in microphone External microphone input	2-way (half duplex) Built-in microphone External microphone input	2-way (half duplex) Built-in microphone External microphone input
SD Memory Card Slot	Yes (SD/SDHC)	Yes (SD/SDHC)	Yes (SD/SDHC)	Yes (SD/SDHC)	Yes (SD/SDHC)	Yes (SD/SDHC)
Lens Type Viewing Angle (Horiz/Vert) Pan (Horiz/Vert) Tilt (Horiz/Vert)	f2.8 54°/40° 120° 65°	f3.5 53°/40° — 65° (only administrator)	f2.4 69°/51° 104° 53°	f1.9 (wide)-f2.8 (tele) 73°/55° 350° 82°	f2.8 54°/40° 120° 65°	f3.5 53°/40° 120° 65°
Zoom	10x digital (by area)	10x digital (by area)	6x zoom (2x Ex zoom, 3x digital zoom)	4.6x (2.3x optical, 2x digital)	10x digital (by area)	10x digital (by area)
Network	10/100 Base-TX	10/100 Base-TX	10/100 Base-TX	10/100 Base-TX	10/100 Base-TX	10/100 Base-TX
I/O Terminals	3	3	3	3	3	3
Analog Video Output	NTSC/PAL	No	NTSC/PAL	NTSC/PAL	NTSC/PAL	No
Security	User ID/Password	User ID/Password	User ID/Password, SSL	User ID/Password, SSL	User ID/Password	User ID/Password
Operating Temperature	32°F – 104°F	32°F – 104°F	-4°F – 122°F	-4°F – 122°F	-4°F – 122°F	-4°F – 122°F
Operating Humidity	20% to 80% (No condensation)	20% to 80% (No condensation)	20% to 90% (No condensation)	20% to 90% (No condensation)	20% to 90% (No condensation)	20% to 90% (No condensation)

¹Only still images in JPEG format can be displayed on a cell phone. *Splash resistant body: camera placement under an eave is recommended

The best image capture devices deserve the best recording solutions. Our line of i-Pro network video recorders set new benchmarks in performance and functionality. Feature highlights include multi-format MPEG-4 and JPEG recorders, built-in motion detection, customizable and expandable storage, and on-board camera control capabilities. And with Panasonic's versatile IP-video management and monitoring software, you'll always be in complete control. That's the Panasonic difference.



WJ-ND400 Series
Network Video Recorder (NVR)

- Multi-format recording: MPEG-4 and JPEG
- Up to 64 network cameras can be connected and recorded simultaneously
- No camera license fees
- Up to 9 hot-plug hard disk drives (HDD) can be installed in main unit
- Recording modes: manual, schedule, event (pre/post), emergency, external timer
- Panasonic camera control: pan/tilt, zoom, focus, brightness, preset position, and auto mode (depends on camera model)
- 8 recording programs including individual recording mode for each camera, and up to 6x schedule per day
- Audio can be recorded and played back - G.726 (ADPCM) 32 kbps/16kbps (up to 64 Panasonic i-Pro cameras)
- Camera assignment to 1 of 8 groups for easy browsing
- Flexible playback controls: go to date (jumps to specific time/date), go to last (jumps to 5 sec. ~ 5 min. before the recording ended)
- Display modes: spot, quad (16 patterns), spot sequence, quad sequence (live/playback)
- Filtered search: time & date, event type, and camera number
- VMD search: motion in a specified area of the recorded images can be searched quickly (depends on i-Pro camera)
- 2x and 4x digital zoom (live/playback)
- Recorded images can be downloaded to a PC
- 2x built-in network interfaces (10Base-T/100Base-TX) for camera recording and client access
- Quick IP setup for Panasonic i-Pro network cameras
- Bandwidth control: 32k/64k/128k/256k/512k/1,024k/2M/5M/10M (bps) and unlimited
- Up to 16 clients can monitor image and control WJ-ND400 NVR simultaneously
- Image transfer to FTP server: recorded image upon alarm and/or live image
- Automatically transfer SD memory card stored images from Panasonic i-Pro cameras
- Alteration detection and recorded data encryption for data security
- Multi-site system management with optional i-Pro management software
- Disk partitioning: normal, event, pre-event, and copy for flexible record management
- RAID5/6 redundant recording for data security
- Reliable embedded Real-Time Operating System
- IPv4/IPv6 multi-protocol support



Model Number	Hard Drive Capacity
WJ-ND400/1000	1TB
WJ-ND400/2000	2TB
WJ-ND400/3000	3TB
WJ-ND400/4000	4TB
WJ-ND400/5000	5TB
WJ-ND400/6000	6TB
WJ-ND400/7000	7TB
WJ-ND400/8000	8TB
WJ-ND400/9000	9TB
WJ-ND400/18000	18TB
WJ-ND400/27000	27TB
WJ-ND400/36000	36TB
WJ-ND400/45000	45TB
WJ-ND400/54000	54TB



Popular Accessories

Model No.	WJ-HDE400	WV-ASM100	WV-ASM100L	Canister/1000
Description	Hard disk expansion unit (9 HDD bays)	Management Software	Management Software-Light	1TB HDD in canister
Page Ref.	—	36	36	—

Specs

Max Storage	9 TB (internal), 54 TB (external)
Network I/F	2 x 1000 Mbps, 1 x 100 Mbps
Power Source	120 VAC, 60Hz, 170W
Ambient Op. Temperature	41° ~ 113° F
Dimensions	16 15/16" x 5 3/16" x 15 3/4" (excludes feet)
Weight	30.9 lbs
Alarm/Control Ports	16 alarm inputs

Camera and Encoder List Supported by WJ-ND400/300/200 NVR Series*

	Panasonic i-Pro series	Panasonic BB series	AXIS communications
PTZ Cameras	WV-NS202/202A, WV-NS954 WV-NW964, WV-NS324	BB-HCM381, BB-HCM481 ¹ BB-HCM580, BB-HCM581 ¹ BB-HCM715A ² (P/T), BB-HCM735A ² (P/T)	<ul style="list-style-type: none"> JPEG@VGA, QVGA only supported No H.264 support No Audio support MPEG-4 support (WJ-ND400 only)
Fixed Dome Cameras	WV-SF336, WV-SF335, WV-SF332 WV-NF284, WV-NW484S WV-NF302, WV-NW502S	BB-HCM701A ² , BB-HCM705A ²	AXIS 209FD/FD-R/MFD/MFD-R AXIS 216FD/FD-V/MFD/MFD-V AXIS P3301/P3301-V AXIS 225FD
Fixed Box Cameras	WV-SP306, WV-SP305, WV-SP302 WV-NP244, WV-NP1004 WV-NP304, WV-NP502		AXIS 210/210A, AXIS 211/211A AXIS 211M, AXIS 221, AXIS 223M
Encoders	WJ-GXE500, WJ-NT304, WJ-NT314		AXIS 241S, AXIS 243SA, AXIS 247S AXIS Q7401, AXIS 241Q, AXIS 241QA AXIS 243Q, AXIS Q7406

*Check with your Panasonic representative for the latest camera compatibility ¹JPEG@VGA, QVGA only, no audio ²H.264/MPEG-4/JPEG support (WJ-ND200: March '10, WJ-ND300A/WJ-ND400: July '10)

NETWORK VIDEO RECORDERS



WJ-ND300A Series Network Video Recorder (NVR)

- Up to 32 network cameras can be connected and recorded
- MPEG-4 and JPEG multi-format recording
- No camera licenses
- Various recording modes: manual, schedule, event (pre/post), emergency, and external timer
- Alarm sources include 16x terminal inputs, 16x camera alarms
- Panasonic camera control: pan/tilt, zoom, focus, brightness, preset position, auto mode (depending on camera model)
- Cameras may be assigned to one of 8 groups to meet application requirements
- Flexible playback controls: A-B repeat, go to date (jump to specific time/date), go to last (jump to 5 sec. ~ 5 min. before the record end)
- Various display modes: spot, quad (8 patterns), spot sequence, quad sequence
- 8 quad screens are fully programmable
- Filtered search: time & date, event type, camera number and text
- Recorded images can be downloaded to a PC
- Downloadable viewer software allows playback of images downloaded from the recorder
- Built-in network interfaces (10Base-T/100Base-TX)
- Quick IP setup for Panasonic i-Pro series network cameras
- Bandwidth control: 32k/64k/128k/256k/512k/1,024k/2M/5M/10M (bps) and unlimited
- Up to 8 clients can monitor images and control WJ-ND300A simultaneously
- Image transfer to FTP server
- Images recorded on the SD memory card can be downloaded manually
- Alarm notification by e-mail
- Multi-site system using optional i-Pro management software
- Disk partitioning for flexible record management: normal, event, copy
- RAID5 capability with optional WJ-NDB301 board

Model Number	Hard Drive Capacity
WJ-ND300A/1000T	1TB
WJ-ND300A/2000T	2TB
WJ-ND300A/4000T	4TB
WJ-ND300A/8000T	8TB
WJ-ND300A/12000T	12TB
WJ-ND300A/16000T	16TB
WJ-ND300A/24000T	24TB
WJ-ND300A/28000T	28TB



Specs

Max Storage	4 TB (internal), 28 TB (external)
Network I/F	2 – 100 Mbps, 1 – 10 Mbps
Power Source	120 VAC, 60 Hz, 85 W
Ambient Op. Temperature	41° ~ 113° F
Dimensions	16 9/16" x 3 7/16" x 13 3/4" (excludes feet)
Weight	18.3 lbs
Alarm/Control Ports	16 alarm inputs, 16 alarm outputs, control/aux

Popular Accessories

				
Model No.	WJ-NDB301	WJ-HDE300	WV-ASM100	WV-ASM100L
Description	RAID5 board	Expansion unit (4 HDD bays)	Management Software	Management Software - Light
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Camera and Encoder List Supported by WJ-ND400/300/200 NVR Series*

	Panasonic i-Pro series	Panasonic BB series	AXIS communications • JPEG@VGA, QVGA only supported • No H.264 support • No Audio support • MPEG-4 support (WJ-ND400 only)
PTZ Cameras	WV-NS202/202A, WV-NS954 WV-NW964, WV-NS324	BB-HCM381, BB-HCM481 ¹ BB-HCM580, BB-HCM581 ¹ BB-HCM715A ² (P/T), BB-HCM735A ² (P/T)	
Fixed Dome Cameras	WV-SF336, WV-SF335, WV-SF332 WV-NF284, WV-NW484S WV-NF302, WV-NW502S	BB-HCM701A ² , BB-HCM705A ²	AXIS 209FD/FD-R/MFD/MFD-R AXIS 216FD/FD-V/MFD/MFD-V AXIS P3301/P3301-V AXIS 225FD
Fixed Box Cameras	WV-SP306, WV-SP305, WV-SP302 WV-NP244, WV-NP1004 WV-NP304, WV-NP502		AXIS 210/210A, AXIS 211/211A AXIS 211M, AXIS 221, AXIS 223M
Encoders	WJ-GXE500, WJ-NT304, WJ-NT314		AXIS 241S, AXIS 243SA, AXIS 247S AXIS Q7401, AXIS 241Q, AXIS 241QA AXIS 243Q, AXIS Q7406

*Check with your Panasonic representative for the latest camera compatibility ¹JPEG@VGA, QVGA only, no audio ²H.264/MPEG-4/JPEG support (WJ-ND200: March '10, WJ-ND300A/WJ-ND400: July '10)

NETWORK VIDEO RECORDERS

WJ-ND200 Series Removable Disk Network Video Recorder (NVR)

- MPEG-4 and JPEG multi-format recording
- Up to 16 network cameras can be connected and recorded
- No camera licenses
- Various recording modes: manual, schedule, event (pre/post), emergency, external timer
- Various alarm sources include 16x terminal inputs, 16x camera alarm
- Panasonic camera control: pan/tilt, zoom, focus, brightness, preset position, auto mode (depending on camera model)
- Audio from the i-Pro network cameras can be recorded and played back, G.726 (ADPCM) 32 kbps
- Cameras may be assigned to one of 4 groups
- Flexible playback controls: go to date (jump to specific time/date), go to last (jump to 5 sec. ~ 5 min. before the record end)
- Various display modes: spot, quad (4 patterns), spot sequence, quad sequence (sequence: live only)
- 4 Quad screens are fully programmable
- Recorded images can be downloaded to a PC
- Quick IP setup for Panasonic i-Pro series network cameras
- Bandwidth control: 32 k / 64 k / 128 k / 256 k / 512 k / 1,024 k / 2 M / 5 M / 10 M (bps) and unlimited
- Up to 4 clients can monitor and control WJ-ND200 simultaneously
- Image transfer to FTP server
- Performance measurement function for appropriate recording frame rate setup
- SD memory recording for network failure (automatic or manual)
- Up to 2 hard disk drives (HDDs) can be installed
- Removable HDD can be connected to a PC via the optional WJ-HDC20 connection unit and played back with provided HDD viewer software
- Alarm notification by e-mail
- User/Host authentication, 4 user levels and user-camera view/control partitioning
- RAID1 mirroring capability



Model Number	Hard Drive Capacity
WJ-ND200/320A	320GB
WJ-ND200/640A	640GB

Specs

Max Storage	2 x 320 GB (internal, removable)
Network I/F	1 - 100 Mbps
Power Source	120 VAC, 60 Hz, 35 W
Ambient Op. Temperature	41° ~ 113° F
Dimensions	10 5/8" x 3 1/2" x 14 1/4" (excludes feet)
Weight	11 lbs
Alarm/Control Ports	16 alarm inputs, 16 alarm outputs, control/aux

Camera/Recorder Bundles

WJ-ND200/705A4 WJ-ND200 NVR with 320GB storage and (4) BB-HCM705A network cameras
 WJ-ND200/701A4 WJ-ND200 NVR with 320GB storage and (4) BB-HCM701A network cameras



Popular Accessories

Model No.	ST320REM	WV-Q200P	WV-Q201	WV-ASM100	WV-ASM100L
Description	320 GB removable HDD	Rack mount kit	Vertical stand	Management Software	Management Software-Light
Page Ref.	—	—	—	36	36

Camera and Encoder List Supported by WJ-ND400/300/200 NVR Series*

	Panasonic i-Pro series	Panasonic BB series	AXIS communications • JPEG@VGA, QVGA only supported • No H.264 support • No Audio support • MPEG-4 support (WJ-ND400 only)
PTZ Cameras	WV-NS202/202A, WV-NS954 WV-NW964, WV-NS324	BB-HCM381, BB-HCM481 ¹ BB-HCM580, BB-HCM581 ¹ BB-HCM715A ² (P/T), BB-HCM735A ² (P/T)	
Fixed Dome Cameras	WV-SF336, WV-SF335, WV-SF332 WV-NF284, WV-NW484S WV-NF302, WV-NW502S	BB-HCM701A ² , BB-HCM705A ²	AXIS 209FD/FD-R/MFD/MFD-R AXIS 216FD/FD-V/MFD/MFD-V AXIS P3301/P3301-V AXIS 225FD
Fixed Box Cameras	WV-SP306, WV-SP305, WV-SP302 WV-NP244, WV-NP1004 WV-NP304, WV-NP502		AXIS 210/210A, AXIS 211/211A AXIS 211M, AXIS 221, AXIS 223M
Encoders	WJ-GXE500, WJ-NT304, WJ-NT314		AXIS 241S, AXIS 243SA, AXIS 247S AXIS Q7401, AXIS 241Q, AXIS 241QA AXIS 243Q, AXIS Q7406

*Check with your Panasonic representative for the latest camera compatibility ¹JPEG@VGA, QVGA only, no audio ²H.264/MPEG-4/JPEG support (WJ-ND200: March '10, WJ-ND300A/WJ-ND400: July '10)



Optional Equipment Shown

WV-ASM100 Management Software Solution for Panasonic NVR's, DVR's and i-Pro Cameras

- Complete software management and live monitoring software for Panasonic WJ-ND200/ND300A/ND400 NVR series, WJ-HD300A/WJ-RT416 DVR series and i-Pro network cameras
- Up to 100 recorders, 64 encoders and 256 directly connected cameras can be registered, and up to 6,400 cameras registered in the recorders
- For flexible design, live images can be received directly from the camera/encoder or via the recorder
- Multi-monitor option enables simultaneous use of Operation Display (1/4/9/16 split), Live Display (1/4/9/16 split) and Map Display each on a dedicated monitor
- Up to 400 camera groups: cameras and multi-screen mode for the Operation Display can be programmed and called up by manual or sequence operation
- Image resolution dynamically changes depending on the screen mode: VGA for Quad screen, QVGA for 16 split screen
- Panasonic camera control
- A camera, a group or a sequence can be called up on the Operation Display by ID with the optional system controller WV-CU950
- Alarm pop-up notification/messaging
- Up to 64 camera icons can be freely positioned on a map with alarm status indicated by the color of the icons
- Download video clips for archiving
- Video analytic functions from WJ-NT314 encoder can be displayed



Accessory



Model No.	WV-CU950
Description	System Controller
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Computer Requirements

Microsoft Windows XP
Intel Pentium D 3GHz
1024 x 768, 32 bit color



WV-ASM100L Management Software Solution for Panasonic NVR's, DVR's and i-Pro Cameras - Light Version

- Complete software management and live monitoring software for Panasonic WJ-ND200/ND300A/ND400 NVR series, WJ-HD300A/WJ-RT416 DVR series and i-Pro network cameras
- Up to 100 recorders, 64 encoders and 256 directly connected cameras can be registered, and up to 6,400 cameras registered in the recorders
- For flexible design, live images can be received directly from the camera/encoder or via the recorder
- Up to 400 camera groups: cameras and multi-screen mode for the Operation Display can be programmed and called up by manual or sequence operation
- Image resolution dynamically changes depending on the screen mode: VGA for Quad screen, QVGA for 16 split screen
- Panasonic camera control
- Alarm pop-up notification/messaging
- Up to 64 camera icons can be freely positioned on a map with alarm status indicated by the color of the icons
- Download video clips for archiving

See Management Software Comparison Chart on page 67



WV-ASM10

Monitoring Software for Panasonic NVR's, DVR's and i-Pro Cameras

- Multi-screen software decoder designed for control rooms; up to 16 split live displays including preprogrammed selection of network cameras
- Up to 16 recorders and 256 network cameras can be registered
- MPEG-4 and JPEG formats
- Live display and sequence play; Spot/Quad (A-D) by 1/4/6/9/16 split multi-screen and synchronized multiscreen group sequence
- Up to 30 ips/camera in 16 split-screen in MPEG-4 2 Mbps mode (depending on the camera)
- Up to 400 camera groups (pre-programmed camera selection and multi-screen setup)
- Open interface for external control
- Supports i-Pro cameras, recorders, encoders
- Pre-programmed cameras can automatically be displayed upon power on
- Camera title display up to 16 characters



Computer Requirements

Microsoft Windows XP
Intel Pentium 3GHz
1024 x 768, 32 bit color

There's no better way to make the analog to IP-video connection than with i-Pro encoders and decoders. They feature advanced built-in video analytics, High Definition quality, multi-format output for viewing and recording, multiplex combinations to accommodate multiple IP and analog cameras, and H.264 compression. That's the Panasonic difference.



WJ-GXE500 4-Channel H.264 Video Encoder

- Full frame H.264 transmission for all 4 channels
- Dual streams of H.264 (High profile) and JPEG at VGA / D1 image size
- Motion adaptive interlace/progressive conversion produces clear frames even when the subject is moving
- Compensates picture degradation caused by long-distance cable - clear picture is maintained
- Coaxial communication ensures the control of Panasonic PTZ cameras via coaxial cable
- Open command conversion table for RS-485 ensures the control of various manufacturer's PTZ cameras
- SD/SDHC Memory card slot for manual recording, alarm recording, and backup upon network failure (JPEG)
- Camera title display: up to 16 alphanumeric characters embedded in the image
- Full duplex bi-directional audio allows interactive communication
- PoE (power will be supplied by simply connecting a LAN cable - IEEE802.3af compliant)
- Rack mountable with mounting brackets
- Alarm sources including 3 terminal input, VMD, camera site alarm, video loss, and Panasonic alarm
- VMD (Video Motion Detector) with 4 programmable detection areas
- Face detection technology detects the position of human face and the information is sent by XML or video stream (Ch1 only)
- Meta data for VMD is supplied to work with the WJ-ND400 NVR playback VMD function



Available: May 2010



H.264

MPEG-4/JPEG

Specs

Image compression	H.264/MPEG-4/JPEG
Protocol	IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP
Video input	4x
Resolution	720 x 480 (D1), 640 x 480 (VGA), 320 x 240 (QVGA)
Op. Temp.	14° ~ 122° F
Power/Consump.	12V DC, 500 mA / PoE, 6W
Dimensions	5 1/2" x 1 3/4" x 7 9/32"
Weight:	2.21 lbs (1kg)

Popular Accessory



Model No.	WV-Q204/2S
Description	Rack mounting bracket (2 units)
Page Ref.	—

WJ-NT314/WJ-NT304
4 Channel MPEG-4/JPEG Video Encoder
with Video Analytics (WJ-NT314 only)



- Connect up to 4 analog cameras
- MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips
- MPEG-4 and JPEG dual stream output for simultaneous live monitoring and high resolution recording
- Progressive output allows every frame to be clear even when subject is moving
- 2 channel video analytics (WJ-NT314 only)
 - 8 detection programs, each with 3 intruder detection areas and 1 object abandonment/removal detection area
 - Trace up to 8 detected objects per channel
 - Depth correction allows more accurate detection when scene includes deeper depth
- Panasonic camera control: pan/tilt/zoom/focus/iris/preset position (up to 256), auto mode, setup menu. AUX, B/W ON/OFF/Auto, click centering
- Unit title display: up to 20 alphanumeric characters on browser
- Camera title display: up to 20 alphanumeric characters on browser
- SD memory card slot for alarm recording and backup if network failure occurs (using FTP command)

- Alarm sources including 2x AVMD (WJ-NT314 only), 4x terminal inputs, 4x camera alarms, 4x video loss alarms and Panasonic alarm protocol can trigger actions including SD memory recording/FTP image transfer, e-mail notification, alarm indication, terminal output and Panasonic protocol output
- Bi-directional audio (1 channel)
- Built-in network interface (10Base-T/100Base-TX)
- Multi-screen: images from 16 cameras can be displayed in 4 separate quad screens
- Alarm e-mail notification
- FTP client function enables periodic image data transfer or transfer upon alarm



Specs

Image Compression Method	JPEG / MPEG-4
Protocol	TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP
Video Input	4 (NTSC Composite)
Resolution	VGA (640 x 480) / QVGA (320 x 240)
Camera Coaxial Control	Pan/Tilt/Zoom/Focus/Preset/Auto Focus (Panasonic PTZ Cameras)
Operating Temperature	14° ~ 122° F
Power/Consumption	12V DC/approx. 10W (AC adaptor for 120VAC)
Dimensions	8 1/4" x 1 3/4" x 11 13/16" (210mm x 44mm x 300mm)
Weight	5.06 lbs (2.3kg)

Popular Accessories

Model No.	WV-Q204/1S	WV-Q204/2S
Description	Rack mounting bracket (1 unit only)	Rack mounting bracket (2 units)
Page Ref.	—	—



WJ-GXD400
Multi-Channel High Definition Video Decoder for
i-Pro Network Surveillance System



- Multi-channel high-definition video decoder with HDMI video interface
- 1x 4 VGA (1280 x 960) images with 2x VGA images in 3 split screens or 6x VGA (640 x 480) images in 6 split screens
- VGA image displayed at 30ips/sec
- Registers up to 256 cameras including cameras connected to i-Pro Network Video Encoders
- Supports tour sequence and group sequence
- Supports camera site alarm signal: alarm indication displayed and alarm terminal output activated

- Supports multicast / unicast for efficient network usage
- Single channel audio decoding G.726
- High-speed network interface (100Base-T/1000Base-T), maintenance port (10Base-T)
- Browser GUI
- Embedded Real-Time Operating System delivers high reliability
- Operating temperature 14° ~ 122°F

Specs

Image Format	MPEG-4, JPEG (multi-decoding)
Resolution	1,280 x 960, 640 x 480, 320 x 240
Audio Format	G.726 (ADPCM), 32 kbps / 16 kbps
Video Output	1,920 x 1,080: 1 x 4VGA (1,280 x 960) with 2x VGA or 6x VGA 30 frames/sec., audio supported
Network Interface	10Base-T/100-BaseTX/1000Base-T, RJ-45 connector
Multicast	Yes
Power/Consumption	12V DC, 1.4 A
Dimensions	8 1/4" x 1 3/4" x 12 1/16" (210mm x 44mm x 300mm)
Weight	4.4 lbs (2.0kg)

Popular Accessories

Model No.	WV-Q204/1S	WV-Q204/2S
Description	Rack mounting bracket (1 unit only)	Rack mounting bracket (2 units)
Page Ref.	—	—

PMPU1000
System Management Server

- Linux based system management server
- 2,048 x 512 analog, including 1,024 IP devices standard system capability
- Satellite feature allows linking 64 PMPU1000 standalone systems to a global system with universal cross network access
- Supports up to 1,024 alarms inputs and various alarm source type and management
- Supports up to 1,024 event schedules
- Flexible system design for use with both analog and IP systems
- 16 Simultaneous operators per local system
- Operator management, priority, access and timer executed restrictions
- Redundant server option
- User-friendly administrator console
- 3x Built-in network interfaces (10Base-T/100Base-TX)



Maximum Size per PMPU1000 Server

	IP	Hybrid	Analog
Cameras	512	Consult Panasonic for system design	512
Logical Monitors	384 <small>(64 WJ-GXD400)</small>		64
DVR/NVR	64		64
Controllers	32		64
Alarms	1,024		1,024
Sequences	128		128
Steps per Sequence	128		128
Registered Users	9,999		9,999

We recommend you contact a Panasonic representative to assist you with your system design.

Supported Devices

Analog	Matrix Switcher	WJ-SX650 series
	DVR	WJ-HD300/300A, WJ-RT416, WJ-HD616, WJ-HD716
	Analog Camera	Supported via Matrix Switcher or DVR
IP	IP Camera	All i-Pro cameras except for WV-NM100
	PTZ	WV-NS202/202A, WV-NS954, WV-NW964
	Fixed Dome	WV-NF284, WV-NW484S, WV-NW502S, WV-NF302
	Fixed Box	WV-NP244, WV-NP1004, WV-NP304, WV-NP502
	NVR	WJ-ND400, WJ-ND300/300A, WJ-ND200 series
	Encoder	WJ-NT304, WJ-NT314
	Decoder	WJ-GXD400
	Controller	WV-CU950
	Management Software	WV-ASM970

Optional System Components



Model No.	WV-ASM970
Description	Management software unit for archiving
Page Ref.	75

IP



Hybrid



Analog



Panasonic delivers the best in analog cameras including our industry leading PTZ and dome systems with Super Dynamic 5 camera technology. And a wide selection of configurations with advanced features including vandal resistant domes with Auto Back Focus, weather proof and day/night configurations, and PTZs with built-in video analytics and advanced auto tracking operation – plus so much more. That's the Panasonic difference.



P T Z C A M E R A S

WV-CW974
Super Dynamic III Weather Proof Day/Night Dome Camera

- All-in-one outdoor unit
- Advanced auto tracking for precise surveillance
- Template matching algorithm tracks human subjects accurately
- Weather-proof environmental structure meets IP66 standards
- Built-in fan/heater for temperature changes between -40°F ~ +122°F
- Super Dynamic III (SDIII) technology delivers 128x wider dynamic range and Intelligent Technology features for exceptional images in virtually any lighting condition
- 540 lines of horizontal resolution in color mode, 570 lines in B/W
- Minimum illumination of 0.5 lux in color mode, 0.04 lux in B/W at f1.4 (wide)
- Auto Image Stabilization function for applications where vibration or wind is a concern
- Day/Night operation can be selected to automatically or manually switch from color to B/W
- 30x optical zoom lens, plus 10x electronic digital zoom (300x total)
- Adaptive Digital Noise Reduction: integration of 2D-DNR and 3D-DNR ensures noise reduction in various conditions
- Electronic sensitivity enhancement (auto/manual)
- Panning speed of max. 400°/sec at preset mode and 0.065°/sec super fine control at manual mode
- 256 presets
- Built-in Video Motion Detection with sensitivity (256 steps, mask 8x6 areas)
- Scene Change Detection alarms when lens is covered, spray painted, removed or defocused
- 4 alarm input and 2 output terminals
- Over the coaxial cable or RS-485 data communication
- Built-in sun shield permits camera locations in direct sunlight



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	540 lines in color, 570 lines on B/W
Minimum Illumination	0.5 lux in color, 0.04 lux in B/W at f1.4 (wide)
Dynamic Range	SDIII, 52dB
Ambient Temperature	-40° ~ 122° F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	Auto Image Stabilization, Scene Change Detection, SDIII, Day/Night, Advanced Auto Tracking with template matching algorithm, auto focus
Lens	3.8-114mm / 30x optical + 10x electronic (300x total)
Pan Range/Speed	360°/0.065° ~ 120°/sec
Power/Consumption	24V AC, 60 Hz, 17 W (62 W heater)
Dimensions	9 7/16" x 15 9/16" (239mm x 395.5mm)
Weight (camera)	10.4 lbs (4.7kg)

Popular Accessories

MOUNTING BRACKETS								
Model No.	PWM20G	PWM20GB	PWM20GS	PWM30G	PWM30GB	PPRM30G	PPRM30GB	
Description	Gooseneck – wall, Black	Gooseneck – wall, Beige	Gooseneck – wall, Silver	Parapet, Black	Parapet, Beige	Extended Parapet, Black	Extended Parapet, Beige	
Page Ref.	98	98	98	98	98	98	98	

MISCELLANEOUS		
Model No.	WV-7176E	
Description	Sunshield cover	
Page Ref.	—	

P T Z C A M E R A S



WV-CW964
Super Dynamic III Weather Proof Day/Night Dome Camera

- Super Dynamic III (SDIII) technology delivers 128x wider dynamic range and Intelligent Technology features for exceptional images in virtually any lighting condition
- Automatic Day/Night switching for 24-hour surveillance
- Weather proof camera meets IP66 international standards for water and dust resistance
- 540 lines of horizontal resolution in color, 570 lines in B/W
- Delivers B/W images in as little as 0.04 lux of illumination, 0.5 lux in color
- 300x zoom magnification (30x optical – 10x electronic)
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise in various conditions
- Panning speed of max. 400°/sec at preset mode and 0.065°/sec super fine control at manual mode
- Auto tracking: camera follows largest movement in image automatically and will pan and tilt to keep subject in center of image
- Built-in Video Motion Detection with sensitivity (256 steps, mask 8 x 6 areas)
- Scene Change Detection alarms when lens is covered, spray painted, removed or defocused
- Built-in fan/heater for temperature changes of -40° F ~ +122° F
- All-in-one outdoor unit
- Built-in sun shield permits camera locations in direct sunlight
- 256 presets
- Over the coax cable or RS-485 data communication
- 4 alarm input and 2 output terminals



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	540 lines in color, 570 lines in B/W
Minimum Illumination	0.5 lux color, 0.04 lux B/W
Dynamic Range	Super Dynamic III, 52dB
Ambient Temperature	-40° ~ 122° F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	SDIII, IP66, Day/Night, Auto Tracking, Auto Image Stabilization, Auto Scene Change Detection
Lens	3.8mm ~ 114mm/30x optical + 10x electronic/f1.4 ~ 22
Pan Range/Speed	360°/0.065° ~ 120°/sec
Presets	256
I/O Terminals	6
Power/Consumption	24V AC/17 W camera, 62 W heater
Dimensions	9 7/16" x 15 9/16" (239mm x 395.5mm)
Weight (camera)	10.4 lbs (4.7kg)

Popular Accessories

MOUNTING BRACKETS

Model No.	PWM20G	PWM20GB	PWM20GS	PWM30G	PWM30GB	PPRM30G	PPRM30GB
Description	Gooseneck – wall, Black	Gooseneck – wall, Beige	Gooseneck – wall, Silver	Parapet, Black	Parapet, Beige	Extended Parapet, Black	Extended Parapet, Beige
Page Ref.	98	98	98	98	98	98	98

MISCELLANEOUS

Model No.	WV-7176E
Description	Sunshield cover
Page Ref.	—



P T Z C A M E R A S

WV-CS954
Super Dynamic III Day/Night Dome Camera

- Super Dynamic III (SDIII) technology delivers 128x wider dynamic range and Intelligent Technology features for exceptional images in virtually any lighting condition
- 30x optical zoom and 10x electronic zoom (300x total)
- 540 lines of horizontal resolution in color, 570 lines in B/W
- Up-the-coax camera control / RS485 camera control
- Minimum sensitivity; 0.04 lux in B/W mode or 0.5 lux in color mode at f1.4 (wide)
- Privacy zone masking function
- Automatic Day/Night switching for 24-hour surveillance
- Auto panning function with 256 preset positions
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise and motion blur in various conditions
- Pan/Tilt speed of max. 400°/sec at preset mode and 0.065°/sec super fine control at manual mode
- Auto tracking: camera automatically pans and tilts to follow moving subject and keep it in center of image
- Proportional pan/tilt speed: speed varies corresponding to zoom position for easier operation
- Built-in Video Motion Detection with sensitivity (256 steps, mask 8 x 6 areas)
- Scene change detection alarms when lens is covered, spray painted, removed or defocused
- Privacy zone can mask up to 8 private areas
- Patrol function
- 256 presets



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	540 lines in color, 570 lines in B/W
Minimum Illumination	0.5 lux color, 0.04 lux B/W at f1.4 (wide)
Dynamic Range	Super Dynamic III, 52dB
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	SDIII, Auto Tracking, Image Stabilizer, Day/Night, Scene Change Detection
Lens	3.8mm ~ 114mm/30x optical + 10x electronic/F1.4 ~ 22
Pan Range/Speed	360°/0.065° ~ 120°/sec
Presets	256
I/O Terminals	4
Power/Consumption	24V AC/13 W
Dimensions	6 1/16" x 9 3/16" (154.5mm ~ 233mm)
Weight (camera)	4.84 lbs (2.2kg)

Popular Accessories

HOUSINGS							
Model No.	PIDV7CN	PIDV7SN	PID9	POD9C	POD9CW	POD9CWT	POD9CT
Type	Ceiling	Ceiling	Ceiling	Pendant	Wall	Wall	Pendant
Location	Indoor	Indoor	Indoor	Outdoor	Outdoor	Outdoor	Outdoor
Description	Steel upper housing	Steel upper housing	Steel upper housing	Silver color/clear dome	Silver color/clear dome	White color/clear dome	White color/clear dome
Comments	Clear dome	Tinted dome	Tinted dome	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower
Page Ref.	90	90	90	94	94	94	94

MOUNTING BRACKETS				
Model No.	WV-Q105	WV-Q116	WV-Q117	WV-Q118
Type	Direct ceiling mount	Embedded ceiling mount	Suspended ceiling mount	Wall
Location	Indoor	Indoor	Indoor	Indoor
Comments				1" cable opening
Page Ref.	98	99	99	99

MISCELLANEOUS	
Model No.	WV-CS3S
Description	Smoke cover
Page Ref.	—

P T Z C A M E R A S



WV-CS574
Color Dome Camera

- 510 lines of horizontal resolution
- Minimum illumination of 1 lux at f1.6 (wide)
- 22x optical zoom lens, 10x electronic zoom (220x total)
- Auto panning function w/32 preset positions
- Optical Slip Ring System
- Privacy zone can mask up to 8 areas
- Image hold during panning
- Auto focus lens
- Patrol learn function
- Digital Noise Reduction: 3D-DNR reduces noise in various conditions
- Electronic sensitivity enhancement: auto (up to 32x) / fix (up to 32x)
- Pan/Tilt speed of max. 300°/sec at preset mode and 0.1°/sec super fine control at manual mode
- 64 presets
- Video Motion Detection with sensitivity (32 steps, 8 x 6 mask areas)
- Over the coaxial cable or RS-485 data communication
- Area title – displays OSD title for each of 8 panning directions



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	510 lines in color
Minimum Illumination	1 lux at f1.6 (wide)
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Lens	3.79mm ~ 83.4mm/22x optical + 10x electronic
Pan Range/Speed	360°/0.1° ~ 120°/sec
Presets	32
I/O Terminals	6
Power/Consumption	24V AC/13 W
Dimensions	4 3/4" x 7 1/2" (120mm x 191mm)
Weight (camera)	4.4 lbs (2kg)

Popular Accessories

HOUSINGS								
Model No.	PDM9	PICSD	PIDV7CN	PIDV7SN	POD9C	POD9CW	POD9CT	POD9CWT
Type	Drop Ceiling	Ceiling	Ceiling	Ceiling	Pendant	Wall	Pendant	Wall
Location	Indoor	Indoor	Indoor	Indoor	Outdoor	Outdoor	Outdoor	Outdoor
Description	For suspended ceiling	Steel upper housing	Steel upper housing	Steel upper housing	Silver color/clear dome	Silver color/clear dome	White color/clear dome	White color/clear dome
Comments		Tinted 5.9" dome	Clear dome	Tinted dome	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower
Page Ref.	91	90	91	91	94	94	94	94

MOUNTING BRACKETS			
Model No.	WV-Q105	WV-Q117	WV-Q118
Type	Direct ceiling mount	Suspended ceiling mount	Wall
Location	Indoor	Indoor	Indoor
Comments			1" cable opening
Page Ref.	98	99	99

ACCESSORIES		
Model No.	WV-CS2S	WV-CS2M
Type	Smoke cover	Mirror cover
Page Ref.	—	—

FIXED DOME CAMERAS

WV-CF324
Ruggedized Day/Night Fixed Dome Camera



- 540 lines of horizontal resolution
- High sensitivity with simple Day/Night function: 0.9 lux (with optional clear dome cover), 1.8 lux (with standard smoke dome cover) at f1.3 (wide)
- Adaptive Black Stretch enhances the visibility of dark areas without compromising the bright areas
- Auto Back Focus (ABF) re-adjusts back focus when switching from color to B/W, ensuring optimal picture quality and reducing post-installation intervention
- Various adjustment features include: Back-Light Compensation (BLC), Auto Tracing White Balance (ATW) and Automatic Light Control (ALC)
- 2.8 ~ 10 mm, 3.6x vari-focal auto iris lens
- Monitor output and ELC mode for easy lens adjustment during installation
- Three-way hinge (horizontal, vertical and swivel rotation) for flexible installation
- Ruggedized metal body and polycarbonate dome cover for durability
- Internal/multiplexed vertical drive synchronization:
 multiple cameras can be synchronized easily



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	540 lines in color
Minimum Illuminations	1.8 lux in color (smoke dome), 0.9 lux in color (clear dome) at f1.3 (wide)
Ambient Temperature	14° ~ 122°F
Scan Methods/Pixels	Interlace/768 (H) x 494 (V)
Special Features	Simple Day/Night, Auto Back Focus (ABF)
Lens	3.6x vari-focal/2.8 ~ 10 mm
Power/Consumption	24V AC, 12 V DC/2.7W, 220 mA
Dimensions	5 3/4" x 3 7/8" H (146 mm x 98 mm)
Weight (camera)	1.65 lbs (750g)

Popular Accessory



Model No.	WV-NF5C
Description	Clear dome cover
Page Ref.	—

FIXED DOME CAMERAS



**WV-CF294/WV-CF284 Series
Day/Night Fixed Dome Camera**

- 540 lines of horizontal resolution
- Adaptive Black Stretch enhances the visibility of dark areas without compromising the bright area
- High sensitivity with simple Day/Night function: 0.9 lux (Color or B/W)
- Auto Back Focus (ABF) re-adjusts back focus when switching from color to B/W, ensuring optimal picture quality and reducing post-installation intervention (WV-CF294 Series only)
- Adjustment features include: Back-Light Compensation (BLC), Auto Tracing White Balance (ATW) and Automatic Light Control (ALC)
- 2.8 ~ 10mm, 3.6x vari-focal auto iris lens (WV-CF294 series only)
- 2.8 ~ 6mm, 2x vari-focal auto iris lens (WV-CF284 series only)
- Monitor output and ELC mode for easier lens adjustment upon installation
- Three-way hinge (horizontal, vertical and swivel rotation) for easy installation
- Internal/multiplexed vertical drive synchronization: multiple cameras can be synchronized easily
- Various mounting options: surface mount, embedded mount (with optional WV-Q168), mounting to junction box (locally obtained)



WV-CF294 Series only





ABS



Specs

Image Sensor	1/4" CCD
Resolution (Horizontal)	540 lines in color
Minimum Illumination	0.9 lux in color
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	Auto Back Focus (WV-CF294 Series only), Simple Day/Night (chrominance signal is removed to achieve B/W), UTP version available
Lens	WV-CF294 Series: 3.6x vari-focal/2.8 ~ 10mm/f1.3 ~ 3.1 WV-CF284 Series: 2x vari-focal/2.8 ~ 6mm/f1.4 ~ 1.8
Power/Consumption	24V AC, 12V DC/2.7 W
Dimensions	5 1/8" x 3 5/8" (129.5mm x 93mm)
Weight (camera)	1 lb (460g)

Popular Accessories

		
Model No.	PCRM1	WV-Q168
Description	Recessed ceiling housing	Embedded ceiling mount
Page Ref.	98	—

WV-CW504 Series
Super Dynamic 5 Vandal-Resistant Fixed Dome Camera

- Super Dynamic 5 delivers superior image quality by incorporating a combination of Super Dynamic, ABS (Adaptive Black Stretch) and i-VMD (intelligent-Video Motion Detection) compensation technology
- 650 lines of horizontal resolution (color), 700 lines (B/W)
- High sensitivity with Day/Night function: 0.1 lux (Color), 0.01 lux (B/W) with clear dome cover at f1.4 (Wide). IR cut filter switches on/off to enhance the sensitivity in B/W mode
- i-VMD (intelligent-Video Motion Detection) including video motion detection, object abandonment/removal detection, scene change detection when lens is covered, spray painted, removed or defocused
- Auto Back Focus (ABF) ensures easy installation and stable focus in both color and B/W modes
- 3-dimensional color conversion function for natural color reproduction even in lower color temperature situation
- Adaptive Digital Noise Reduction: Integration of 2D-DNR and 3D-DNR ensures noise reduction in various conditions
- Electronic sensitivity enhancement: auto (up to 32x) / manual (up to 32x)
- Electronic shutter from 1/100 to 1/10,000 sec.
- 3.8 ~ 8.0 mm, 2x vari-focal Auto Iris lens with 2x digital zoom
- Auto Image Stabilizer for applications where vibration or wind is a concern
- Internal / Line-lock / Multiplexed Vertical Drive (VD2) synchronization
- Over the coaxial cable data communication
- IP66 rated water and dust resistant. Compatible with IEC60529 measurement standard
- Dehumidification device for use in various weather conditions
- Vandal resistant mechanism for high reliability
- Monitor output for easier installation
- 3-way hinge (horizontal, vertical and swivel rotation) for easy installation
- 2 piece mounting bracket structure for easy cable connection
- Available in flush mount (WV-CW504F) and surface mount (WV-CW504S) options
- Optional heater (model WV-CW5H) maintains operating temperature -22 °F ~ 122 °F



Clear dome standard; smoked dome optional



Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	650 lines in color, 700 lines in B/W
Minimum Illumination	0.1 lux in color, 0.01 lux in B/W
Dynamic Range	SD5, 52dB
Ambient Temperature	-22° ~ 122°F (with optional heater WV-CW5H)
Scan Method/Pixels	Interface/976 (H) x 494 (V)
Special Features	SD5, Auto Back Focus (ABF), Adaptive Black Stretch (ABS), Day/Night, intelligent VMD (i-VMD), IP66 rated, 3.8-8.0mm 2x vari-focal auto iris lens, dehumidification device
Power/Consumption	24V AC/11W, 12V DC/280 mA
Dimensions	6 7/16" x 7 9/16" x 5 3/4" (164mm x 191.5mm x 146.2mm) surface, 6 1/16" x 5 3/4" (154mm x 191.5mm x 145.7mm) flush
Weight (camera)	3.74 lbs (1.7kg) surface, 2.97 lbs. (1.35kg) flush

Visit www.panasonic.com/SD5 for more details on Super Dynamic 5 technology including video demonstrations.

Other Models Available

WV-CW504F/09	Flush mount camera with 9-22mm lens
WV-CW504F/15	Flush mount camera with 15-50mm lens
WV-CW504F/22	Flush mount camera with 2.2mm lens
WV-CW504S/09	Surface mount camera with 9-22mm lens
WV-CW504S/15	Surface mount camera with 15-50mm lens
WV-CW504S/22	Surface mount camera with 2.2mm lens

Popular Accessories

MOUNTING BRACKETS*						
Model No.	PCM484S	PHM484S	PPM484S	PWM484S	WV-Q115	WV-Q169
Type	Corner	Hanging	Pole	Wall	Mounting Base	Embedded
Location	Outdoor	Outdoor	Outdoor	Outdoor	Base	Ceiling Mount
Page Ref.	100	100	100	100	99	100

*Note: Brackets are designed for surface mount cameras only

LENSES		
Model No.	PLA22T3DN	PLZ15/33
Size	1/3"	1/3"
Iris	Auto	Auto
Type	Wide	Wide
Focal Length	2.2mm	15 - 50mm
Aperture	f1.2	f1.5
Page Ref.	87	87

MISCELLANEOUS		
Model No.	WV-CW4S	WV-CW5H
Description	Smoked Dome Cover	Heater Unit
Page Ref.	—	—

VANDAL - RESISTANT CAMERAS



WV-CW244 Series
Vandal-Resistant Fixed Dome Camera

- High impact resistant 3.5mm thick polycarbonate dome and spring mounted lens
- 3.8 ~ 8.0 mm, 2x vari-focal lens
- High sensitivity in lighting as low as 1 lux with clear dome at f1.4 (wide)
- 480 lines of horizontal resolution
- Meets IP66 standards for dust and moisture
- Three-way hinge (horizontal, vertical and swivel rotation) for easy installation
- Monitor output for easier installation
- Available in either flush or surface mount
- Optional heater maintains operating temperature -22° F ~ 122° F
- 24V AC / 12V DC



Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	480 lines in color
Minimum Illumination	1 lux (0.1 fc) in color (w/ clear dome) at f1.4 (wide)
Ambient Temperature	-22° ~ 122° F (with optional heater WV-CW3H)
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	IP66 rated
Lens	2x vari-focal/3.8 ~ 8mm/1:1.4 ~1.8
Power/Consumption	24V AC, 12V DC/3 W (with optional heater 12.1 W)
Dimensions	6 5/16" x 5 9/16" (160mm x 140.5mm) surface, 6" x 5 3/8" (152.5mm x 137mm) flush
Weight (camera)	3.1 lbs (1.4kg) surface, 2.2 lbs (1kg) flush

Popular Accessories

MOUNTING BRACKETS*

Model No.	PCM484S	PHM484S	PPM484S	PWM484S	PCMA474F
Type	Corner	Hanging	Pole	Wall	Corner adapter for indoor use
Location	Outdoor	Outdoor	Outdoor	Outdoor	for indoor use (flush version only)
Page Ref.	100	100	100	100	97

*Note: Brackets are designed for surface mount cameras only

LENSES

Model No.	PLA22T3DN	PLZ15/33	PLZ29/27
Size	1/3" fixed focal	1/3" vari-focal	1/3" vari-focal day/night
Iris	Auto	Auto	Auto
Type	Wide	Wide	Wide
Focal Length	2.2mm	15-50mm	2.9-8.0mm
Aperture	f1.2	f1.5	f0.95
Page Ref.	87	87	87

MISCELLANEOUS

Model No.	WV-CW2C	WV-CW3H	WV-Q114
Description	Clear dome cover - bubble only	Heater Unit	Mounting base for flush version
Page Ref.	—	—	—

FIXED COLOR CAMERAS

WV-CW384**Super Dynamic III Weather Proof Day/Night Camera**

- Self-contained bullet style outdoor camera with sun shield
- Super Dynamic III (SDIII) technology delivers 128x wider dynamic range and Intelligent Technology features for exceptional images in virtually any lighting condition
- Auto Back Focus (ABF) re-adjusts back focus when switching from color to B/W, ensuring optimal picture quality and reducing post-installation intervention
- Day/Night operation: 540 lines of horizontal resolution (color), 570 (B/W)
- High sensitivity: 0.65 lux (Color), 0.09 lux (B/W) at f1.6 (wide)
- Signal-to-Noise Ratio: 50 dB
- Electronic sensitivity enhancement: auto (up to 10x), manual (up to 32x)
- Electronic shutter from 1/100 to 1/10,000 sec
- Video Motion Detection with sensitivity (32 steps, mask 8 x 6 areas)
- 5.0 ~ 40mm, 8x vari-focal lens with 2x digital zoom
- Monitor output and ELC mode for easy lens adjustment during installation
- Built-in flashing blue LED acts as additional deterrent
- Meets IP66 standards for water and dust resistance
- Built-in fan, heater and sun shield maintains operating temperature
- Versatile mounting bracket encloses the video and power cables properly
- Auto Image Stabilizer for applications where vibration or wind is a concern
- Over the coaxial cable data communication
- Internal/line-lock/multiplexed vertical drive (VD2) synchronization
- 16 alphanumeric camera title display
- Sleek design and easy installation

**Specs**

Image Sensor	1/3" CCD
Resolution (Horizontal)	540 lines in color, 570 lines in B/W
Minimum Illumination	0.65lux color, 0.09lux B/W at f1.6 (wide)
Dynamic Range	SDIII, 50dB
Ambient Temperature	-22° ~ 122° F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	SDIII, Day/Night, IP66, All-in-one unit
Lens	8x vari-focal/5 ~ 40mm/f1.6 ~ 176
Power/Consumption	24V AC, 12V DC/3.8 W (heater 12 W)
Dimensions	5 1/8" x 9 5/16" x 18 3/16" (130mm x 237mm x 462mm)
Weight (camera)	2.9 lb (1.3kg)

FIXED COLOR CAMERAS



*Lens Optional

WV-CL930 Series
1/2" CCD Day/Night Camera*

- 540 lines of horizontal resolution (color), 570 lines (B/W)
- Ultra high sensitivity with Day/Night function: 0.09 lux (Color), 0.008 lux (B/W) at f1.4
- Auto Back Focus (ABF) re-adjusts back focus when switching from color to B/W, ensuring optimal picture quality and reducing post-installation intervention
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise in various conditions
- Back Light Compensation (BLC)
- Electronic sensitivity enhancement: auto (up to 32x) / manual (up to 128x)
- Video Motion Detection with sensitivity (256 steps, mask 8 x 6 areas)
- Scene Change Detection alarms when lens is covered, spray painted, removed or defocused
- Day/Night input and alarm output terminals
- Auto Image Stabilization for applications where vibration or wind is a concern
- Function command: shutter speed and sensitivity enhancement level can be controlled precisely by function number with optional Panasonic controller
- Model WV-CL930: 120V AC, WV-CL934: 24V AC or 12V DC






Specs




Image Sensor	1/2" CCD
Resolution (Horizontal)	540 lines in color, 570 lines in B/W
Minimum Illumination	0.09 lux color, 0.008 lux B/W
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	Day/Night, Low light sensitivity, Auto Back Focus
Power	24V AC, 12V DC (WV-CL934), 120V AC (WV-CL930)
Dimensions	2 3/4" x 2 9/16" x 5 15/16" (70mm x 65mm x 151mm)
Weight (camera)	1.23 lb (560g) WV-CL934, 1.25 lb (570g) WV-CL930

Popular Accessories



LENSES

			
Model No.	PLAHS1770	WV-LZ81/6A	WV-LZA62/2
Size	1/2"	1/2"	1/2"
Iris	Auto	Auto	Auto
Type	Zoom Lens	Zoom Lens	Zoom Lens
Focal Length	7-70mm	8.5-51mm	8-80mm
Aperture	f1.4	f1.2	f1.4
Page Ref.	88	88	86

HOUSINGS

			
Model No.	POH1000	POH1500	POH1500HB
Placement	Outdoor	Outdoor	Outdoor
Style	Bullet	Bullet	Bullet
Description	10" - Ltwt. Aluminum	15" - Ltwt. Aluminum	15" - Ltwt. Aluminum
Comments	Available with Heater/Blower (POH1000HB)	Available with Heater/Blower (POH1500HB)	Heater/Blower
Page Ref.	96	96	96

BRACKETS

		
Model No.	PUM8	PWM800
Placement	Indoor	Outdoor
Type	Wall	Wall
Comments	Maximum weight = 3 lbs	Use with POH1000/1500 housings
Page Ref.	98	98

FIXED COLOR CAMERAS

WV-CP500 Series
Super Dynamic 5 Day/Night Fixed Camera*

- Super Dynamic 5 delivers superior image quality by incorporating a combination of Super Dynamic, ABS (Adaptive Black Stretch) and i-VMD (intelligent-Video Motion Detection) compensation technology
- 650 lines of horizontal resolution (color), 700 lines (B/W)
- High sensitivity with Day/Night function: 0.3 lux (color), 0.04 lux (B/W) at f1.4, IR cut filter switches on/off to enhance the sensitivity in B/W mode
- i-VMD (intelligent-Video Motion Detection) including video motion detection, object abandonment/removal detection, scene change detection when lens is covered, spray painted, removed or defocused
- Auto Back Focus (ABF) ensures easy installation and stable focus in both color and B/W modes
- 3-Dimensional color conversion function for natural color reproduction even in lower color temperature situation
- Adaptive Digital Noise Reduction: integration of 2D-DNR and 3D-DNR ensures noise reduction in various conditions
- Electronic sensitivity enhancement: auto (up to 32x) / manual (up to 32x)
- Electronic shutter from 1/100 to 1/10,000 sec.
- Digital zoom: up to 2x
- Alarm input and alarm output terminals
- Auto Image Stabilizer for applications where vibration or wind is a concern
- Internal / line-lock / multiplexed vertical drive (VD2) synchronization
- Over the coaxial cable data communication
- Available in 24V AC or 12V DC (WV-CP504) or 120V AC (WV-CP500) power sources



*Lens Optional



Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	650 lines in color, 700 lines in B/W
Minimum Illumination	0.3 lux in color, 0.04 lux in B/W
Dynamic Range	SD5, 52dB
Ambient Temperature	14° ~ 122°F
Scan Method/Pixels	Interlace/976 (H) x 494 (V)
Special Features	SD5, Auto Back Focus (ABF), Adaptive Black Stretch (ABS), Day/Night, intelligent VMD (i-VMD), digital zoom (2x)
Power/Consumption	24V AC, 12V DC, 120V AC/up to 3.6W
Dimensions	2 13/16" x 2 9/16" x 4 1/16" (72mm x 65mm x 103.5mm) WV-CP504, 2 15/16" x 2 9/16" x 5 3/16" (75mm x 65mm x 132.5mm) WV-CP500
Weight (camera)	0.77 lbs (350g) WV-CP504, 0.95 lbs. (430g) WV-CP500

Visit www.panasonic.com/SD5 for more details on Super Dynamic 5 technology including video demonstrations.

Popular Accessories

LENSES			
Model No.	WV-LZ62/8S	WV-LZA61/2S	PTVR0916DC
Size	1/3"	1/3"	1/3"
Iris	Auto	Auto	Auto
Type	8x Vari-focal (ALC)	2x Vari-focal (ALC)	Vari-focal
Focal Length	5-40mm	3.8-8mm	9-22mm
Aperture	f1.6 (W) - f1.9 (T)	f1.4 (W) - f1.8 (T)	f1.6
Page Ref.	86	86	87

MOUNTING BRACKETS		
Model No.	PUM8	PWM800
Type	Wall	Wall
Location	Indoor	Outdoor
Duty	Light (up to 3 lbs.)	Medium (up to 25 lbs.)
Page Ref.	98	98

HOUSINGS		
Model No.	POH1000	POH1500
Placement	Outdoor	Outdoor
Style	Bullet	Bullet
Description	10" - Lwt. Aluminum	15" - Lwt. Aluminum
Comments	Available with Heater/Blower (POH1000HB)	Available with Heater/Blower (POH1500HB)
Page Ref.	96	96

FIXED COLOR CAMERAS



*Lens Optional

WV-CP254H
Day/Night Camera*




- Compact camera design - measures only 2 5/8"W x 2 7/8"D
- Automatic Day/Night switching for 24-hour surveillance
- High sensitivity of 1.0 lux in color, and 0.15 lux in B/W at f1.4 lens
- 480 lines of horizontal resolution in color, and 570 lines in B/W
- Signal to noise ratio of 50dB
- Electronic shutter from 1/60 to 1/15,000 sec
- Built-in back-light compensation mode
- Automatic gain control
- Automatic tracing white balance
- Highlight detail aperture correction
- Internal or line-lock synchronization modes
- 24V AC








Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	480 lines in color, 570 lines on B/W
Minimum Illumination	1.0 lux color, 0.15 lux B/W
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Interlace/771 (H) x 492 (V)
Special Features	Compact size, Day/Night
Power/Consumption	24V AC 60Hz/3.3 W
Dimensions	2 5/8" x 2 9/16" x 2 7/8" (67mm x 65mm x 72.5mm)
Weight (camera)	0.7 lb (330g)

Popular Accessories

			
LENSES			
Model No.	WV-LA2R8C3B	WV-LZ62/8S	WV-LZA61/2S
Size	1/3"	1/3"	1/3"
Iris	Auto	Auto	Auto
Type	Super Wide	8x Vari-focal (ALC)	2x Vari-focal (ALC)
Focal Length	2.8mm	5-40mm	3.8-8mm
Aperture	f1.3	f1.6 (W) - f1.9 (T)	f1.4 (W) - f1.8 (T)
Page Ref.	86	86	86

			
HOUSINGS			
Model No.	PRC201C	POH1000	PIFIXD
Placement	Indoor	Outdoor	Indoor
Style	Bullet	Bullet	Dome
Description	Recessed ceiling	10" - Ltwt. Aluminum	Steel upper housing
Comments	Designed for 2' x 2' suspended ceilings	Available with Heater/Blower (POH1000HB)	Tinted 5.9" bubble
Page Ref.	89	96	90

		
MOUNTING BRACKETS		
Model No.	PUM8	PWM800
Placement	Indoor	Outdoor
Type	Wall	Wall
Comments	Maximum weight = 3 lbs	Use with POH1000 housing
Page Ref.	98	98

FIXED COLOR CAMERAS

WV-CP280 Series
Day/Night Camera*

- High performance DSP offers superb image quality
- 540 lines of horizontal resolution
- Adaptive Black Stretch feature transforms shadows and dark areas into natural, crisp images in real time
- Minimum illumination of 0.8 lux in color mode with f1.4 lens
- Simple Day/Night function (no IR filter shifting)
- Back Light Compensation (BLC)
- Automatic Light Control (ALC)
- Electronic Light Control (ELC)
- WV-CP280: 120V AC, 60 Hz;
- WV-CP284: 24V AC, 60 Hz or 12V DC






*Lens Optional







Specs

Image Sensor	1/3" CCD
Resolution (Horizontal)	540 lines in color
Minimum Illumination	0.8 lux with f1.4 lens
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	Adaptive Black Stretch, Simple Day/Night (no IR filter shifting)
Power/Consumption	24V AC/2.7W, 12V DC/220mA, 120V AC/3.4 W
Dimensions	2 5/8" x 2 9/16" x 5 1/2" (67mm x 65mm x 139.5)
Weight (camera)	0.77 lb (350g) WV-CP284, 1.12 lbs (510g) WV-CP280

Popular Accessories

LENSES			
			
Model No.	WV-LA2R8C3B	WV-LZ62/8S	WV-LZA61/2S
Size	1/3"	1/3"	1/3"
Iris	Auto	Auto	Auto
Type	Super Wide	8x Vari-focal (ALC)	2x Vari-focal (ALC)
Focal Length	2.8mm	5-40mm	3.8-8mm
Aperture	f1.3	f1.6 (W) - f1.9 (T)	f1.4 (W) - f1.8 (T)
Page Ref.	86	86	86

HOUSINGS		
		
Model No.	POH1000	POH1500
Placement	Outdoor	Outdoor
Style	Bullet	Bullet
Description	10" - Lwt. Aluminum	15" - Lwt. Aluminum
Comments	Available with Heater/Blower (POH1000HB)	Available with Heater/Blower (POH1500HB)
Page Ref.	96	96

MOUNTING BRACKETS		
		
Model No.	PUM8	PWM800
Type	Wall	Wall
Location	Indoor	Outdoor
Duty	Light (up to 3 lbs.)	Medium (up to 25 lbs.)
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Panasonic Ready-to-Go Camera Packages

Pre-tested, pre-assembled, ready for installation

These time-saving packages streamline your ordering and installation. Each package arrives as a fully-assembled unit — complete with camera, lens, and housing — and is ready for immediate installation at the job site. No separate components to order, unpack, and collate. You have a wide choice of indoor and outdoor packages, color or day/night and a broad array of vari-focal lenses to satisfy your system requirements.

Indoor/Outdoor Fixed

Model		Camera					Lens				Housing	Mount
		WV-NP502 (i-Pro)	WV-NP244 (i-Pro)	WV-CP504 (analog)	WV-CP254H (analog)	WV-CP284 (analog)	2.7-13.5mm Vari-Focal Wide Angle Day/Night	5-50mm Vari-Focal Telephoto Day/Night	2.4-6mm	2.8-12mm	Standard Bullet	Outdoor Dome
NETWORK DAY/NIGHT	POCNP502LMP05	•						•			•	•
	POCNP502LMP24	•							•		•	•
NETWORK COLOR	POCNP244L2		•							•	•	•
	POCNP244L5		•					•			•	•
ANALOG DAY/NIGHT	POC504L2			•						•	•	•
	POC504L5			•				•			•	•
ANALOG COMPACT DAY/NIGHT	POC254L2				•		•				•	•
	POC254L5				•		•				•	•
ANALOG GENERAL PURPOSE	POC284L2					•	• ¹				•	•
	POC284L5					•		• ²			•	•

¹ 2.8-12mm vari-focal lens, standard (13VG2812ASSQ)











² 5-50mm vari-focal lens, standard (13VG550SQ)

Lenses manufactured by third party provider

Panasonic quality and reliability

Every component in our Ready-to-Go camera packages delivers the quality you expect from Panasonic. Each package is backed by a three-year Panasonic limited warranty that covers all components.

Indoor/Outdoor Dome

 Model		Type	Camera			Lens		Housing	Mount		
		Color	 WV-CP254H (analog)	 WV-CP284 (analog)	 WV-CS954 (analog)	 2.7-13.5mm Vari-Focal Wide Angle Day/Night	 5-50mm Vari-Focal Telephoto Day/Night	 Built-In Zoom Lens with PTZ	 Outdoor Dome	 Wall	 Pendant
DOME COMPACT DAY/ NIGHT	POC254L2D	•	•			•			•		•
	POC254L2DW	•	•			•			•	•	
	POC254L5D	•	•				•		•		•
	POC254L5DW	•	•				•		•	•	
COLOR GENERAL PURPOSE	POC284L2D	•		•		• ¹			•		•
	POC284L2DW	•		•		• ¹			•	•	
	POC284L5D	•		•			• ²		•		•
	POC284L5DW	•		•			• ²		•	•	
DOME w/PTZ SDIII DAY/ NIGHT	POS954D	•			•			•	•		•
	POS954DW	•			•			•	•	•	

¹ 2.8-12mm vari-focal lens, standard (13VG2812ASSQ)

² 5-50mm vari-focal lens, standard (13VG550SQ)

Lenses manufactured by third party provider

analog

PTZ and Fixed Dome Camera Lineup



Model	WV-CW974/964	WV-CS954	WV-CS574	WV-CW504S/F	WV-CW244S/F	WV-CF324
Camera Type	Outdoor PTZ	Indoor PTZ	Indoor PTZ	Outdoor Vandal	Outdoor Vandal	Ruggedized Indoor Minidome
Super Dynamic	SDIII	SDIII	No	SD5	No	Adaptive Black Stretch
Imaging Device	1/4"	1/4"	1/4"	1/3"	1/3"	1/4"
Day/Night	Yes	Yes	No	Yes	No	Yes (Simple)
Auto Back Focus	Auto focus	Auto focus	Auto focus	Yes	No	Lens ABF
Minimum Illumination <small>(w/clear dome when applicable)</small>						
Color	0.5lux	0.5lux	1.0lux	0.3lux	1.0lux	0.9lux
Color w/enhancement	0.02lux @ 32x sens up	0.02lux @ 32x sens up	0.032lux @ 32x sens up	0.01lux @ 32x sens up		
B/W	0.04lux	0.04lux		0.04lux		
B/W w/enhancement	0.0013lux @ 32x sens up	0.0013lux @ 32x sens up		0.0015lux @ 32x sens up		
Key Features	Advanced auto tracking w/automatic PTZ (WV-CW974) Auto tracking w/pan/tilt (WV-CW964) Privacy zone masking	Advanced auto tracking w/pan/tilt Privacy zone masking	Privacy zone masking	High Sensitivity Adaptive Digital Noise Reduction 3D Color Conversion/ intelligent VMD (object abandonment/removal)	Options: Heater WV-CW3H Clear Dome WV-CW2C	Adaptive Black Stretch Metal body Polycarbonate dome cover
Horiz. Resolution	540 lines	540 lines	510 lines	650 lines	480 lines	540 lines
Focal Length	3.8mm-114mm	3.8mm-114mm	3.79mm-83.4mm	2x vari-focal 3.8mm-8.0mm	2x vari-focal 3.8mm-8.0mm	3.6x vari-focal 2.8mm-10.0mm
Zoom	30x optical/ 10x digital	30x optical/ 10x digital	22x optical/ 10x digital	2x optical/ 2x digital	2x optical	3.6x optical
Motion Detection	Yes	Yes	Yes	i-VMD (Intelligent VMD)	No	No
On Screen Display	Yes	Yes	Yes	Yes	No	No
Image Stabilization	Yes	Yes	No	Yes	No	No
IP66	Yes	No	No	Yes	Yes	No
Power	24VAC	24VAC	24VAC	24VAC/12VDC	24VAC/12VDC	24VAC/12VDC
Power Consumption	Camera AC 17 W w/heater AC 62 W	AC 13 W	AC 13 W	AC 11 W w/heater DC 280mA	AC 3.0 W DC 265mA	AC 2.7 W DC 220mA
Operating Temp.	-40°F – 122°F	14°F – 122°F	14°F – 122°F	14°F – 122°F -22°F – 122°F When optional heater used	14°F – 122°F -22°F – 122°F When optional heater used	14°F – 122°F

Fixed Dome and Fixed Box Camera Lineup



Model	WV-CF294/284	WV-CW384	WV-CL930 series	WV-CP500 series	WV-CP254H	WV-CP280 series
Camera Type	Indoor Minidome	Outdoor Fixed Box	Fixed Box	Fixed Box	Fixed Box	Fixed Box
Super Dynamic	Adaptive Black Stretch	SDIII	No	SD5	No	No
Imaging Device	1/4"	1/3"	1/2"	1/3"	1/3"	1/3"
Day/Night	Yes (Simple)	Yes	Yes	Yes	Yes	Yes
Auto Back Focus	WV-CF294: Lens ABF WV-CF284: N/A	Yes	Yes	Yes	No	No
Minimum Illumination <small>(w/clear dome when applicable)</small>						
Color	0.9lux	0.65lux (0.065lux @ 10x sens up)	0.09lux (0.003lux @ 32x sens up)	0.3lux (w/o sens up)	1.0lux	0.8lux
Color w/enhancement				0.01lux (w32x sens up)		
B/W	0.9lux	0.09lux 0.009lux @ 10x sens up)	0.008lux 0.0003lux @ 32x sens up	0.4lux (w/o sens up)	0.15lux	0.6lux
B/W w/enhancement				0.015lux (w32x sens up)		
Key Features	Adaptive Black Stretch	All-in-one unit IP66 Rated	1/2" CCD High IR Sensitivity (B/W mode)	High sensitivity/Adaptive Digital Noise Reduction/ 3D Color Conversion Intelligent VMD (object abandonment/removal)	Compact size: 2 5/8" x 2 9/16" x 2 7/8"	Adaptive Black Stretch
Horiz. Resolution	540 lines	540 lines	540 lines	650 lines	480 lines	540 lines
Focal Length	WV-CF294: 3.6x vari-focal, 2.8-10.0mm WV-CF284: 2x vari-focal, 2.8-6.0mm	8x vari-focal 5mm-40mm (Built-in) CS lens mount ALC Light Control	Lens optional CS lens mount ELC/ALC Light Control	Lens optional CS lens mount ELC/ALC Light Control	Lens optional CS lens mount ELC/ALC Light Control	Lens optional CS lens mount ELC/ALC Light Control
Zoom	WV-CF294: 3.6x optical WV-CF284: 2x optical	N/A	N/A	N/A	N/A	N/A
Motion Detection	No	Yes	Yes	Yes	No	No
On Screen Display	No	Yes	Yes	Yes	No	No
Image Stabilization	No	Yes	Yes	Yes	No	No
IP66	No	Yes	No	No	No	No
Power	24VAC/12VDC	Camera 24VAC/12VDC Heater 24VAC	WV-CL930:120VAC WV-CL934: 24VAC/12VDC	WV-CP500:120VAC WV-CP504: 24VAC/12VDC	24VAC	WV-CP280: 120VAC WV-CP284: 24VAC/12VDC
Power Consumption	WV-CF294: AC 2.7 W DC 220mA WV-CF284: AC 3.0 W DC 265mA	24VAC 18 W 12VDC 540mA	120VAC 4.6 W 24VAC 4.0 W 12VDC 350mA	120VAC 3.2 W 24VAC 3.6 W 12VDC 310mA	24VAC 3.3 W	120VAC 3.4 W 24VAC 2.7 W 12VDC 220mA
Operating Temp.	14°F – 122°F	-22°F – 122°F (Heater On)	14°F – 122°F	14°F – 122°F	14°F – 122°F	14°F – 122°F

As a recognized leader in DVR technology, Panasonic continues to build on our reputation with new H.264 real time recorders to help you conserve storage space without compromising image quality. And a combination of features to provide extreme versatility including DVD back-up recording and archiving, scalable on-board storage, dual streaming viewing and playback, and network interfaces. That's the Panasonic difference.



WJ-HD716 Series 16 Channel Real-Time H.264 Digital Video Recorder

- H.264 compression technology for more efficient use of disk space
- Panasonic proprietary UniPhier System LSI Platform to provide real-time field recording of 480 images per second (ips) and frame recording of 240 ips
- Intelligent Video Motion Detection (i-VMD) with Super Dynamic 5 Link (SD5Link) to share metadata information between cameras and the recorder
- Dual HDMI video outputs for true 1080i HD playback
- 16 analog video inputs including 16 Panasonic coaxial camera control inputs and 4 audio inputs
- Up to 960 ips at 16 channels, 2x monitor real-time live
- Live/playback monitor out and live monitor out (HDMI, BNC)
- SD/SDHC memory card slot for easy copy of recorded image data
- Various display modes: 4/7/8/9/12/16 split screen display
- Up to 5 recorders can be cascaded for increased camera support
- Equipped with four front accessible hard disk drive slots
- Expandable hard drive storage capacity via optional expansion units
- Up to four optional WV-CU650 system controllers can be connected via PS-Data
- Easy operation with GUI and USB mouse
- Remote monitoring
- H.264 image transfer at QVGA resolution for optimal bandwidth utilization
- Set-up data transferable via SD/SDHC memory card
- User/host authentication (up to 32 user registrations)
- Up to 8 users can operate simultaneously via network
- Easy maintenance capability through front access








Model Number	Drive Capacity
WJ-HD716/1000	1TB
WJ-HD716/2000	2TB
WJ-HD716/4000	4TB
WJ-HD716/13000	13TB

Specs

Hard Drives	1TB base unit (up to 4 HDDs internally, 27 HDDs externally)
Input/Output (Video)	16x 1.0 V [p-p] 75 ohm composite video inputs (BNC) / 16x multiplexed control data (1-16 ch.) / Cascade IN: 2x HDMI, 1x BNC
Input/Output (Audio)	4x - 10dBv, 10 K ohm (RCA) (1-4ch.) / Rear: 1x-10 dBv, 600 ohm, Front: 1x-10 dBv, 600 ohm
Input/Output (Alarm)	16x terminal inputs, 16x camera alarm, PS-Data
Ambient Temperature	41° ~ 113° F
Interface (Ethernet)	10Base-T/100Base-TX (RJ-45) x 1
Interface (DATA)	2x RS-485 (RJ-11), 2/4 wire, half duplex, for 1-16 ch.
Power/Consumption	120V AC, 60 Hz/130W
Dimensions	16 15/16" x 5 3/16" x 15 3/4" (430mm x 132mm x 400mm)
Weight	37.4 lbs (17kg) with 4 HDDs

Popular Accessories

					
Model No.	Canister/1000	WJ-HDE400	WJ-HDB601	WJ-HDB611	WV-ASM100
Description	1TB HDD in canister (9 HDD bays)	Hard disk expansion unit	RAID 5/6 board	DVD Drive	Management Software
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Controller Compatibility

	WV-CU161C	WV-CU650	WV-CU950
WJ-HD716	No	Yes *1 *2	No

*1 In PS-Data mode
*2 May require firmware update

DIGITAL VIDEO RECORDERS



WJ-HD616 Series 16 Channel H.264 Digital Video Recorder




- H.264 compression technology for more efficient use of disk space
- Panasonic proprietary UniPhier System LSI Platform to provide real-time field recording of 240 images per second (ips) and frame recording of 120 ips
- Intelligent Video Motion Detection (i-VMD) with Super Dynamic 5 Link (SD5Link) to share metadata information between cameras and the recorder
- Dual HDMI video outputs for true 1080i HD playback
- 16 analog video inputs including 8 Panasonic coaxial camera control inputs and 4 audio inputs
- Live/playback monitor out and live monitor out (HDMI, BNC)
- SD/SDHC memory card slot for easy copy of recorded image data
- Various display modes: 4/7/8/9/12/16 split screen display
- Up to 5 recorders can be cascaded for increased camera support
- Equipped with four front accessible hard disk drive slots
- Expandable hard drive storage capacity via optional expansion units
- Up to four optional WV-CU650 system controllers can be connected via PS-Data
- Easy operation with GUI and USB mouse
- Remote monitoring
- H.264 image transfer at QVGA resolution for optimal bandwidth utilization
- Set-up data transferable via SD/SDHC memory card
- User/host authentication (up to 32 user registrations)
- Up to 8 users can operate simultaneously via network
- Easy maintenance capability through front access

Model Number	Drive Capacity
WJ-HD616/1000	1TB
WJ-HD616/2000	2TB
WJ-HD616/4000	4TB
WJ-HD616/13000	13TB

Specs

Hard Drives	1TB base unit (up to 4 HDDs internally, 27 HDDs externally)
Input/Output (Video)	16x 1.0 V [p-p] 75 ohm composite video inputs (BNC) / 8x multiplexed control data (1-8 ch.) / Cascade IN: 2x HDMI, 1x BNC
Input/Output (Audio)	4x - 10dBv, 10 K ohm (RCA) (1-4ch.) / Rear: 1x-10 dBv, 600 ohm, Front: 1x-10 dBv, 600 ohm
Input/Output (Alarm)	16x terminal inputs, 16x camera alarm, PS-Data
Ambient Temperature	41° ~ 113° F
Interface (Ethernet)	10Base-T/100Base-TX (RJ-45) x 1
Interface (DATA)	2x RS-485 (RJ-11), 2/4 wire, half duplex, for 1-16 ch.
Power/Consumption	120V AC, 60 Hz/130W
Dimensions	16 15/16" x 5 3/16" x 15 3/4" (430mm x 132mm x 400mm)
Weight	37.4 lbs (17kg) with 4 HDDs

Popular Accessories

			<i>Photo Not Available</i>	<i>Photo Not Available</i>	
Model No.	Canister/1000	WJ-HDE400	WJ-HDB601	WJ-HDB611	WV-ASM100
Description	1TB HDD in canister (9 HDD bays)	Hard disk expansion unit	RAID 5/6 board	DVD Drive	Management Software
Page Ref.	—	36			36

Controller Compatibility

	WV-CU161C	WV-CU650	WV-CU950
WJ-HD616	No	Yes ^{*1} ^{*2}	No

^{*1} In PS-Data mode
^{*2} May require firmware update

 ACCESSORIES

EX-DVD External Digital Archiving Solution

- Further enhances performance and efficiency of Panasonic WJ-HD300A Digital Video Recorder series
- Versatility to record in DVD-RAM, DVD-R and CD-R formats and connects easily via standard USB 2.0 port
- Archived images can be played back in their native formats on standard PCs
- Native image files are also ideal for FTP downloading via direct or network connections and for viewing from external storage devices



SCT08P Converter

- Enables control of Pelco PTZ cameras through Panasonic WJ-HD300A DVR series utilizing Panasonic system controller WV-CU650
- Ability to upgrade existing VCR / MUX systems to Panasonic WJ-HD300A DVR series, while utilizing previously installed Pelco PTZ cameras
- Control up to 8 Pelco protocol cameras with 1 converter
- Ability to select first 8 channels (1-8) or 2nd set of 8 channels (9-16)
- Supports P-Protocol and D-Protocol
- Supports basic control functions (Pan/Tilt/Zoom/Preset)
- AC adapter, RJ-11 cable for Panasonic camera RS-485 port included



 MEDIA

DVD-RAM Disks

- LM-HB47LU – DVD-RAM Disk, 4.7GB
- LM-HB94LU – DVD-RAM Disk, 9.4GB





Optional Equipment Shown

WV-ASM100 Management Software Solution for Panasonic NVR's, DVR's and i-Pro Cameras

- Complete software management and live monitoring software for Panasonic WJ-ND200/ND300A/ND400 NVR series, WJ-HD300A/WJ-RT416 DVR series and i-Pro network cameras
- Up to 100 recorders, 64 encoders and 256 directly connected cameras can be registered, and up to 6,400 cameras registered in the recorders
- For flexible design, live images can be received directly from the camera/encoder or via the recorder
- Multi-monitor option enables simultaneous use of Operation Display (1/4/9/16 split), Live Display (1/4/9/16 split) and Map Display each on a dedicated monitor
- Up to 400 camera groups: cameras and multi-screen mode for the Operation Display can be programmed and called up by manual or sequence operation
- Image resolution dynamically changes depending on the screen mode: VGA for Quad screen, QVGA for 16 split screen
- Panasonic camera control
- A camera, a group or a sequence can be called up on the Operation Display by ID with the optional system controller WV-CU950
- Alarm pop-up notification/messaging
- Up to 64 camera icons can be freely positioned on a map with alarm status indicated by the color of the icons
- Download video clips for archiving
- Video analytic functions from WJ-NT314 encoder can be displayed



Accessory



Model No.	WV-CU950
Description	System Controller
Page Ref.	77

Computer Requirements

Microsoft Windows XP
Intel Pentium D 3GHz
1024 x 768, 32 bit color



WV-ASM100L Management Software Solution for Panasonic NVR's, DVR's and i-Pro Cameras – Light Version

- Complete software management and live monitoring software for Panasonic WJ-ND200/ND300A/ND400 NVR series, WJ-HD300A/WJ-RT416 DVR series and i-Pro network cameras
- Up to 100 recorders, 64 encoders and 256 directly connected cameras can be registered, and up to 6,400 cameras registered in the recorders
- For flexible design, live images can be received directly from the camera/encoder or via the recorder
- Up to 400 camera groups: cameras and multi-screen mode for the Operation Display can be programmed and called up by manual or sequence operation
- Image resolution dynamically changes depending on the screen mode: VGA for Quad screen, QVGA for 16 split screen
- Panasonic camera control
- Alarm pop-up notification/messaging
- Up to 64 camera icons can be freely positioned on a map with alarm status indicated by the color of the icons
- Download video clips for archiving

See Management Software Comparison Chart on page 67



WV-ASM10 Monitoring Software for Panasonic NVR's, DVR's and i-Pro Cameras

- Multi-screen software decoder designed for control rooms; up to 16 split live displays including preprogrammed selection of network cameras
- Up to 16 recorders and 256 network cameras can be registered
- MPEG-4 and JPEG formats
- Live display and sequence play; Spot/Quad (A-D) by 1/4/6/9/16 split multi-screen and synchronized multiscreen group sequence
- Up to 30 ips/camera in 16 split-screen in MPEG-4 2 Mbps mode (depending on the camera)
- Up to 400 camera groups (pre-programmed camera selection and multi-screen setup)
- Open interface for external control
- Supports i-Pro cameras, recorders, encoders
- Pre-programmed cameras can automatically be displayed upon power on
- Camera title display up to 16 characters






Computer Requirements

Microsoft Windows XP
Intel Pentium 3GHz
1024 x 768, 32 bit color

Recorders & Encoders/Decoders Lineup Chart




Network Video Recorders

			
Model	WJ-ND400	WJ-ND300A	WJ-ND200
Max. Storage	9 TB (internal), 54 TB w/external	4TB (internal), 28TB w/ external	320 GB (internal, removable)
Image Download	PC via Network	PC via Network	PC via Network
Network I/F	2x1 Gbps, 1x10 Mbps	2x100 Mbps, 1x10 Mbps	1x100 Mbps
Max. IP Camera	64 at MPEG-4	32 at MPEG-4	16 at MPEG-4
Max. Recording Rate/Total	Approx. 1,920fps	Approx. 960fps	Approx. 270fps (at 640x480 9 cameras) (More depending on camera/network settings)
Camera Brands Supported	Panasonic, Axis	Panasonic, Axis	Panasonic, Axis
Alarm/Control Ports	32 alarm inputs, 32 alarm outputs, control/aux	16 alarm inputs, 16 alarm outputs, control/aux	16 alarm inputs, 16 alarm outputs, control/aux
Motion Detection/Search	Only from camera/Metadata smart search	Only from camera	Only from camera
Power Source	120 VAC, 60 Hz	120 VAC, 60 Hz	120 VAC, 60 Hz
Rack Mountable	Yes	Yes	Yes
Remote Software	Yes (browser, WV-ASM100/ASM10)	Yes (browser, WV-ASM100/ASM10)	Yes (browser, WV-ASM100/ASM10)



Digital Video Recorders

		
Model	WJ-HD716	WJ-HD616
Video Inputs	16	16
Input Loop Through	Yes	Yes
Monitor Out	2x HDMI, 2 multi-screen	2x HDMI, 2 multi-screen
Other Video/Audio Outputs	2 composite, 2 audio	2 composite, 2 audio
Audio Inputs	4	4
Max. Recording Rate/Total	480 ips (field)	240 ips (field)
Video Input/Output Signal	NTSC only	NTSC only
Max. Storage	4,000 GB (Internal) 31,000 GB (w/external)	4,000 GB (Internal) 31,000 GB (w/external)
Copy Ports	Built-in SD/SDHC, optional CD/DVD burner	Built-in SD/SDHC, optional CD/DVD burner
Image Download	PC via Network	PC via Network
Alarm/Control Ports	16 alarm inputs 16 alarm outputs control/aux	16 alarm inputs 16 alarm outputs control/aux
PTZ Support	Yes (coax and RS485)	Yes (coax and RS485)
Motion Detection	Yes	Yes
Power Source	120 VAC, 60 Hz	120 VAC, 60 Hz
Rack Mountable	Yes	Yes
Remote Software	Yes (Netclient, browser, WV-ASM100)	Yes (Netclient, browser, WV-ASM100)

Encoders/Decoders

Video Encoder		Video Encoder		Video Decoder	
Model	WJ-GXE500	Model	WJ-NT304/WJ-NT314	Model	WJ-GXD400
Compression	H.264, MPEG-4, JPEG	Compression	Dual MPEG-4/JPEG	Type	Multi Channel High Definition
Video Inputs	4	Video Inputs	4	Compression	Dual MPEG-4/JPEG
Audio Inputs	1	Audio Inputs	1, 2-way capable	Audio Inputs	1 RCA
SD Card Backup	Yes (SDHC)	SD Card Backup	Yes	FPS/Resolution	30 ips
FPS/Resolution	30 ips per channel, D1 (720 x 480) VGA, QVGA	FPS/Resolution	4 CIF/10-30 fps	Display	1,280 x 960, 640 x 480, 320 x 240
Supports	Face Detection	Analytics	2 ch. video (WJ-NT314 only)	Supports	Up to 256 Panasonic i-Pro cameras and encoders

Management Software Comparison Chart

Functions			WV-ASM100 (Ver. 6.0) Management Software	WV-ASM100L (Ver. 6.0) Management Software - Light	WV-ASM10 (Ver. 2.0) Live Monitoring Software
					
Main Functions/Description			Live / Playback / Control	Live / Playback / Control	Live Only / No Control
Supported Video Formats			H.264 / MPEG-4 / M-JPEG	H.264 / MPEG-4 / M-JPEG	H.264 / MPEG-4 / M-JPEG
Supported Devices	Camera	Direct	i-Pro series ¹	i-Pro series ¹	i-Pro series ¹
		Via Recorder	i-Pro series ¹ , Axis ² , BB series ²	i-Pro series ¹ , Axis ² , BB series ²	i-Pro series ¹ , Axis ² , BB series ²
	Recorder	NVR	WJ-ND400, WJ-ND300/300A, WJ-ND200 series	WJ-ND400, WJ-ND300/300A, WJ-ND200 series	WJ-ND400, WJ-ND300/300A, WJ-ND200 series
		DVR	WJ-HD716/616, WJ-HD309A/316A, WJ-RT416 series	WJ-HD716/616, WJ-HD309A/316A, WJ-RT416 series	WJ-HD309A/316A series
	Encoder		WJ-NT304, WJ-NT314	WJ-NT304	WJ-NT304
	Controller		WV-CU950	No	No
Max. Devices	Camera	Direct	256	256	256
		Via Recorder	6,400 (with WJ-ND400 series) 3,200 (with WJ-ND300 series)	6,400 (with WJ-ND400 series) 3,200 (with WJ-ND300 series)	1,024 (with WJ-ND400 series) 512 (with WJ-ND300A series)
		Via Encoder	256 (with WJ-NT304/314)	256 (with WJ-NT304)	256 (with WJ-NT304)
	Recorder		100	100	16
	Encoder		64	64	64
	Controller		1	No	No
Camera Control			Yes (PTZ, Preset, Auto mode etc.)	Yes (PTZ, Preset, Auto mode etc.)	No
Recorder Control			Yes (Playback, REC etc.)	Yes (Playback, REC etc.)	No
Multi-screen Pattern			1 / 4 / 9 / 16	1 / 4 / 9 / 16	1 / 4 / 6 / 9 / 16
Display Performance			30 ips x 16 screens @ MPEG4 2Mbps	30 ips x 16 screens @ MPEG4 2Mbps	30 ips x 16 screens @ MPEG4 2Mbps
Sequence (Tour / Group)			Yes	Yes	Yes
AVMD Display (Frame and Tracking Line)			Yes	No	No
Multiple Monitors Supported			Yes (Up to 3 monitors: Operation / Live / Map)	No	No
Map Function			Yes	No	No
Audio ³			Yes (Live: 2-way, Playback: 1-way)	Yes (Live: 2-way, Playback: 1-way)	No
Supported Alarm			Panasonic Alarm Protocol	Panasonic Alarm Protocol	No
Event Search (T&D, Event type etc.)			Yes	Yes	No
VMD Search			Yes (with WJ-ND400 series)	No	No
Image Download			Yes	Yes	No

¹ Except model WV-NM100

² Specific models only. Camera control is not supported. Only JPEG supported.

³ Only Panasonic i-Pro models are supported.

Get your analog cameras on the network with the performance of Panasonic encoders and decoders. They feature advanced built-in video analytics, High Definition quality, multi-format output for viewing and recording, and multiplex combinations to accommodate multiple cameras. That's the Panasonic difference.



WJ-GXE500 4-Channel H.264 Video Encoder

- Full frame H.264 transmission for all 4 channels
- Dual streams of H.264 (High profile) and JPEG at VGA / D1 image size
- Motion adaptive interlace/progressive conversion produces clear frames even when the subject is moving
- Compensates picture degradation caused by long-distance cable - clear picture is maintained
- Coaxial communication ensures the control of Panasonic PTZ cameras via coaxial cable
- Open command conversion table for RS-485 ensures the control of various manufacturer's PTZ cameras
- SD/SDHC Memory card slot for manual recording, alarm recording, and backup upon network failure (JPEG)
- Camera title display: up to 16 alphanumeric characters embedded in the image
- Full duplex bi-directional audio allows interactive communication
- PoE (power will be supplied by simply connecting a LAN cable - IEEE802.3af compliant)
- Rack mountable with mounting brackets
- Alarm sources including 3 terminal input, VMD, camera site alarm, video loss, and Panasonic alarm
- VMD (Video Motion Detector) with 4 programmable detection areas
- Face detection technology detects the position of human face and the information is sent by XML or video stream (Ch1 only)
- Meta data for VMD is supplied to work with the WJ-ND400 NVR playback VMD function



Available: May 2010



H.264



Specs

Image compression	H.264/MPEG-4/JPEG
Protocol	IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP
Video input	4x
Resolution	720 x 480 (D1), 640 x 480 (VGA), 320 x 240 (QVGA)
Op. Temp.	14° ~ 122° F
Power/Consump.	12V DC, 500 mA / PoE, 6W
Dimensions	5 1/2" x 1 3/4" x 7 9/32"
Weight:	2.21 lbs (1kg)

Popular Accessory



Model No.	WV-Q204/2S
Description	Rack mounting bracket (2 units)
Page Ref.	—

WJ-NT314/WJ-NT304
4 Channel MPEG-4/JPEG Video Encoder
with Video Analytics (WJ-NT314 only)



- Connect up to 4 analog cameras
- MPEG-4/JPEG digital signal output at VGA image size with up to 30 ips
- MPEG-4 and JPEG dual stream output for simultaneous live monitoring and high resolution recording
- Progressive output allows every frame to be clear even when subject is moving
- 2 channel video analytics (WJ-NT314 only)
 - 8 detection programs, each with 3 intruder detection areas and 1 object abandonment/removal detection area
 - Trace up to 8 detected objects per channel
 - Depth correction allows more accurate detection when scene includes deeper depth
- Panasonic camera control: pan/tilt/zoom/focus/iris/preset position (up to 256), auto mode, setup menu. AUX, B/W ON/OFF/Auto, click centering
- Unit title display: up to 20 alphanumeric characters on browser
- Camera title display: up to 20 alphanumeric characters on browser
- SD memory card slot for alarm recording and backup if network failure occurs (using FTP command)
- Alarm sources including 2x AVMD (WJ-NT314 only), 4x terminal inputs, 4x camera alarms, 4x video loss alarms and Panasonic alarm protocol can trigger actions including SD memory recording/FTP image transfer, e-mail notification, alarm indication, terminal output and Panasonic protocol output
- Bi-directional audio (1 channel)
- Built-in network interface (10Base-T/100Base-TX)
- Multi-screen: images from 16 cameras can be displayed in 4 separate quad screens
- Alarm e-mail notification
- FTP client function enables periodic image data transfer or transfer upon alarm



Specs

Image Compression Method	JPEG / MPEG-4
Protocol	TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP
Video Input	4 (NTSC Composite)
Resolution	VGA (640 x 480) / QVGA (320 x 240)
Camera Coaxial Control	Pan/Tilt/Zoom/Focus/Preset/Auto Focus (Panasonic PTZ Cameras)
Operating Temperature	14° ~ 122° F
Power/Consumption	12V DC/approx. 10W (AC adaptor for 120VAC)
Dimensions	8 1/4" x 1 3/4" x 11 13/16" (210mm x 44mm x 300mm)
Weight	5.06 lbs (2.3kg)

Popular Accessories

Model No.	WV-Q204/1S	WV-Q204/2S
Description	Rack mounting bracket (1 unit only)	Rack mounting bracket (2 units)
Page Ref.	—	—

WJ-GXD400**Multi-Channel High Definition Video Decoder for i-Pro Network Surveillance System**

- Multi-channel high-definition video decoder with HDMI video interface
- 1x 4 VGA (1280 x 960) images with 2x VGA images in 3 split screens or 6x VGA (640 x 480) images in 6 split screens
- VGA image displayed at 30ips/sec
- Registers up to 256 cameras including cameras connected to i-Pro Network Video Encoders
- Supports tour sequence and group sequence
- Supports camera site alarm signal: alarm indication displayed and alarm terminal output activated
- Supports multicast / unicast for efficient network usage
- Single channel audio decoding G.726
- High-speed network interface (100Base-T/1000Base-T), maintenance port (10Base-T)
- Browser GUI
- Embedded Real-Time Operating System delivers high reliability
- Operating temperature 14° ~ 122°F

**Specs**

Image Format	MPEG-4, JPEG (multi-decoding)
Resolution	1,280 x 960, 640 x 480, 320 x 240
Audio Format	G.726 (ADPCM), 32 kbps / 16 kbps
Video Output	1,920 x 1,080: 1 x 4VGA (1,280 x 960) with 2x VGA or 6x VGA 30 frames/sec., audio supported
Network Interface	10Base-T/100-BaseTX/1000Base-T, RJ-45 connector
Multicast	Yes
Power/Consumption	12V DC, 1.4 A
Dimensions	8 1/4" x 1 3/4" x 12 1/16" (210mm x 44mm x 300mm)
Weight	4.4 lbs (2.0kg)

Popular Accessories

Model No.	WV-Q204/1S	WV-Q204/2S
Description	Rack mounting bracket (1 unit only)	Rack mounting bracket (2 units)
Page Ref.	—	—

Panasonic delivers the control solution for any size video surveillance system. Our server based system delivers advanced and versatile programmable operations with features like intuitive GUIs with site map overlays, advanced multi-group and tour sequences, scalable solutions for future expansion, and seamless integration with Panasonic's complete line of video surveillance solutions. That's the Panasonic difference.



PMPU1000
System Management Server

- Linux based system management server
- 2,048 x 512 analog, including 1,024 IP devices standard system capability
- Satellite feature allows linking 64 PMPU1000 standalone systems to a global system with universal cross network access
- Supports up to 1,024 alarms inputs and various alarm source type and management
- Supports up to 1,024 event schedules
- Flexible system design for use with both analog and IP systems
- 16 Simultaneous operators per local system
- Operator management, priority, access and timer executed restrictions
- Redundant server option
- User-friendly administrator console
- 3x Built-in network interfaces (10Base-T/100Base-TX)



Maximum Size per PMPU1000 Server

	IP	Hybrid	Analog
Cameras	512	Consult Panasonic for system design	512
Logical Monitors	384 <small>(64 WJ-GXD400)</small>		64
DVR/NVR	64		64
Controllers	32		64
Alarms	1,024		1,024
Sequences	128		128
Steps per Sequence	128		128
Registered Users	9,999		9,999

We recommend you contact a Panasonic representative to assist you with your system design.

Supported Devices

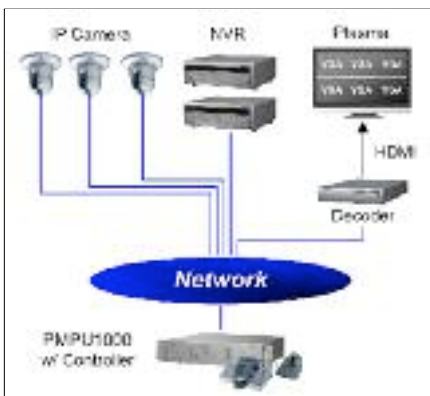
Analog	Matrix Switcher	WJ-SX650 series
	DVR	WJ-HD300/300A, WJ-RT416, WJ-HD616, WJ-HD716
	Analog Camera	Supported via Matrix Switcher or DVR
IP	IP Camera	All i-Pro cameras except for WV-NM100
	PTZ	WV-NS202/202A, WV-NS954, WV-NW964
	Fixed Dome	WV-NF284, WV-NW484S, WV-NW502S, WV-NF302
	Fixed Box	WV-NP244, WV-NP1004, WV-NP304, WV-NP502
	NVR	WJ-ND400, WJ-ND300/300A, WJ-ND200 series
	Encoder	WJ-NT304, WJ-NT314
	Decoder	WJ-GXD400
	Controller	WV-CU950
	Management Software	WV-ASM970

Optional System Components



Model No.	WV-ASM970
Description	Management software unit for archiving
Page Ref.	75

IP



Hybrid



Analog



MATRIX SWITCHER



• Optional Equipment Shown

WJ-SX650 Mid-Range Matrix Switcher

- Easy configuration
- 256 inputs x 32 outputs, expandable up to 512 x 64
- Simple set-up with administrator console
- Removable boards: front access
- Seamless control integration with WJ-HD300A and WJ-RT416 DVR series
- Supports up to 1,024 alarm inputs
- Compact design

Controller Compatibility

	WV-CU161C	WV-CU650	WV-CU950
WJ-SX650	No	Yes *1 *2	No

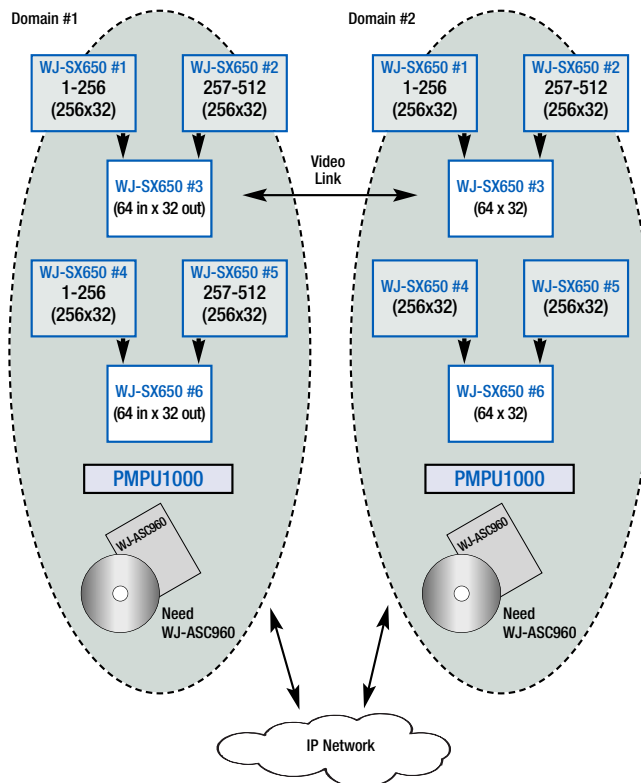
*1 In PS-Data mode
*2 In Terminal mode



Accessories

Model No.	WJ-SX650U	WJ-PB65C32	WJ-PB65E01	WJ-PB65M16	WJ-CA65L20K	WJ-CA65L07K	WJ-CA68	WV-CU650
Description	Card Cage for WJ-SX650 Matrix Switcher	Video Input Board for WJ-SX650 Matrix Switcher	Ethernet Board for WJ-SX650 Matrix Switcher	Video Output Board for WJ-SX650 Matrix Switcher	Expansion Cable Kit (2m – 6.6 ft.) for WJ-SX650 Matrix Switcher	Expansion Cable Kit (0.7m – 2.3 ft.) for WJ-SX650 Matrix Switcher	D-sub/BNC Video Cable for WJ-SX650 Matrix Switcher	System Controller
Page Ref.	—	—	—	—	—	—	—	77

Satellite System Concept



Visit www.panasonic.com/security for the latest product information

WV-ASM970

Management Software for PMPU1000

- Dedicated GUI (Graphic User Interface) for PMPU1000
- 2 Monitor Outputs (operation & map, video monitoring)
- Multi-split screen (1/4/7/9/10/13/16 split) support
- Up to 30 ips/camera can be displayed in 16 split-screen at H.264 VGA or MPEG-4 VGA
- Camera Control (PTZ, Preset, Iris, Auto function and so on) supported
- Recorder Control (REC, Play, R-Play, FF, REW, Pause, Stop, Go to date, Go to last and so on) supported
- Up to 100 map (JPEG or Bitmap) with up to 64 camera icons in a map
- Minimum PC Requirement
 - CPU
 - Intel CoreTM2 Quad Q9650 or faster
 - Intel CoreTM i7-920 or faster (Panasonic recommends)
 - RAM
 - 3GB or more
 - Video Card
 - VRAM: 256MB or more, compatible with DirectX 9.0c
 - OS
 - Microsoft Windows 7 Professional (32bit/64bit) (English or Chinese Version)
 - Microsoft Windows Vista Business SP2 (32bit/64bit) (English or Chinese Version)
 - Microsoft Windows XP Professional SP3 (32bit) (English or Chinese Version)



DATA MULTIPLEXER



WJ-MP204C
4 Channel Data Multiplexer Unit

- 4 camera inputs and selection
- Panasonic data multiplexer (PS•Data) link mode
- Camera selection in daisy chain connection allows expansion of the system up to 16 cameras

PS•Data



QUAD SYSTEM



WJ-MS424
Color Quad System

- Quad picture and sequential switching function
- Alphanumeric character generator permits presetting of up to 8 characters
- Alarm inputs terminals
- User-friendly on-screen set-up menu

CONTROL SYSTEMS



WV-CU161C
System Controller

- Preset control functions: 64 positions, focus, zoom ratio, rotation mode, etc.
- Lens control: zoom ratio, focus, iris
- Pan/tilt control: manual tilt, auto-pan
- Receiver control: wiper, defroster, AUX 1-2



Controller Compatibility

WV-CU161C	
WJ-SX650	No
WJ-HD309A	No
WJ-HD316A	No
WJ-HD616	No
WJ-HD716	No
WJ-RT416	No
Panasonic camera direct	Yes

WV-CU650
System Controller

- Control of Panasonic switchers and digital recorders
- PTZ camera control
- Panasonic digital recorders control buttons and jog/sechuttle
- Separate 3D joystick control
- Enables complete cascade function for WJ-HD300A DVR Series
- RS485 data port for PS•Data link or terminal mode

Controller Compatibility

WV-CU650	
WJ-SX650	Yes *1 *2
WJ-HD309A	Yes *1
WJ-HD316A	Yes *1
WJ-HD616	Yes
WJ-HD716	Yes
WJ-RT416	Yes *1 *3
Panasonic camera direct	No

*1 In PS-Data mode
*2 In Terminal mode
*3 May require firmware update



PS•Data

WV-CU950
System Controller

- Control of Panasonic switchers and digital recorders
- PTZ camera control
- Separate 3D joystick control
- Panasonic digital recorders control buttons and jog/sechuttle
- 10Base-T/100Base-TX Ethernet port
- RS485 data port for PS•Data link or terminal mode

Controller Compatibility

WV-CU950	
WJ-SX650	Yes*
WJ-HD309A	No
WJ-HD316A	No
WJ-HD616	No
WJ-HD716	No
WJ-RT416	No
WV-ASM100	Yes
Panasonic camera direct	No

*WJ-MPU955A is needed



PS•Data

Make sure you're viewing all the resolution and color captured by your cameras and recorders with Panasonic monitors. We offer LCD and CRT displays for every viewing need including high resolution image reproduction, 16:9 ratio wide screens, wide angle viewing capability, true color reproduction, multiple inputs for multiple sources, and selectable scan sizes. That's the Panasonic difference.



LCD DISPLAYS

WV-LW2200 22" Full HD Wide Screen LCD Monitor

- Proprietary Panasonic image-processing technology delivers HD quality
- Screen resolution: 1,920 x 1,080
- High contrast: 1000 : 1 (typical)
- HDMI 1080p compatible
- Full color display: approx. 16.7 million colors
- BNC composite input with loop through output, HDMI input and RGB for PC input
- Selectable screen aspects and scanning ranges: 16:9 full, 16:9 zoom, 4:3 full, 4:3 zoom and dot-by-dot
- Automatic power-save function for no signal input or can be activated manually
- Horizontal resolution: 500 TV lines for composite video
- 21.6" diagonal



Specs

Display Pixel	1,920 x 1,080
Aspect Ratio	16 x 9
Contrast Ratio	1000:1
Viewing Angle	H: 85° / V: 80°
Brightness	300 cd/m2 (typical)
Special Features	VESA mounting holes, security slot for optional anti-theft lock
Power/Consumption	120V AC, 60Hz
Dimensions	20 7/8" x 16 5/16" x 9 1/4" (531mm x 414mm x 235mm)
Weight	17 lbs (7.7kg)

WV-LW1900 19" W-XGA Wide Screen LCD Monitor

- Proprietary Panasonic image-processing technology
- Screen resolution: 1,366 x 768
- High contrast: 1000 : 1 (typical)
- HDMI 1080p compatible
- Full color display: approx. 16.7 million colors
- BNC composite input with loop through output, HDMI input and RGB for PC input
- Selectable screen aspects and scanning ranges: 16:9 full, 16:9 zoom, 4:3 full, 4:3 zoom and dot-by-dot
- Automatic power-save function for no signal input or can be activated manually
- Horizontal resolution: 500 TV lines for composite video
- 18.5" diagonal



Specs

Display Pixel	1,366 x 768
Aspect Ratio	16 x 9
Contrast Ratio	1000:1
Viewing Angle	H: 85° / V: 80°
Brightness	300 cd/m2 (typical)
Special Features	VESA mounting holes, security slot for optional anti-theft lock
Power/Consumption	120V AC, 60Hz
Dimensions	18 1/4" x 14 3/4" x 9 1/4" (463mm x 374mm x 235mm)
Weight	14.3 lbs (6.5kg)

L C D D I S P L A Y S



PLCD42HD
42" High Definition LCD Monitor

- High Definition resolution: 1,920 x 1,200
- High contrast ratio – 1300:1
- Active Matrix TFT with approx. 16.7 million colors
- 2x BNC composite inputs with loop through outputs
- S-Video in/out
- DVI and HDMI inputs
- Two built-in speakers
- Pedestal stand included
- Power: 120V AC

Specs

Display Pixel	1,920 x 1,080
Aspect Ratio	16 x 9
Contrast Ratio	1300:1
Viewing Angle	H: 178° / V: 178°
Brightness	500 cd/m2 (typical)
Special Features	High Definition, pedestal stand
Power/Consumption	120V AC, 250W
Dimensions	41.85" x 28.45" x 12" (1,063mm x 725mm x 305mm)
Weight	77.2 lbs (35kg)



PLCD24HD
24" High Definition LCD Monitor

- High Definition resolution: 1,920 x 1,200
- High contrast ratio - 1000:1
- Active Matrix TFT with approx. 16.7 million colors
- 2x BNC composite inputs with loop through outputs
- S-Video in/out
- RGB for PC input
- DVI and HDMI inputs
- Two built-in speakers with gradual volume increase
- Picture-in-picture
- Space saving design
- Equipped with standard VESA mounting holes
- Power: 120V AC

Specs

Display Pixel	1,920 x 1,200
Aspect Ratio	16 : 9
Contrast Ratio	1000 : 1 (typical)
Viewing Angle	H: 160°, V: 160°
Brightness	400 cd/m2 (typical)
Special Features	High Definition, energy efficient, space saving design
Power/Consumption	120V AC, 110W
Dimensions	22 4/9" x 15 1/3" x 3 7/10" (570.4mm x 389mm x 94mm)
Weight	26.46 lbs (12kg)

LCD DISPLAYS

PLCD20P
20" LCD Monitor

- Resolution screen: 1,600 x 1,200
- High contrast ratio - 800:1
- Active Matrix TFT with approx. 16.7 million colors
- 2x BNC composite inputs with loop through outputs
- S-Video in/out
- RGB for PC input
- DVI and HDMI inputs
- Two built-in speakers with gradual volume increase
- Picture-in-picture
- Space saving design
- Equipped with standard VESA mounting holes
- Power: 120V AC

Specs

Display Pixel	1,600 x 1,200
Aspect Ratio	4 : 3
Contrast Ratio	800 : 1 (typical)
Viewing Angle	H: 178°, V: 178°
Brightness	300 cd/m2 (typical)
Special Features	Energy efficient, space saving design
Power/Consumption	120V AC, 70W
Dimensions	18 1/9" x 15 5/9" x 3 15/79" 460.4mm x 395.1mm x 81mm)
Weight	23.1 lbs (10.5kg) includes stand

**Popular Accessory***Photo Not Available*

Model No.	PLCDRMK
Description	Optional rack mount kit
Page Ref.	—

WV-LC1900
19" SXGA LCD Monitor

- High resolution screen: 1,280 x 1,024 (SXGA)
- 500 TV lines of resolution
- High contrast ratio - 800:1
- Full color display: approx. 16.7 million colors
- Exceptional picture quality using motion adaptive Interlace/Progressive converter technology
- 2x BNC composite inputs with loop through outputs, S-Video and RGB for PC input
- Max. 0.5 W speaker output
- Three selectable scan sizes: full scan (5:4), over scan (4:3) and under scan (4:3)
- Security slot for insertion of industry-standard anti-theft lock (optional)
- Equipped with standard VESA mounting holes
- Power: 120V AC

Specs

Display Pixel	1,280 x 1,024 (SXGA)
Aspect Ratio	5 : 4
Contrast Ratio	800 : 1 (typical)
Horizontal Resolution	500 TV lines
Viewing Angle	H: 160°, V: 160°
Brightness	300 cd/m2 (typical)
Special Features	Energy efficient, space saving design
Power/Consumption	120V AC, 43W
Dimensions	16 11/16" x 17 5/16" x 9 5/16" (423mm x 440mm x 236mm)
Weight	16.5 lbs (7.5kg) includes stand



L C D D I S P L A Y S



WV-LC1700
17" SXGA LCD Monitor

- High resolution screen: 1,280 x 1,024 (SXGA)
- 500 TV lines of resolution
- High contrast ratio - 800:1
- Full color display: approx. 16.7 million colors
- Exceptional picture quality using motion adaptive Interlace/Progressive converter technology
- 2x BNC composite inputs with loop through outputs, S-Video and RGB for PC input
- Max. 0.5 W speaker output
- Three selectable scan sizes: full scan (5:4), over scan (4:3) and under scan (4:3)
- Security slot for insertion of industry-standard anti-theft lock (optional)
- Equipped with standard VESA mounting holes
- Power: 120V AC

Specs

Display Pixel	1,280 x 1,024 (SXGA)
Aspect Ratio	5 : 4
Contrast Ratio	800 : 1 (typical)
Horizontal Resolution	500 TV lines
Viewing Angle	H: 160°, V: 160°
Brightness	300 cd/m2 (typical)
Special Features	Energy efficient, space saving design
Power/Consumption	120V AC, 41W
Dimensions	15 15/16" x 16 5/16" x 9 5/16" (404mm x 415mm x 236mm)
Weight	15.4 lbs (7.0kg) includes stand

Popular Accessory

Model No.	WQ-LM191
Description	Optional mounting bracket for EIA 19" rack
Page Ref.	—



PLCD15V
15" LCD Monitor

- Resolution screen: 1,024 x 768
- High contrast ratio - 600:1
- Active Matrix TFT with approx. 16.7 million colors
- 2x BNC composite inputs with loop through outputs
- S-Video in/out
- RGB for PC input
- Two built-in speakers with gradual volume increase
- Space saving design
- Equipped with standard VESA mounting holes
- Power: 120V AC

Specs

Display Pixel	1,024 x 768
Aspect Ratio	4 : 3
Contrast Ratio	600 : 1 (typical)
Viewing Angle	H: 160°, V: 160°
Brightness	300 cd/m2 (typical)
Special Features	Energy efficient, space saving design
Power/Consumption	120V AC, 36W
Dimensions	13 5/6" x 13 2/3" x 7 5/6" 351mm x 348mm x 200mm)
Weight	12.6 lbs (5.7kg) includes stand

Popular Accessory

<i>Photo Not Available</i>	
Model No.	PLCDRMK
Description	Optional rack mount kit
Page Ref.	—

COLOR MONITORS

Specs

Aspect Ratio	4 : 3
Actual Visual Size (approx.)	8 3/4" diagonal
Horizontal Resolution	300 TV lines
Rack Mount (19-type)	Yes
Video Input/Output	2 / 2 (BNC)
Special Features	Audio - RCA
Power/Consumption	120V AC, 60 Hz/48 W
Dimensions	8 11/16" x 9 1/32" x 12 3/16" (220mm x 229mm x 309mm)
Weight	14.3 lbs (6.5kg)

WV-CM1020
9" Color CRT Monitor

- 22cm (9") diagonal actual visual size
- 300 lines of horizontal resolution
- Selectable 2 channels A/B
- 2 loop through video/audio connectors
- Max. 0.5 W speaker
- Durable metal cabinet
- 120VAC/60Hz

**Specs**

Aspect Ratio	4 : 3
Actual Visual Size (approx.)	14" diagonal
Horizontal Resolution	More than 370 TV lines
Rack Mount (19-type)	Yes
Video Input/Output	2 / 2 (BNC)
Special Features	S-Video (1), Audio - RCA
Power/Consumption	120V AC, 60 Hz/70 W
Dimensions	14 13/16" x 14 3/16" x 15 11/16" (376mm x 361mm x 399mm)
Weight	33.1 lbs (15kg)

WV-CM1420
13" Color CRT Monitor

- 34cm (13") diagonal actual visual size
- More than 370 TV lines of horizontal resolution
- Selectable 2 channels A/B
- Max. 0.5W speaker output
- 120VAC/60Hz

**Popular Accessory**

Model No.	WQ-LM140E
Description	rack mount
Page Ref.	—

Specs

Aspect Ratio	4 : 3
Actual Visual Size (approx.)	13 3/16" diagonal
Horizontal Resolution	370 TV lines
Rack Mount (19-type)	No
Video Input/Output	1 / 1 (BNC)
Special Features	S-Video (1), Audio - RCA
Power/Consumption	120V AC, 60 Hz/60 W
Dimensions	14 7/16" x 13 5/8" x 14 3/8" (366mm x 346mm x 365mm)
Weight	21.2 lbs (9.6kg)

WV-CK1420A
13" Color CRT Monitor

- 34cm (13") diagonal actual visual size
- 370 lines of horizontal resolution (S-Video)
- Looping through BNC connectors for video input and output
- Looping through RCA connectors for audio input and output
- S-Video input
- Max. 0.7W for speaker output
- 120VAC/60Hz

**Specs**

Aspect Ratio	4 : 3
Actual Visual Size (approx.)	20" diagonal
Horizontal Resolution	500 TV lines
Rack Mount (19-type)	No
Video Input/Output	1 / 1 (BNC)
Special Features	S-Video (1), Audio - RCA
Power/Consumption	120V AC, 60 Hz/75 W
Dimensions	20 1/16" x 18 3/8" x 18 7/8" (509mm x 467mm x 480mm)
Weight	46.3 lbs (21kg)

WV-CK2020A
20" Color CRT Monitor

- 51cm (20") diagonal actual visual size
- 500 lines of horizontal resolution (S-Video)
- Looping through BNC connectors for video input and output
- Looping through RCA connectors for audio input and output
- S-Video input
- Max. 0.7 W for speaker output
- 120VAC/60Hz





Move your video signals from point to point without sacrificing quality over long distances by employing fiber optics transceivers. They transmit video and control signals over 4 miles without signal degradation, include universal interfaces for easy integration, and are available multimode and singlemode in a variety of combinations. And with Panasonic's line of camera housings and brackets, you can outfit the cameras you need to meet the specific requirements of each camera location.




FIBER OPTICS

VIDEO RECEIVERS - MULTIMODE

MODEL	SERIES	DESCRIPTION
MRM100	M100 Series	Low profile FM video receiver - module
RRM100	M100 Series	FM video receiver - rack card
MR404C	404C Series	4 Channel video receiver - module
RR404C	404C Series	4 Channel video receiver - rack card
MRR880C	880C Series	8 Channel video receiver - modular or EIA 19 rack mount
MRM1605P	M1605P Series	Video receiver with Panasonic up-the-coax control - module 
RRM1605P	M1605P Series	Video receiver with Panasonic up-the-coax control - rack card 
MRM1485	M1485 Series	Video receiver / RS485 transceiver - module
RRM1485	M1485 Series	Video receiver / RS485 transceiver - rack card

VIDEO TRANSMITTERS - MULTIMODE

MODEL	SERIES	DESCRIPTION
MTM100	M100 Series	Low profile FM video transmitter - module
MT404C	404C Series	4 Channel video transmitter - module
MRT880C	880C Series	8 Channel video transmitter - modular or EIA 19 rack mount
MTM1605P	M1605P Series	Video transmitter with Panasonic up-the-coax control - module 
MTM1485	M1485 Series	Video transmitter / RS485 transceiver - module

DATA TRANSCEIVERS - MULTIMODE

MODEL	SERIES	DESCRIPTION
MTX486	486 Series	Panasonic PSD data transmitter - module
MRX486	486 Series	Panasonic PSD data receiver - module
MT45MLSC	45 Series	10/100 Meg Ethernet data transmitter - module
MR45MLSC	45 Series	10/100 Meg Ethernet data receiver - module
MTX47LX	47 Series	1 Gig Ethernet data transmitter - module
MRX47LX	47 Series	1 Gig Ethernet data receiver - module

ACCESSORIES

MODEL	SERIES	DESCRIPTION
SR20/2	Sub rack	EIA 19" rack mount frame with universal switching power supply



1 / 3 " L E N S E S



WV-LZA62/2
Megapixel Lens

- 2x variable
- $f1.4$ (wide), $f2.1$ (tele)
- 2.8-6 mm focal length
- Auto iris



WV-LZA61/2S
1/3" Vari-focal Lens

- 2x variable
- 3.8-8 mm focal length
- Auto iris
- Silver color



WV-LA2R8C3B
1/3" Lens

- Super wide-angle lens
- $f1.3$ aperture ratio
- 2.8 mm focal length
- Auto iris
- Not for use with Auto Back Focus cameras



WV-LZ62/8S
1/3" Vari-focal Lens

- 8x variable lens
- $f1.6$ (wide), $f1.9$ (tele) aperture ratio
- 5-40 mm focal length
- Auto iris
- Silver color



WV-LA9C3B
1/3" Lens

- Standard-angle lens
- $f1.2$ aperture ratio
- 9 mm focal length

For Camera/Lens Compatibility, Visit Pages 102-103

1 / 3 " L E N S E S

PLZ15/33
1/3" Vari-focal Lens²

- Wide-angle lens
- f1.5 aperture ratio
- 15-50 mm focal length
- Auto iris
- Vandal-resistant camera compatible*



PLZ29/27
1/3" Vari-focal Day/Night Lens²

- Wide-angle lens
- f0.95 aperture ratio
- 2.9-8.0 mm focal length (2.7x)
- Auto iris
- Vandal-resistant camera compatible*



PLA22T3DN
1/3" Fixed Focal Lens¹

- Wide-angle lens
- f1.2 aperture ratio
- 2.2 mm focal length
- Auto iris
- Vandal-resistant camera compatible*



PLAMP2206
1/3" Megapixel Lens²

- Wide-angle lens
- 2.2 mm focal length
- Auto iris
- Megapixel camera compatible



PLAMP2406
1/3" Megapixel Lens²

- Wide-angle lens
- f1.2 aperture ratio
- 2.4-6 mm focal length
- Auto iris
- Megapixel camera compatible



PLAMP2812
1/3" Megapixel Lens²

- Wide-angle lens
- f1.4 aperture ratio
- 2.8-12 mm focal length
- Auto iris
- Megapixel camera compatible



PLAMP0550
1/3" Megapixel Lens²

- Wide-angle lens
- f1.4 aperture ratio
- 5-50 mm focal length
- Auto iris
- Megapixel camera compatible



1. OEM partnership w/Tamron
2. OEM partnership w/Fujinon

*Only the factory installed lens qualifies for the vandal-resistant rating

For Camera/Lens Compatibility, Visit Pages 102-103

1 / 3 " L E N S E S



PLZ27/5DN
1/3" Vari-focal
Day/Night Lens²

- Wide-angle lens
- *f*1.3 aperture ratio
- 2.7–13.5 mm focal length (5x)
- Auto iris



PLZ20/5
1/3" Vari-focal Lens¹

- Wide-angle lens
- *f*1.6 aperture ratio
- 20.0–100.0 mm focal length (5x)
- Auto iris



PLZ5/10
1/3" Vari-focal Lens²

- Wide-angle lens
- *f*1.6 aperture ratio
- 5.0–50.0 mm focal length (10x)
- Auto iris



PTVR0916DC
1/3" Vari-focal Lens¹

- *f*1.6 aperture ratio
- 9-22 mm focal length
- Auto iris

1 / 2 " L E N S E S



PLAHS1770
1/2" Vari-focal Lens²

- 10x variable lens
- *f*1.8 aperture ratio
- 7-70 mm focal length
- Manual iris
- For WV-CL930 camera series



WV-LZ81/10
1/2" Zoom Lens

- 10x motorized lens
- *f*1.4 aperture ratio
- 8-80 mm focal length
- Auto iris



WV-LZ81/6A
1/2" Zoom Lens

- 6x motorized lens
- *f*1.2 aperture ratio
- 8.5-51 mm focal length
- Auto iris

For Camera/Lens Compatibility, Visit Pages 102-103

1. OEM partnership w/Tamron
2. OEM partnership w/Fujinon

INDOOR FIXED HOUSINGS

Specs

Type	Corner
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	8.5" x 5.5" x 8.5" (HxWxD)
Weight	8 lbs.

Camera Compatibility:
WV-CP254H

PMCH8 Metal Indoor Corner Housing

- For Panasonic's standard body 1/3" cameras with Panasonic fixed-focal lens series
- Accommodates a standard body fixed camera/lens up to 8" in length
- Constructed of 14-gauge steel
- For corner mount applications



Specs

Type	Surface Mount
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	5.8" x 5.5" x 10.8" (HxWxD)
Weight	8 lbs.

Camera Compatibility:
WV-NP502, WV-NP304, WV-NP244, WV-CL930 Series,
WV-CP500 Series, WV-CP480 Series, WV-CP254H,
WV-CP280 Series

PMEH8A Metal Indoor Wedge Housing

- For Panasonic's standard body 1/3" cameras with Panasonic fixed-focal lens series
- Accommodates a standard body fixed camera/lens up to 8" in length
- Constructed of 14-gauge low-profile wedge housing
- 18-gauge base
- For surface mount applications



Specs

Type	Surface Mount
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	7.1" x 6.5" x 13.1" (HxWxD)
Weight	10 lbs.

Camera Compatibility:
WV-NF302, WV-NP502, WV-NP304

PMEH11 11" Steel Wedge Housing

- Accommodates camera/lens combinations less than 11" long
- Vandal-resistant housing for indoor use
- Clear 3/16" polycarbonate window and 14-gauge steel body
- Easy surface mounting to any ceiling type



INDOOR DOME HOUSINGS

Specs

Type	Suspended Ceiling
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	2' x 2'
Weight	8 lbs.

Camera Compatibility:
WV-NP502, WV-NP304, WV-NP244, WV-CL930 Series,
WV-CP500 Series, WV-CP480 Series, WV-CP254H,
WV-CP280 Series

PRC201C Recessed Ceiling Housing

- For use in 2' x 2' suspended ceiling applications
- Housing manufactured from high-impact white plastic
- Viewing window manufactured from high-grade optically clear acrylic
- Unit is fully adjustable for 360° positioning
- Accommodates a standard body fixed camera up to 8" in length (camera not included)



INDOOR DOME HOUSINGS



PICSD
Indoor In-Ceiling Dome

- For Panasonic PTZ dome cameras WV-CS574 and WV-NS324
- Opaque liner combined with lower tinted dome hides camera position
- Small size 5.9" bubble
- Steel upper housing

PIFIXD
Indoor Half Dome Housing

- Same features as above; designed for Panasonic 1/2 body fixed cameras

Specs

Type	Dome Recessed Ceiling
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	9.3" x 7" x 9.3" (HxWxD)
Weight	4 lbs.

Camera Compatibility for PICSD:
WV-CS574
Camera Compatibility for PIFIXD:
WV-CP254H



PID5SN
Indoor Recessed Ceiling Housing - Smoked

- Discreet enclosure for mounting into a drop ceiling tile or sheet rock ceiling
- Metal back box, plenum rated
- Smoked dome
- For WV-NS202, WV-NF284, WV-CF294/284 & WV-CW484 cameras

Specs

Type	Dome Recessed Ceiling
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	14" x 11" x 11" (HxWxD)
Weight	4 lbs.

Camera Compatibility:
WV-NS202A, WV-NF284, WV-CF324,
WV-CF294, WV-CF284



PID5CN
Indoor Recessed Ceiling Housing - Clear

- Discreet enclosure for mounting into a drop ceiling tile or sheet rock ceiling
- Metal back box, plenum rated
- Clear dome
- For WV-NS202, WV-NF284, WV-CF294/284 & WV-CW484 cameras

Specs

Type	Dome Recessed Ceiling
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	14" x 11" x 11" (HxWxD)
Weight	4 lbs.

Camera Compatibility:
WV-NS202A, WV-NF284, WV-CF324,
WV-CF294, WV-CF284



PID8A
Indoor Recessed Ceiling Housing - Tinted

- 8.5" tinted dome
- Upper steel construction
- Opaque liner combined with tinted dome
- For Panasonic fixed cameras
- Max. camera/lens combination 7"

Specs

Type	Dome Recessed Ceiling
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	10.5" x 12.25" x 12.5" (HxWxD)
Weight	8 lbs.

Camera Compatibility:
WV-NP502, WV-NP304, WV-CL930 Series,
WV-CP500 Series, WV-CP480 Series,
WV-CP254H, WV-CP280 Series

INDOOR DOME HOUSINGS

Specs

Type	Surface Mount Ceiling
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	8" x 8" x 16" (HxWxD)
Weight	6 lbs.

Camera Compatibility:
 WV-NP244, WV-CL930 Series, WV-CP500 Series,
 WV-CP480 Series, WV-CP254H, WV-CP280 Series

PSMD12 Indoor Surface Dome Housing

- 12" dome
- Accommodates a standard body fixed camera/lens up to 8" in length
- Constructed of ABS plastic housing
- Tinted acrylic dome
- For Panasonic's standard body 1/3" cameras with Panasonic fixed-focal lens series

Camera not included



Specs

Type	Drop Ceiling
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	2' x 2'
Weight	5 lbs.

Camera Compatibility:
 WV-CS954, WV-CS574

PDM9 Indoor Drop Ceiling Mount

- For discreet indoor surveillance; mounts into a standard 2 x 2 or 2 x 4 suspended ceiling
- Can be used alone or in conjunction with the entire ceiling tile
- For the WV-CS954 and WV-CS574 cameras

Camera not included



Specs

Type	Recessed Ceiling
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	8.4" x 8.4" x 6.6" (HxWxD)
Weight	3.5 lbs.

Camera Compatibility:
 WV-NS954, WV-NS202A, WV-CS954, WV-CS574

PID9 Indoor In-Ceiling Dome Housing

- Opaque liner combined with lower tinted dome hides camera position
- Steel upper housing
- For WV-CS574 and WV-CS954 cameras (camera not included)



INDOOR VANDAL-RESISTANT HOUSINGS

Specs

Type	Recessed Ceiling
Heater/Blower	No
Operating Temperature	Indoor
Power/Consumption	None
Dimensions	11.5" x 11.8" x 11.8" (HxWxD)
Weight	8 lbs

Camera Compatibility:
 WV-NS954, WV-NS202A, WV-CS954, WV-CS574

PIDV7CN/PIDV7SN Vandal-Resistant Indoor Recessed Ceiling Housing and Mount

- Easy installation into sheetrock or drop ceilings
- Heavy duty construction with durable 7" polycarbonate dome
- Includes a decorative trim ring with security screws
- Plenum rated metal top
- PIDV7CN: Clear lower dome
- PIDV7SN: Smoked lower dome



▪ Clear lower dome shown

INDOOR VANDAL-RESISTANT HOUSINGS



PISM5V
Indoor Vandal-Resistant Housing

- Easy camera installation
- Constructed of high-impact polycarbonate for vandal resistance
- Surface mount primary design with the ability to be pendant or wall mounted by way of 1" pipe thread attachment point on the top of the enclosure (plug included when not used)
- Designed to meet IP66 standards
- The enclosure also features a side knock-out for 3/4" conduit opening to meet a variety of installations conditions
- Mounting support for multiple Panasonic cameras

Specs

Type	Surface Mount
Heater/Blower	Yes
Operating Temperature	-40 F to +122 F
Weight	5 lbs

Camera Compatibility:
WV-NS202A, WV-NF302, WV-NF284, WV-CF294

OUTDOOR FIXED HOUSINGS



PBRH10
Outdoor Bullet Resistant Housing

- 10" housing for Panasonic's standard body cameras with all current Panasonic vari-focal and fixed lenses
- Ballistic rated
- 7-gauge strength and durability
- 24 VAC heater

Specs

Type	Bullet Resistant
Heater/Blower	Yes
Operating Temperature	-20 F to +120 F
Power/Consumption	24VAC/28 W
Dimensions	7.75" x 13.75" x 6" (HxWxD)
Weight	25 lbs

Camera Compatibility:
WV-NP502, WV-NP304, WV-NP244, WV-CL930 Series,
WV-CP500 Series, WV-CP480 Series, WV-CP254H,
WV-CP280 Series

Popular Accessory



Model No.	PBWM10
Description	Wall mount bracket for PBRH10
Page Ref.	—

OUTDOOR DOME HOUSINGS

Specs

Type	Dome Pendant PTZ Camera Mount
Heater/Blower	Yes
Operating Temperature	-20 F to +120 F
Power/Consumption	24VAC/52 W
Dimensions	14" x 10" x 10" (HxWxD)
Weight	6.6 lbs

Camera Compatibility:
WV-NS954, WV-CS954, WV-CS574

Specs

Type	Dome Wall PTZ Camera Mount
Heater/Blower	Yes
Operating Temperature	-20° F to +120° F
Power/Consumption	24VAC/52 W
Dimensions	14" x 15" x 10" (HxWxD)
Weight	19.8 lbs

Camera Compatibility:
WV-NS954, WV-CS954, WV-CS574

Specs

Type	Dome Pendant Fixed Camera Mount
Heater/Blower	Yes
Operating Temperature	-50° F to +120° F
Power/Consumption	24VAC, 50 W
Dimensions	17" x 14" x 17" (HxWxD)
Weight	11 lbs.










Camera Compatibility:
WV-NP502, WV-NP304, WV-NP244, WV-CL930 Series,
WV-CP500 Series, WV-CP480 Series, WV-CP254H,
WV-CP280 Series

Specs

Type	Dome Wall Fixed Camera Mount
Heater/Blower	Yes
Operating Temperature	-50° F to +120° F
Power/Consumption	24VAC, 50 W
Dimensions	17" x 14" x 17" (HxWxD)
Weight	11 lbs.

Camera Compatibility:
WV-NP502, WV-NP304, WV-NP244, WV-CL930 Series,
WV-CP500 Series, WV-CP480 Series, WV-CP254H,
WV-CP280 Series

Popular Accessories

MOUNTING BRACKETS									
Model No.	PWM20G	PWM20GB	PWM30G	PWM30GB	PPRM30G	PPRM30GB	PWBT1621	PACA2	PAPM3
Description	Gooseneck wall mount, black	Gooseneck wall mount, beige	Parapet mount (inside wall), black	Parapet mount (inside wall), beige	Parapet mount (outside wall), black	Parapet mount (outside wall), beige	Ground loop isolation transformer	Corner mount adapter, black	Pole mount adapter, black
Page Ref.	90	90	90	90	90	90	—	89	89

POD7CN Outdoor Dome Housing

- Pendant mount style for PTZ dome cameras
- Easy installation
- 24-hour fan operation for effective heating and condensation protection
- 24VAC heater for low power installation
- Surge protection for video line and power
- Ground loop protection by optional unit PWBT1621 (isolation transformer)
- Optically clear dome material
- Lower dome: 7" diameter

Camera not included



POD7CWN Outdoor Dome Housing

- Includes same features as POD7CN, except:
- Wall mount style for PTZ dome cameras



POD8CF Outdoor Dome Housing

- Pendant mount for fixed cameras
- White housing
- Durable engineered plastic top, UV protected
- Optional mounts for corner, pole, and parapet applications PACA2, PAPM3
- 24VAC blowers and thermostatically controlled heaters for condensation protection
- Surge protection for both video and power
- Thermoformed, optically clear, cell-cast acrylic material
- Use optional PWM20G or PWM20GB for wall mount application



POD8CWF Outdoor Dome Housing

- Wall mount for fixed cameras
- White housing
- Includes same features as POD8CF
- Optional mounts for corner, pole and parapet applications



OUTDOOR DOME HOUSINGS



POD9CT
Outdoor Dome Housing

- Pendant mount style for PTZ dome cameras
- Built-in heater/blower for effective heating/condensation protection
- Surge protection for video and power lines
- Optically clear dome material, UV protected
- White housing

Specs

Type	Dome Pendant Mount
Heater/Blower	Yes
Operating Temperature	-40° F to +122° F
Power/Consumption	24VAC, 50 W
Dimensions	15" x 11" x 16" (HxWxD)
Weight	7 lbs.

Camera Compatibility:
WW-NS202A, WW-CS954, WW-CS574



POD9CWT
Outdoor Dome Housing

- Wall mount style for PTZ dome cameras
- Built-in heater/blower for effective heating/condensation protection
- Surge protection for video and power lines
- Optically clear dome material, UV protected
- White housing

Specs

Type	Dome Wall Mount
Heater/Blower	Yes
Operating Temperature	-40° F to +122° F
Power/Consumption	24VAC, 50 W
Dimensions	15" x 11" x 16" (HxWxD)
Weight	7 lbs.

Camera Compatibility:
WW-NS202A, WW-CS954, WW-CS574



POD9C
Outdoor Dome Housing

- Pendant mount style for PTZ dome cameras
- Built-in heater/blower for effective heating/condensation protection
- Surge protection for video and power lines
- Optically clear dome material, UV protected
- Silver housing

Specs

Type	Dome Pendant Mount
Heater/Blower	Yes
Operating Temperature	-40° F to +122° F
Power/Consumption	24VAC, 50 W
Dimensions	15" x 11" x 11" (HxWxD)
Weight	7 lbs.

Camera Compatibility:
WW-NS202A, WW-CS954, WW-CS574



POD9CW
Outdoor Dome Housing

- Wall mount style for PTZ dome cameras
- Built-in heater/blower for effective heating/condensation protection
- Surge protection for video and power lines
- Optically clear dome material, UV protected
- Silver housing

Specs

Type	Dome Wall Mount
Heater/Blower	Yes
Operating Temperature	-40° F to +122° F
Power/Consumption	24VAC, 50 W
Dimensions	15" x 11" x 16" (HxWxD)
Weight	7 lbs.

Camera Compatibility:
WW-NS202A, WW-CS954, WW-CS574

Popular Accessories

MOUNTING BRACKETS									
Model No.	PWM20G	PWM20GB	PWM30G	PWM30GB	PPRM30G	PPRM30GB	PWBT1621	PACA2	PAPM3
Description	Gooseneck wall mount, black	Gooseneck wall mount, beige	Parapet mount (inside wall), black	Parapet mount (inside wall), beige	Parapet mount (outside wall), black	Parapet mount (outside wall), beige	Ground loop isolation transformer	Corner mount adapter, black	Pole mount adapter, black
Page Ref.	90	90	90	90	90	90	—	89	89

Specs

Type	Dome Pendant Mount
Heater/Blower	24 VAC 25 W
Operating Temperature	-20° F to +122°F
Power/Consumption	24V AC/54 W
Dimensions	10.3" x 10.3" x 14.6" (262mm x 262mm x 371mm)
Weight	7 lbs.

Camera Compatibility:
WV-NS202A

Specs

Type	Dome Wall Mount
Heater/Blower	24 VAC 25 W
Operating Temperature	-20° F to +122°F
Power/Consumption	24V AC/25 W
Dimensions	10.3" x 10.3" x 14.6" (262mm x 262mm x 371mm)
Weight	7 lbs.

Camera Compatibility:
WV-NS202A

Specs

Type	Dome Pendant Mount
Heater/Blower	24 VAC 25 W
Operating Temperature	-20° F to +122°F
Power/Consumption	24V AC/52 W
Dimensions	10.3" x 10.3" x 14.6" (262mm x 262mm x 371mm)
Weight	9 lbs.

Camera Compatibility:
WV-CS954, WV-CS574

Specs

Type	Dome Wall Mount
Heater/Blower	24 VAC 25 W
Operating Temperature	-20° F to +122°F
Power/Consumption	24V AC/52 W
Dimensions	10.3" x 10.3" x 14.6" (262mm x 262mm x 371mm)
Weight	9 lbs.










Camera Compatibility:
WV-CS954, WV-CS574

Specs

Type	Surface Mount
Heater/Blower	Yes
Operating Temperature	-40 F to +122 F
Weight	5 lbs

Camera Compatibility:
WV-NS202A, WV-NF302, WV-NF284, WV-CF294

Popular Accessories

MOUNTING BRACKETS									
Model No.	PWM20G	PWM20GB	PWM30G	PWM30GB	PPRM30G	PPRM30GB	PWBT1621	PACA2	PAPM3
Description	Gooseneck wall mount, black	Gooseneck wall mount, beige	Parapet mount (inside wall), black	Parapet mount (inside wall), beige	Parapet mount (outside wall), black	Parapet mount (outside wall), beige	Ground loop isolation transformer	Corner mount adapter, black	Pole mount adapter, black
Page Ref.	90	90	90	90	90	90	—	89	89

PODV7CPNS
Outdoor Vandal-Resistant Housing

- White housing
- Power board included
- Heater/blower
- Pendant mount



PODV7CWNS
Outdoor Vandal-Resistant Housing

- White housing
- Power board included
- Heater/blower
- Wall mount



PODV9CPT
Outdoor Vandal-Resistant Housing

- Pendant mount with easy camera installation
- Strong cast aluminum top and trim ring
- Rugged UV protected polycarbonate lower dome
- Heater/blower for effective heating and condensation protection



PODV9CWT
Outdoor Vandal-Resistant Housing

- Wall mount with easy camera installation
- Strong cast aluminum top and trim ring
- Rugged UV protected polycarbonate lower dome
- Heater/blower for effective heating and condensation protection



POSM5V
Outdoor Vandal-Resistant Housing

- Constructed of high impact polycarbonate
- Surface mount with ability to pendant or wall mount
- Easy camera installation



INDOOR/OUTDOOR FIXED HOUSINGS



POH1000 Outdoor Housing

- 10" aluminum housing for all Panasonic standard body cameras and all current Panasonic vari-focal and fixed lenses
- Lightweight aluminum chassis
- Side hinges for ease of access when focusing and adjusting
- Terminal block interface for easy connection
- Provision for optional heater/blower and sun shield
- Includes PWM800 wall mount kit

POH1000HB Outdoor Housing

- Includes same features as POH1000, plus:
- Built-in 24VAC heater/blower



POH1500 Outdoor Housing

- 15" housing for fixed box cameras
- Lightweight aluminum chassis
- Side hinge for ease of access when adjusting and servicing camera
- Dual conduit opening on housing bottom, sealed with rubber grommets
- Terminal block interface for easy connection
- Provision for optional heater/blower and sun shield
- Includes PWM800 wall mount kit

POH1500HB Outdoor Housing

- Includes same features as POH1500, plus:
- Built-in 24VAC heater/blower

PRESSURIZED HOUSINGS



PPFD9C/PPFD9CN Pressurized Dome Housing

- Constructed of durable engineered plastic top, 94 VO with UV protected and polycarbonate lower dome
- Standard with pendant mount
- Meets DE and IP67 standards
- Pressurized indicator
- 50 W heater turns on at 40° F and off at 60° F
- Power and video surge protector
- PPFD9C: for analog cameras
- PPFD9CN: for network cameras

PPH14 Indoor Pressurized Housing

- Accommodates a lens and camera combination with a total length of up to 14"
- For Panasonic's standard body 1/3" cameras with Panasonic fixed-focal length cameras or motorized zoom lens



Specs

Type	Standard Fixed Camera
Heater/Blower	Yes
Operating Temperature	-20° F to +120° F
Power/Consumption	24VAC, 27 W
Dimensions	4.3" x 5.6" x 11" (HxWxD)
Weight	5 lbs.

Camera Compatibility:
WV-NP502, WV-NP304, WV-NP244, WV-CL930 Series,
WV-CP500 Series, WV-CP480 Series, WV-CP254H,
WV-CP280 Series

Popular Accessory

Model No.	PSS10
Description	Sunshield, also performs as hanging mount
Page Ref.	—

Specs

Type	Standard Fixed Camera
Heater/Blower	Yes
Operating Temperature	-20° F to +120° F
Power/Consumption	24VAC, 27 W
Dimensions	4.3" x 5.6" x 16" (HxWxD)
Weight	7 lbs.

Camera Compatibility:
WV-NP502, WV-NP304, WV-NP244, WV-CL930 Series,
WV-CP500 Series, WV-CP480 Series, WV-CP254H,
WV-CP280 Series

Popular Accessory

Model No.	PSS15
Description	Sunshield, also performs as hanging mount
Page Ref.	—

Specs

Type	Pendant
Heater/Blower	24 VAC 54 W
Operating Temperature	-50° F to +122° F
Power/Consumption	24V AC/52 W
Dimensions	13" x 11.5" x 11.5" (HxWxD) (262mm x 262mm x 371mm)
Weight	7 lbs.

Camera Compatibility:
WV-CS954, WV-CS574

Specs

Type	Bullet (requires mount)
Heater/Blower	Yes
Operating Temperature	-40° F to +120° F
Power/Consumption	24V AC/28 W
Dimensions	6.8" x 22" x 5.7"
Weight	9 lbs.

Camera Compatibility:
WV-NP502, WV-NP304, WV-NP244, WV-CL930 Series,
WV-CP500 Series, WV-CP480 Series, WV-CP254H,
WV-CP280 Series

Popular Accessory

Model No.	PWM800
Description	Wall mount kit
Page Ref.	89

MOUNTING BRACKETS

PACA2 – Black Finish PACA2B – Beige Finish Outdoor Corner Mount Adapter

- 200 lbs. load weight
- To corner mount dome housing models: POD7CW, POD8CWF, POD9CWT, POD9CW, PODV7CWNS, PWM20G, PWM20GB, PWM20GS



PAPM3 – Black Finish PAPM3B – Beige Finish Outdoor Pole Mount Adapter

- Mounted to a round pole larger than 3" in diameter by stainless steel straps (not included)
- 200 lbs. load weight
- To mount dome housing models: POD7CW, POD8CWF, POD9CWT, POD9CW, PODV7CWNS, PWM20G, PWM20GB, PWM20GS



PCMA474F Corner Mount Adapter

- Rugged corner adapter
- Tamper-proof screws for complete protection
- Durable powder coat finish
- For select Panasonic vandal-resistant cameras



PHM5 Hanging Mount Bracket

- Designed for indoor use and for pendant mounting from a flat surface
- Pipe extension (not included)
- For use with Panasonic PTZ cameras

Camera not included



PHM220 Pole Mount Bracket

- Lightweight aluminum
- Powder coat finish
- For use with bullet style housing



PHM240 Pedestal Mount Bracket

- Lightweight aluminum
- Powder coat finish
- For use with bullet style housing



PHM260 Ceiling Mount Bracket

- Lightweight aluminum
- Powder coat finish
- For use with bullet style housing



PPMF12D Pendant Mount Bracket

- Mounting bracket and back box for housing models: POD7C, POD8CF, POD9C, POD9CT, PODV7CNS in a hanging mount application
- Includes knockouts for conduit
- 1-1/2" standard pipe (not included)



MOUNTING BRACKETS



**PPRM30G – Black Finish
PPRM30GB – Beige Finish
Parapet Mount**

- Durable powder coat finish
- All aluminum construction
- 1 1/2" pipe thread on end for quick and easy dome mounting
- Access plug for easy wire pulls
- Extension piece for added flexibility
- Swivels for easy camera mounting
- 50 lbs. load rating
- For pendant housings



**PRCM1
Embedded Mount Bracket**

- For use in recessed ceiling applications (ceiling tile or sheetrock)
- White trim plate
- Designed for BB-HCM701A, BB-HCM705A, WV-CW484, WV-NF284, WV-NS202A, WV-NW484S cameras



**PSRCW2000B
Outdoor Parapet
Roof Top Mount Bracket**

- Heavy-duty
- Designed to be mounted on a flat roof top or roof top parapet
- Swivels for easy camera mounting
- 150 lbs. load weight
- Black
- For use with outdoor dome housing models: POD7CW, PODV7CWNS, POD8CW, POD9CWT



**PUM8
Indoor Wall
Mount Bracket**

- For wall mount applications or can be quickly converted for ceiling mounting
- For Panasonic's standard body cameras with maximum camera and lens length of 8" and maximum weight of 3 lbs.



**PWM9
Wall Mount Bracket**

- Designed for indoor use, supports Panasonic PTZ cameras
- Mounts to a flat wall and has a 1" cable opening

Camera not included



**PWM30G – Black Finish
PWM30GB – Beige Finish
Parapet Mount**

- Durable powder coat finish
- All aluminum construction
- 1 1/2" pipe thread on end for quick and easy dome mounting
- Access plug for easy wire pulls
- Swivels for easy camera mounting
- 50 lbs. load rating



**PWM20G – Black Finish
PWM20GB – Beige Finish
PWM20GS – Silver Finish
Wall Mount**

- Durable powder coat finish
- All aluminum construction
- 1 1/2" pipe thread on end for quick and easy dome mounting
- Access plug for easy wire pulls
- 50 lbs. load rating
- For all pendant mounts



**PWM800
Outdoor Wall/Pole Mount**

- Medium-duty outdoor mount
- Designed for mounting to a flat wall or round pole (larger than 3.5" diameter)
- Supports weight loads up to 25 lbs.
- Black, textured powder coat finish
- Use with POH1000/POH1500 bullet housing series

MOUNTING BRACKETS

WV-Q105 Direct Ceiling Installation Bracket

- For WV-CS954, WV-CS574 and WV-NS202A cameras



WV-Q106 Embedded Ceiling Mount Bracket

- For WV-CS574 camera



WV-Q115 Mounting Bracket

- For WV-CW504F camera



WV-Q117 Suspended Ceiling Installation Bracket

- For WV-CS954 and WV-CS574 cameras



WV-Q116 Embedded Ceiling Installation Bracket

- For WV-CS954 camera



WV-Q118 Wall Mount Bracket

- For WV-CS954 and WV-CS574 cameras



WV-Q150S - Smoke Dome WV-Q150C - Clear Dome Wall Mount Bracket

- For WV-NS202A network PTZ camera



WV-Q151S - Smoke Dome WV-Q151C - Clear Dome Embedded Ceiling Mount Bracket

- For WV-NS202A network PTZ camera



WV-Q152S - Smoke Dome WV-Q152C - Clear Dome Ceiling Mount Bracket

- For WV-NS202A network PTZ camera



MOUNTING BRACKETS



WV-Q166
Embedded Ceiling Mount Bracket

- For WV-CW484 vandal-resistant camera series



WV-Q167
Embedded Ceiling Mount Bracket

- For WV-NF284 network camera



WV-Q169
Embedded Ceiling Mount Bracket

- For WV-NW484S camera



WV-Q173
Embedded Ceiling Mount Bracket

- For WV-NF302 camera

VANDAL-RESISTANT CAMERA BRACKETS



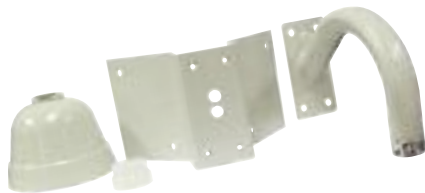
PS484S
Vandal-Resistant Shroud

- Weatherproof
- Durable cast aluminum construction
- 1 1/2" NPT thread for easy mounting



PPM484S
Vandal-Resistant Pole Mount

- Weatherproof
- Pass through for wire connections
- Pole outdoor mount for WV-CW244S, WV-CW484S, WV-NW484S and WV-NW502S cameras



PCM484S
Vandal-Resistant Corner Mount

- Weatherproof
- Pass through for wire connections
- Corner outdoor mount for WV-CW244S, WV-CW484S, WV-NW484S and WV-NW502S cameras



PHM484S
Vandal-Resistant Hanging Mount

















- Weatherproof
- Pass through for wire connections
- Made of 1" thick steel tubing
- Beige powder coat finish
- Outdoor hanging mount for WV-CW244S, WV-CW484S, WV-NW484S and WV-NW502S cameras



PWM484S
Vandal-Resistant Wall Mount

- Weatherproof
- Pass through for wire connections
- Outdoor wall mount for WV-CW244S, WV-CW484S, WV-NW484S and WV-NW502S cameras

Panasonic i-Pro IP and Analog Camera Counterpart Chart

<i>i-Pro</i>	Features	<i>analog</i>	Features
 WV-NW964 Super Dynamic III Weather Proof Day/Night Dome Network Camera	All-in-one outdoor weather proof PTZ Super Dynamic III Day/Night 30x optical zoom lens, 10x electronic (300x total) Auto tracking SD memory card recording Drag and zoom 360° map shot	 WV-CW964 Super Dynamic III Weather Proof Day/Night Dome Camera	All-in-one outdoor weather proof PTZ Super Dynamic III Day/Night 30x optical zoom lens, 10x electronic (300x total) Auto Tracking Up-the-coax camera control / RS485 camera control
 WV-NS954 Super Dynamic III Day/Night Dome Network Camera	Indoor PTZ with 30x optical zoom lens, 10x electronic (300x total) Super Dynamic III Progressive output, MPEG-4/JPEG Auto tracking SD memory card recording Drag and zoom Full duplex two-way audio	 WV-CS954 Super Dynamic III Day/Night Dome Camera	Indoor PTZ with 30x optical zoom lens, 10x electronic (300x total) Super Dynamic III 540 lines color, 570 B/W 0.04 lux in B/W, 0.5 lux in color mode Auto Tracking Up-the-coax camera control / RS485 camera control
 WV-NS20A Super Dynamic III Day/Night Dome Network Camera	Indoor PTZ with 22x optical zoom lens, 10x electronic (220x total) Super Dynamic III Progressive output, MPEG-4/JPEG SD memory card recording Drag and zoom 360° map shot Power over Ethernet (PoE)	 WV-CS574 22x Zoom Color Dome Camera	Indoor PTZ with 22x optical zoom lens, 10x electronic (220x total) 510 lines color 1.0 lux Auto panning with 32 presets 360° endless panning Privacy zone masking Patrol learn
 WV-SF332 Megapixel Fixed Mini Dome Network Camera	Supports H.264/MPEG-4/JPEG video streams Progressive scan High sensitivity with automatic calibration Face detection technology Focus assist Power over Ethernet	 WV-CF294 Day/Night Fixed Dome Camera	1/4" CCD Adaptive Black Stretch 540 lines color 2.8 x 10mm, 3.6x vari-focal lens One touch Auto Back Focus UTP version available
 WV-NW502S Super Dynamic Megapixel Vandal-Resistant Fixed Dome Network Camera	Megapixel Super Dynamic with ABS Vandal Auto Back Focus (ABF) SDHC memory card recording Power over Ethernet IP66 rated Dehumidification device	 WV-CW504 Series Super Dynamic 5 Vandal Resistant Fixed Dome Camera	Super Dynamic 5 with ABS Vandal Auto Back Focus (ABF) 650 lines of resolution (color) IP66 rated Dehumidification device Available in both flush and surface mount
 WV-NW484S Super Dynamic III Vandal-Resistant Day/Night Fixed Dome Network Camera	Vandal Auto Back Focus (ABF) Super Dynamic III Power over Ethernet (PoE), including optional heater 3.8 - 8.0mm, 2x vari-focal lens with 3x digital zoom SD memory card recording Dehumidification device IP66 rated	 WV-CW244 Series Vandal-Resistant Fixed Dome Camera	480 lines of resolution (color) 3.8 ~8mm, 2x vari-focal lens Three-way hinge for easy installation Monitor output IP66 rated
 WV-NP502 Super Dynamic Megapixel Day/Night Network Camera	Megapixel Super Dynamic with ABS Day/Night SDHC memory card recording Power over Ethernet Face Detection	 WV-CP500 Series Super Dynamic 5 Day/Night Camera	Super Dynamic 5 with ABS Day/Night 650 lines of resolution (color) Intelligent VMD (Object Removed/Left Behind Detection) Auto image stabilizer
 WV-SP302 Megapixel Fixed Network Camera	Supports H.264/MPEG-4/JPEG video streams Progressive scan Simple Day/Night Face detection technology Focus assist Power over Ethernet	 WV-CP280 Series Day/Night Camera	High performance 1/3" CCD Adaptive Black Stretch 540 lines in color Simple Day/Night function (no IR filter shifting) 0.8 lux in color 120V AC, 24V AC, 12V DC power sources

Recommended Camera and Lens Combinations



Lens Models		Camera Models			WV-NW502S	WV-NW484S	WV-NP502	WV-SF306/305/302	WV-NP304	WV-NP244
Size	Model	Focal length (mm)	Aperture ratio	Auto iris						
1/3"	PLA22T3DN	2.2	f1.2	Y		•				•
1/2"	PLAHS1770	7.0~70.0	f1.8	N						
1/3"	PLAMP0550	5.0~50.0	f1.4	Y					•	
1/3"	PLAMP2206	2.2	f1.3	Y			•	•	•	•
1/3"	PLAMP2406	2.4~6.0	f1.2	Y					•	
1/3"	PLAMP2812	2.8~12.0	f1.4	Y					•	
1/3"	PLZ15/33	15.0~50.0	f1.5	Y		•				•
1/3"	PLZ20/5	20.0~100.0	f1.6	Y						•
1/3"	PLZ27/5DN	2.7~13.5	f1.3	Y						•
1/3"	PLZ29/27	2.9~8.0	f0.95	Y		•				•
1/3"	PLZ5/10	5.0~50.0	f1.6	Y						•
1/3"	PTVR0916DC	9.0~22.0	f1.6	Y			•	•	•	•
1/3"	WV-LA2R8C3B	2.8	f1.3	Y						•
1/3"	WV-LA9C3B	9.0	f1.2	Y						•
1/3"	WV-LZ62/8S	5.0~40.0	f1.6 (W); f1.9 (T)	Y						•
1/2"	WV-LZ81/6A	8.5~51.0	f1.2	Y						•
1/2"	WV-LZ81/10	8.0~80.0	f1.4	Y						•
1/3"	WVLZA61/2S	3.8~8.0	f1.4 (W); f1.8 (T)	Y						•
1/3"	WV-LZA62/2	2.8~6.0	f1.4 (W); f1.2 (T)	Y			•	•		•













Recommended Camera and Lens Combinations

analog

Lens Models		Camera Models			WV-CW504 series	WV-CW244 series	WV-CL930 series	WV-CP500 series	WV-CP254H	WV-CP280 series
Size	Model	Focal length (mm)	Aperture ratio	Auto iris						
1/3"	PLA22T3DN	2.2	f1.2	Y		•			•	•
1/2"	PLAHS1770	7.0~70.0	f1.8	N			•			
1/3"	PLAMP2206	2.2	f1.3	Y						
1/3"	PLZ15/33	15.0~50.0	f1.5	Y		•			•	•
1/3"	PLZ20/5	20.0~100.0	f1.6	Y					•	•
1/3"	PLZ27/5DN	2.7~13.5	f1.3	Y					•	•
1/3"	PLZ29/27	2.9~8.0	f0.95	Y		•			•	•
1/3"	PLZ5/10	5.0~50.0	f1.6	Y					•	•
1/3"	PTVR0916DC	9.0~22.0	f1.6	Y				•	•	•
1/3"	WV-LA2R8C3B	2.8	f1.3	Y					•	•
1/3"	WV-LA9C3B	9.0	f1.2	Y					•	•
1/3"	WV-LZ62/8S	5.0~40.0	f1.6 (W); f1.9 (T)	Y				•	•	•
1/2"	WV-LZ81/6A	8.5~51.0	f1.2	Y			•		•	•
1/2"	WV-LZ81/10	8.0~80.0	f1.4	Y			•		•	•
1/3"	WVLZA61/2S	3.8~8.0	f1.4 (W); f1.8 (T)	Y				•	•	•
1/3"	WV-LZA62/2	2.8~6.0	f1.4 (W); f1.2 (T)	Y				•	•	•













Housing and Camera Cross Reference Chart

(refer to individual specifications for more detail)

























	Housing Features										Camera Models																		
	Indoor	Outdoor	Vandal	Pendant Mount	Wall Mount	Smoke Dome	Clear Dome	Surface Mount	Recessed Ceiling	Heater/Blower	WW-NS954	WW-NS202A	WW-NF302	WW-NF284	WW-NP502	WW-NP304	WW-NP1004	WW-NP244	WW-CS954	WW-SS574	WW-CF324	WW-CF294T	WW-CF284/T	WW-CL930 Series	WW-CP500 Series	WW-CP480 Series	WW-CP254H	WW-CP280 Series	WW-BP330 Series
 PBRH10		•	•						•					•	•		•							•	•	•	•	•	•
 PDM9	•					•		•											•	•									
 PICSD	•					•		•												•									
 PID5CN	•						•	•			•		•								•	•	•						
 PID5SN	•					•		•			•		•								•	•	•						
 PID8A	•					•		•						•	•									•	•	•	•	•	•
 PID9	•					•		•			•	•							•	•									
 PIDV7CN											•	•							•	•									
 PIDV7SN											•	•							•	•									
 PMEH8A	•		•				•							•	•		•							•	•	•	•	•	•
 PMEH11	•		•				•						•	•	•	•	•												
 POD7CN		•		•			•		•	•									•	•									
 POD7CWN		•			•		•		•	•									•	•									
 POD8CF		•		•			•		•	•				•	•		•							•	•	•	•	•	•
 POD8CWF		•			•		•		•	•				•	•		•							•	•	•	•	•	•

Housing and Camera Cross Reference Chart

























(refer to individual specifications for more detail)

Housing Features		Camera Models																									
Housing Model	Indoor	Outdoor	Vandal	Pendant Mount	Wall Mount	Smoke Dome	Clear Dome	Surface Mount	Recessed Ceiling	Heater/Blower	WW-NS954	WW-NS202A	WW-NF302	WW-NF284	WW-NP502	WW-NP304	WW-NP1004	WW-NP244	WW-CS954	WW-CS574	WW-CL930 Series	WW-CP500 Series	WW-CP480 Series	WW-CP254H	WW-CP280 Series	WW-BP330 Series	
 POD9C (SILVER)		•		•			•			•		•							•	•							
 POD9CT (WHITE)		•		•			•			•		•							•	•							
 POD9CW (SILVER)		•			•		•			•		•							•	•							
 POD9CWT (WHITE)		•			•		•			•		•							•	•							
 PODV7CPNS		•	•	•			•			•		•															
 PODV7CWNS		•	•		•		•			•		•															
 POH1000	•	•			•									•	•			•			•	•	•	•	•	•	•
 POH1000HB		•			•					•				•	•			•			•	•	•	•	•	•	•
 POH1500HB		•			•					•				•	•	•		•			•	•	•	•	•	•	•
 PPFD9C		•			•		•			•									•	•							
 PPH14		•			•									•	•	•		•			•	•	•	•	•	•	•
 PSMD12	•					•		•										•			•	•	•	•	•	•	•

Housing and Bracket Compatibility Chart

								
Page				97	97	97	97	98
Housing		Page	Description	PACA2/PACA2B Outdoor corner mount bracket	PAPM3/PAPM3B Outdoor pole mount adapter	PHM5 Hanging mount bracket	PPMF12D Pendant mount bracket	PPRM30G/30GB Extended parapet mount
PBRH10		84	Outdoor bullet resistant housing	w/ optional PWM800				
POD7CN		85	Outdoor dome housing, pendant	w/ optional PWM20G series	w/ optional PWM20G series	•	•	•
POD7CWN		85	Outdoor dome housing, wall bracket	•	•			
POD8CF		85	Outdoor pendant mount housing for fixed cameras	w/ optional PWM20G series	w/ optional PWM20G series	•	•	•
POD8CWF		85	Outdoor pendant mount housing for fixed cameras, wall bracket	•	•			
POD9C		86	Outdoor pendant mount housing, silver	w/ optional PWM20G series	w/ optional PWM20G series	•	•	•
POD9CT		86	Outdoor pendant mount housing, white	w/ optional PWM20G series	w/ optional PWM20G series	•	•	•
POD9CW		86	Outdoor housing, wall mount, silver	•	•			
POD9CWT		86	Outdoor housing, wall mount, white	•	•			
PODV7CPNS		87	Outdoor vandal-resistant housing, pendant, white	w/ optional PWM20G series	w/ optional PWM20G series	•	•	•
PODV7CWNS		87	Outdoor vandal-resistant housing, wall mount, white	•	•			
PODV9CPT		87	Outdoor vandal-resistant housing, pendant, white	w/ optional PWM20G series	w/ optional PWM20G series	•	•	•
PODV9CWT		87	Outdoor vandal-resistant housing, wall mount, white	•	•			
POH1000		88	10" outdoor fixed box housing					
POH1000HB		88	10" outdoor fixed box housing with heater/blower					
POH1500		88	15" outdoor fixed box housing					
POH1500HB		88	15" outdoor fixed box housing with heater/blower					
PPFD9C		88	Pressurized dome housing	w/ optional PWM20G series	w/ optional PWM20G series	•	•	•
PPH14		88	Indoor pressurized housing					

Housing and Bracket Compatibility Chart

							
Page				98	98	98	98
				PSRCW2000B	PWM20G/PWM20GB/PWM20GS	PWM30G/30GB	PWM800
Housing		Page	Description	Outdoor parapet roof top bracket	Parapet mount	Parapet mount	Outdoor wall/pole mount
PBRH10		92	Outdoor bullet resistant housing				•
POD7CN		93	Outdoor dome housing, pendant		•	•	
POD7CWN		93	Outdoor dome housing, wall bracket	•			
POD8CF		93	Outdoor pendant mount housing for fixed cameras		•	•	
POD8CWF		93	Outdoor pendant mount housing for fixed cameras, wall bracket	•			
POD9C		94	Outdoor pendant mount housing, silver		•	•	
POD9CT		94	Outdoor pendant mount housing, white		•	•	
POD9CW		94	Outdoor housing, wall mount, silver	•			
POD9CWT		94	Outdoor housing, wall mount, white	•			
PODV7CPNS		95	Outdoor vandal-resistant housing, pendant, white		•	•	
PODV7CWNS		95	Outdoor vandal-resistant housing, wall mount, white	•			
PODV9CPT		95	Outdoor vandal-resistant housing, pendant, white		•	•	
PODV9CWT		95	Outdoor vandal-resistant housing, wall mount, white	•			
POH1000		96	10" outdoor fixed box housing				•
POH1000HB		96	10" outdoor fixed box housing with heater/blower				•
POH1500		96	15" outdoor fixed box housing				•
POH1500HB		96	15" outdoor fixed box housing with heater/blower				•
PPFD9C		96	Pressurized dome housing		•	•	
PPH14		96	Indoor pressurized housing				•







Total System Solutions

Panasonic provides total system solutions for analog and IP systems, including hybrid solutions which allow migration from analog to digital platforms. All product information provided as example only. Contact your local Panasonic representative for system design assistance.

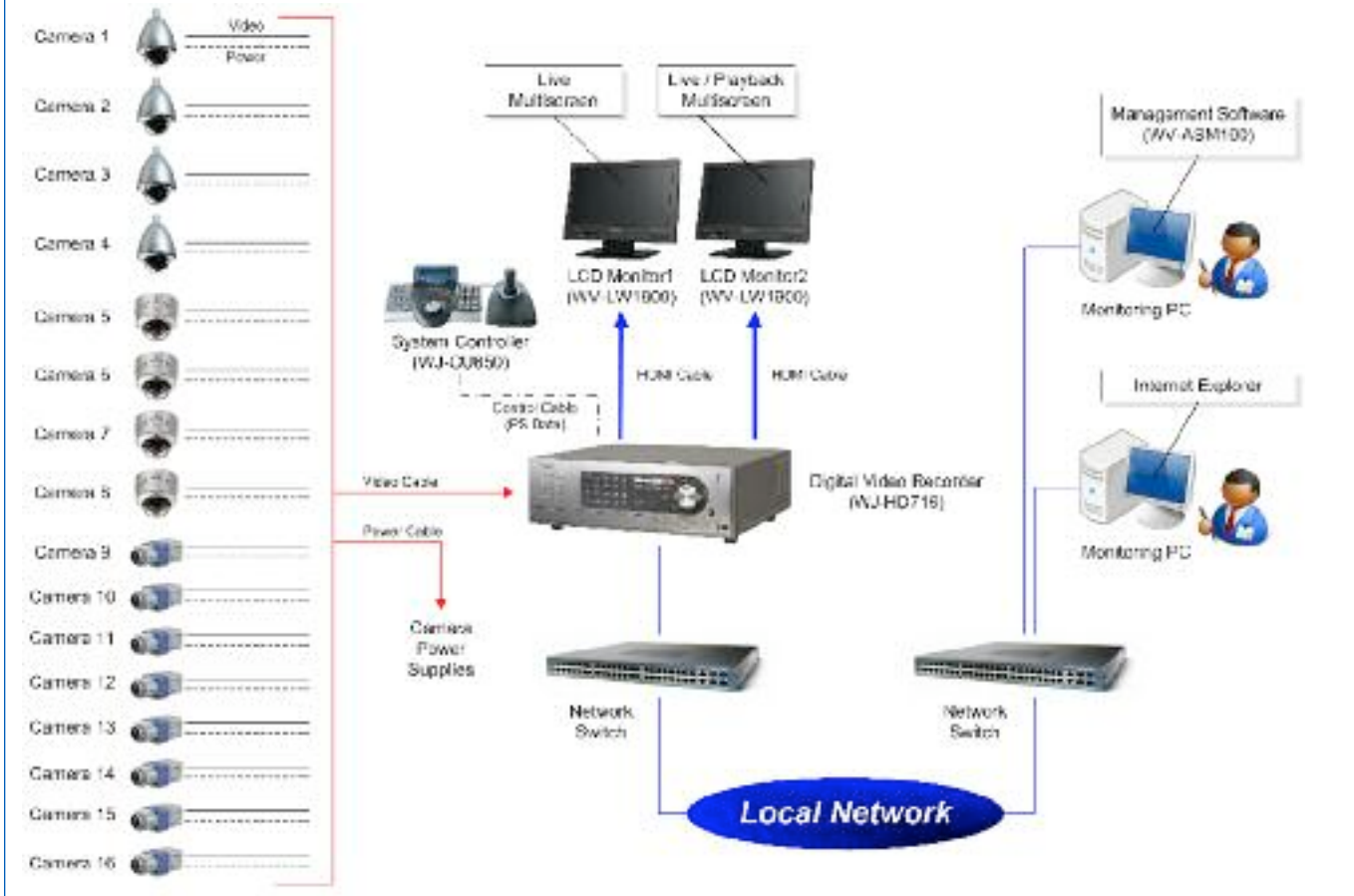
Product Information

Symbol	Description	Model
	SD III Weather Proof Day/Night PTZ Dome Camera Progressive output, 30x optical zoom, IP66 MPEG-4/JPEG, SD card (IP model only)	WV-CW964 (Analog) WV-NW964 (IP)
	SD III Vandal Resistant Day/Night Fixed Dome Camera Progressive output, Auto Back Focus, IP66 MPEG-4/JPEG, PoE, SD card (IP model only)	WV-CW484S (Analog) WV-NW484S (IP)
	SD III Day/Night PTZ Dome IP Camera Progressive output, 22x optical zoom, IP66 MPEG-4/JPEG, PoE, SD card	WV-NS202A
	Megapixel Day/Night IP Camera Progressive scan, 1.3 Megapixel, MPEG-4/JPEG Focus Assist, PoE, SD card	WV-NP304
	SD III Day/Night Analog Camera Auto Back Focus, Auto Image Stabilization Adaptive Digital Noise Reduction	WV-CP484
	Full High Definition Video Decoder HDMI interface, Up to 5 split screens, MPEG-4/JPEG	WJ-GXD400
	4CH H.264/MPEG-4/JPEG Video Encoder 30fps/ch @VGA, H.264, SDHC card	WJ-GXE500
	High Density Network Video Recorder MPEG-4/JPEG, Up to 64 camera@VGA, Up to 54TB RAID5/6, IPV4v6	WJ-ND400 series
	Network Video Recorder MPEG-4/JPEG, Up to 32 camera@VGA, Up to 14TB RAID5 (optional)	WJ-ND300A series
	16CH Digital Video Recorder 400 fps recording, RAID5/RAID6 redundant recording VMD, SDHC/DVD copy	WJ-HD716
	Mid-range Matrix Switcher 512 x 64, supports up to 1024 alarm inputs	WJ-SX650 WJ-SX650U
	System Management Server 2048 x 512 (including 1024 IP devices) can be controlled by a server, up to 64 servers can be linked	FMPL1000
	<ul style="list-style-type: none"> WV-ASM100 System Management Software 15 split screens, 3 monitor output (Operator/Viewer) Supports IP camera, joystick control, DVR & NVR WJ-ASM100 System Management Software for FMPL1000 15 split screens, 2 monitor output (Operator/Viewer), DVR & NVR 	WV-ASM100 WV-ASM070

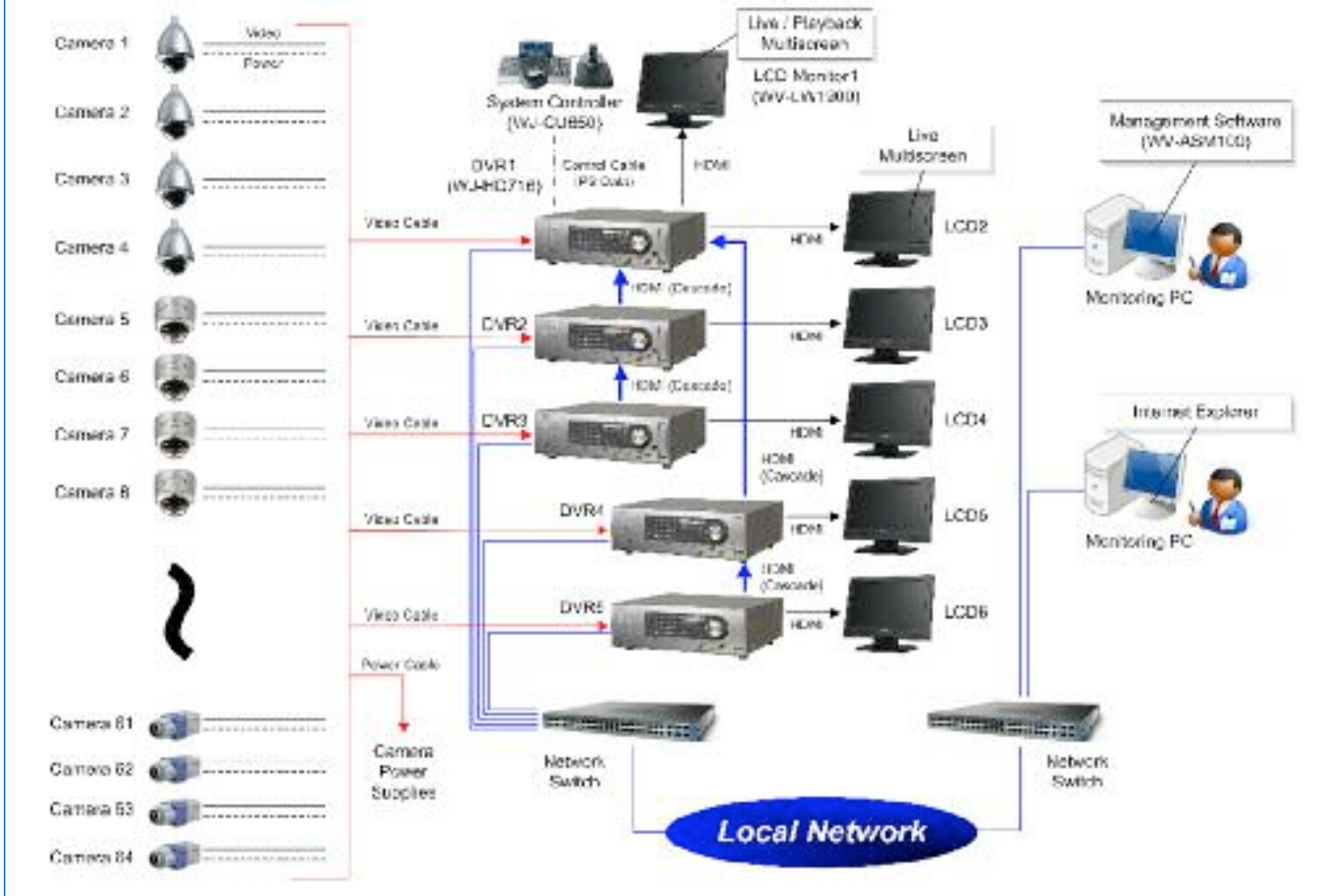
Cable Information

Symbol	Description
	Network Cable, CAT5E or CAT6 cable
	Video Cable, Coaxial cable
	High-Definition Multimedia Interface cable
	WJ-ND400 series expansion cable; e-SATA cable
	Control Cable, RS-485 Communications cable
	Low Voltage Power Cable; Camera Power 24VAC

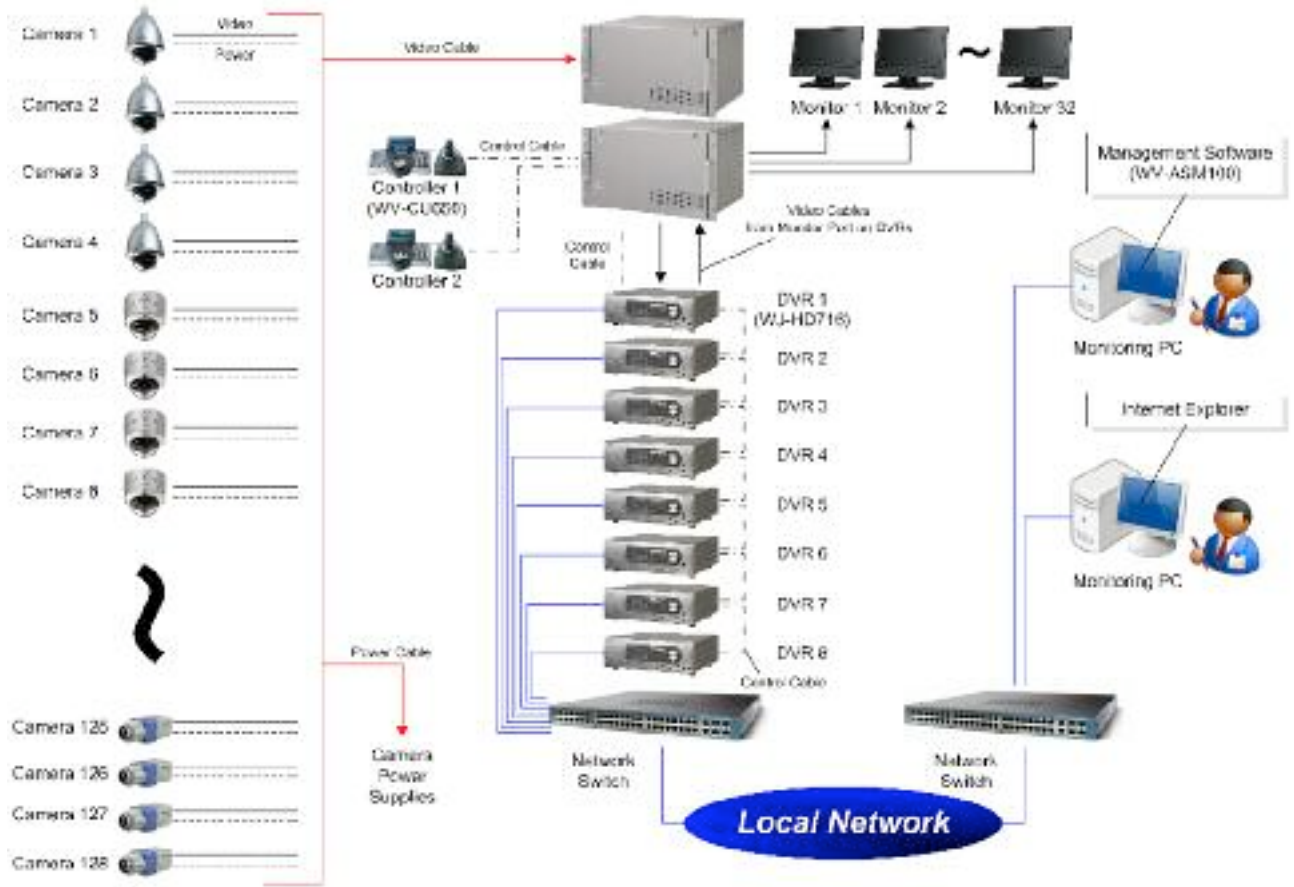
Small Analog System



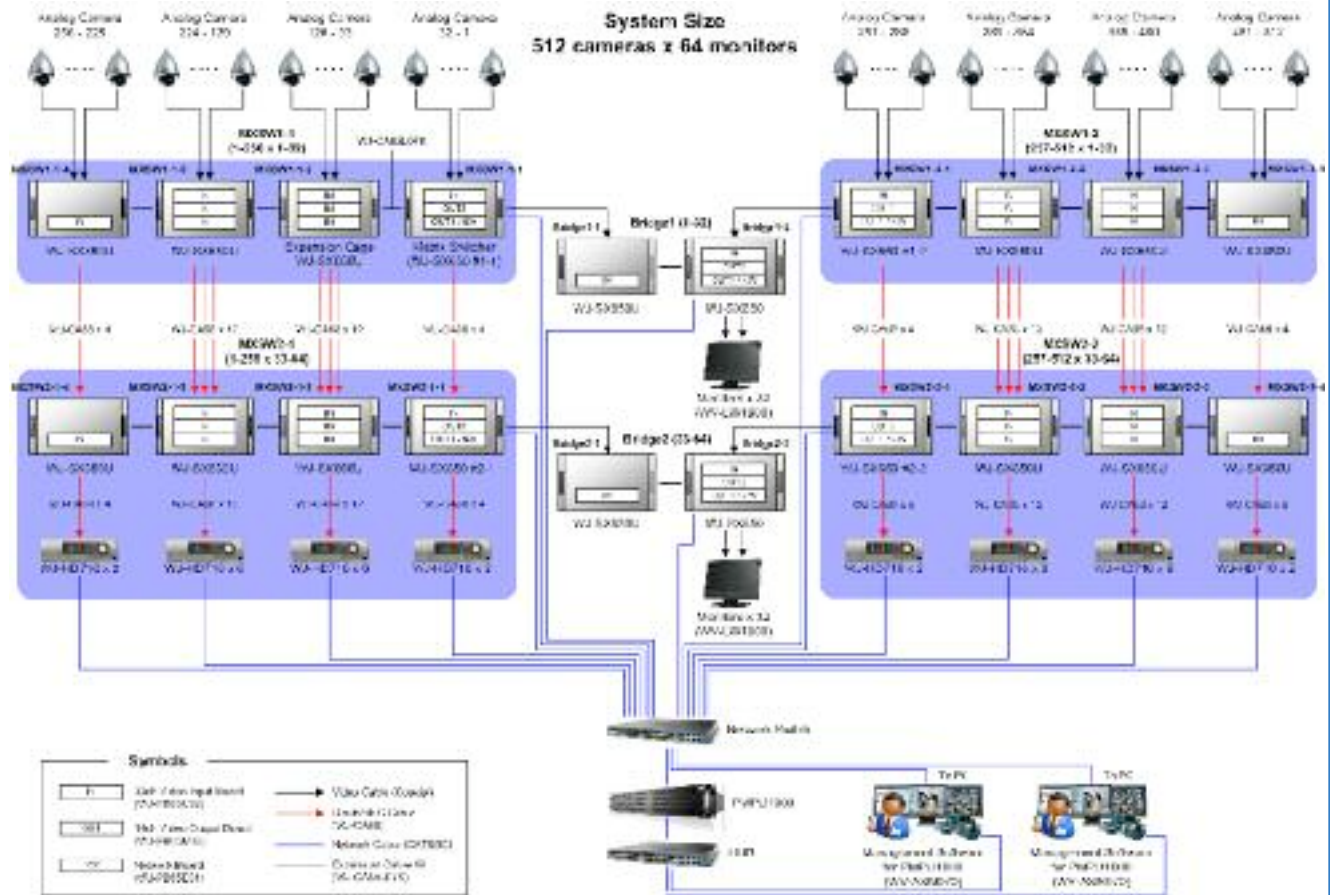
Mid Size Analog System



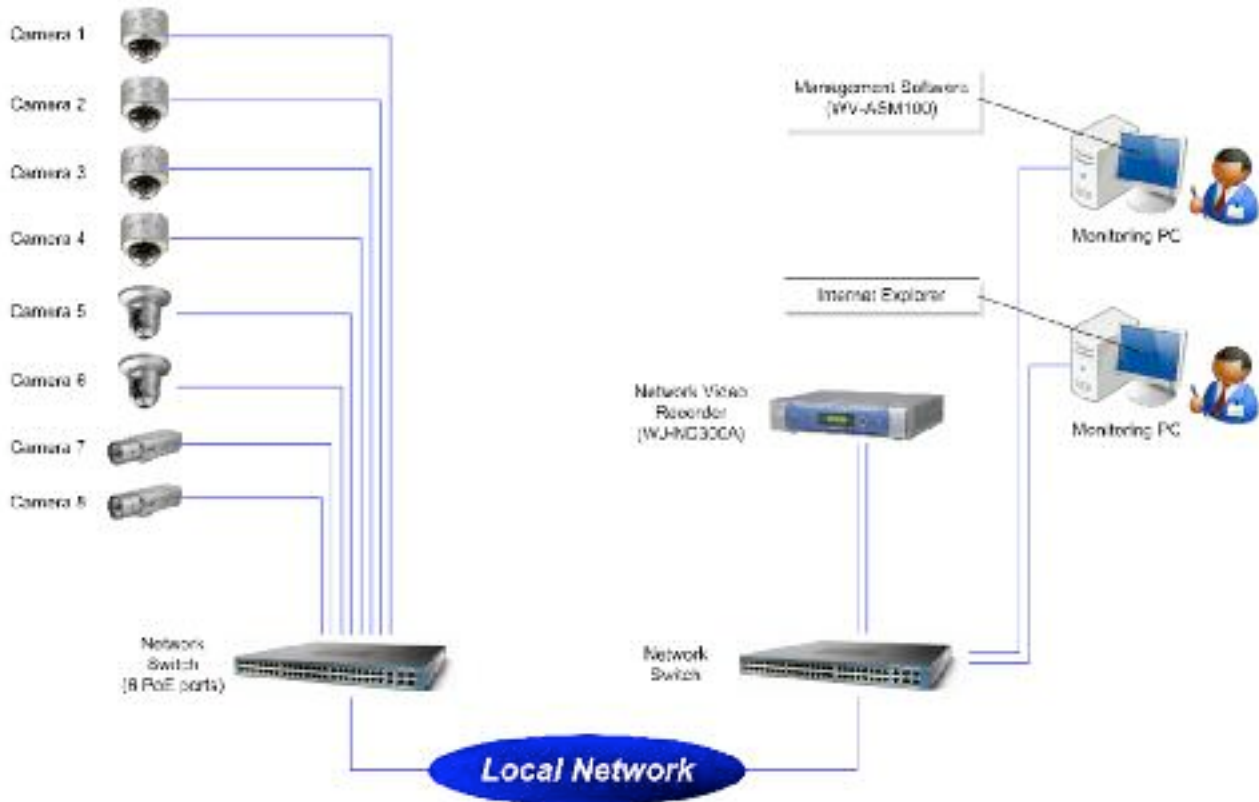
Large Analog System (Single Site)



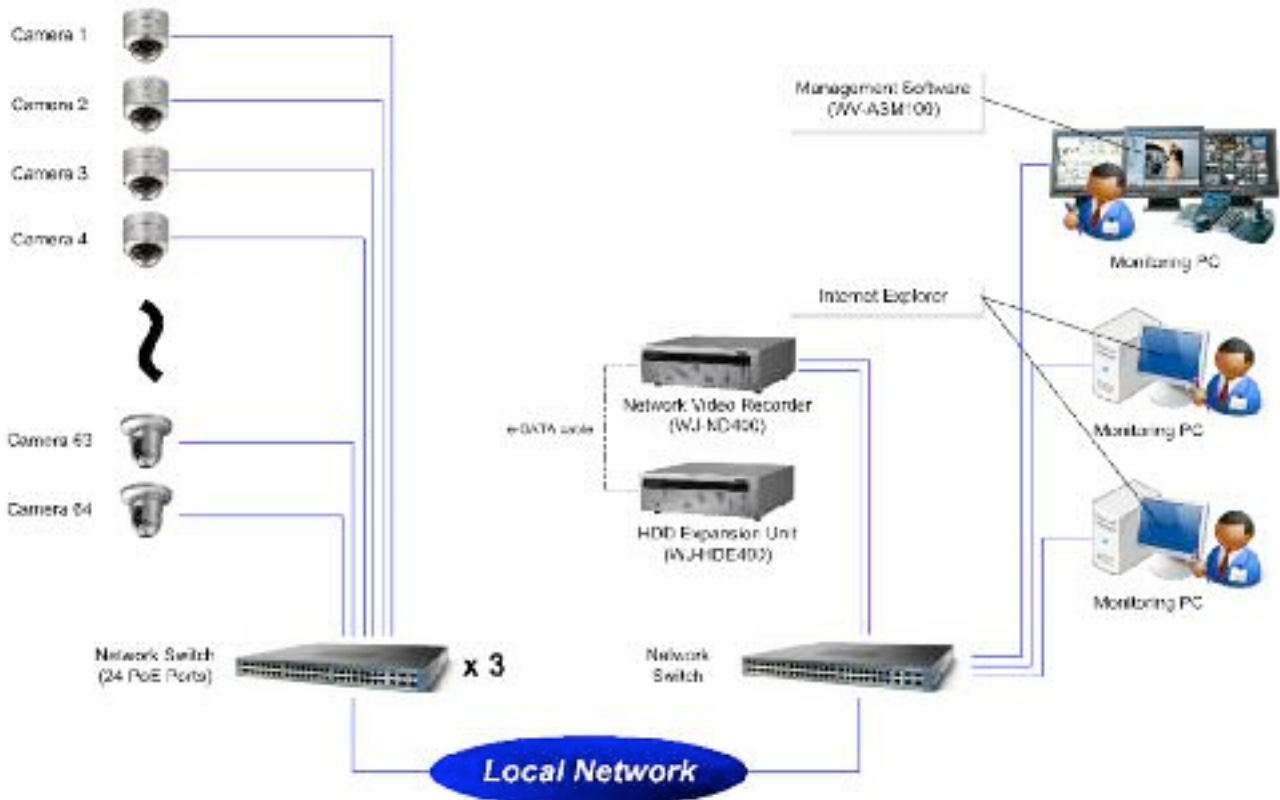
Large Analog System



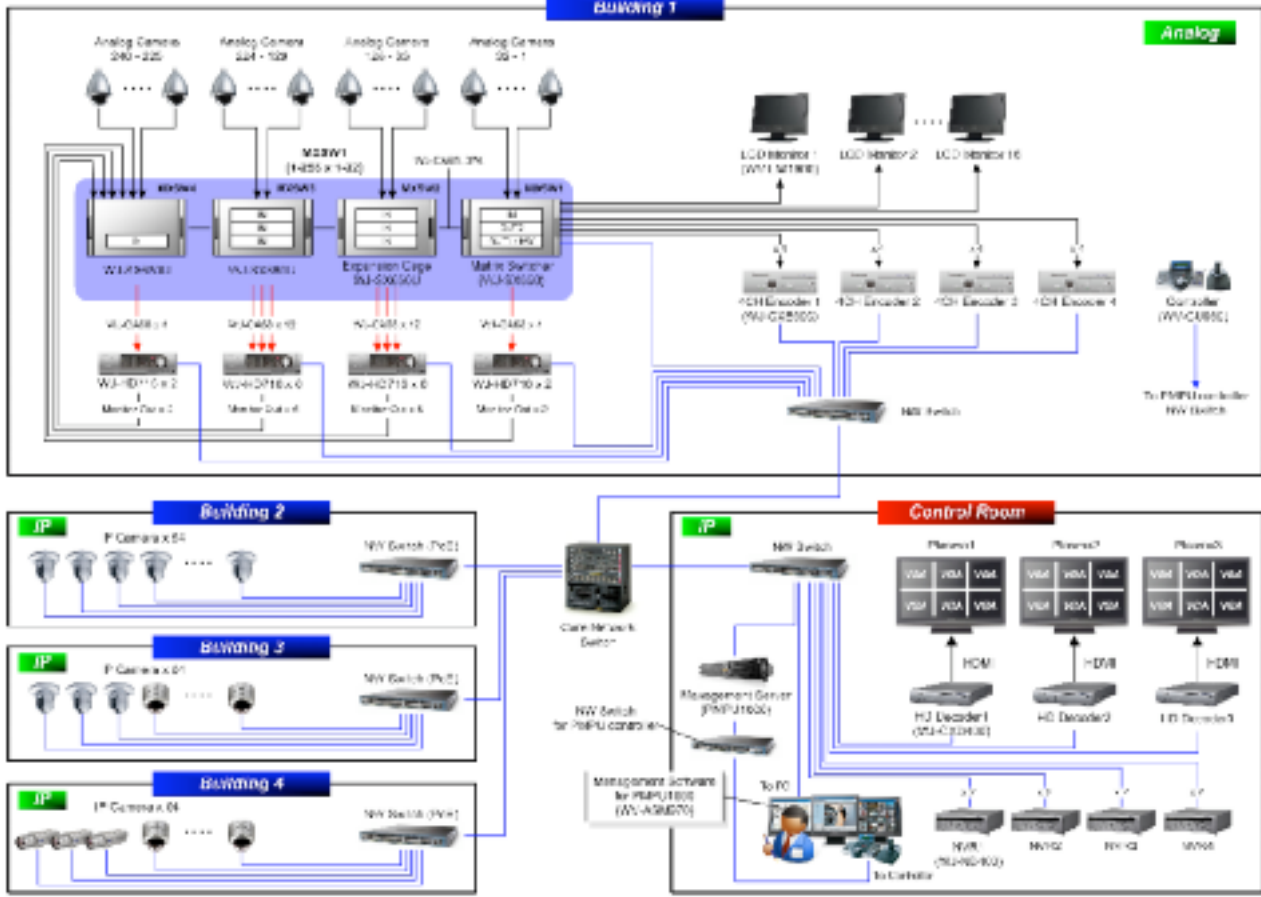
Small IP System



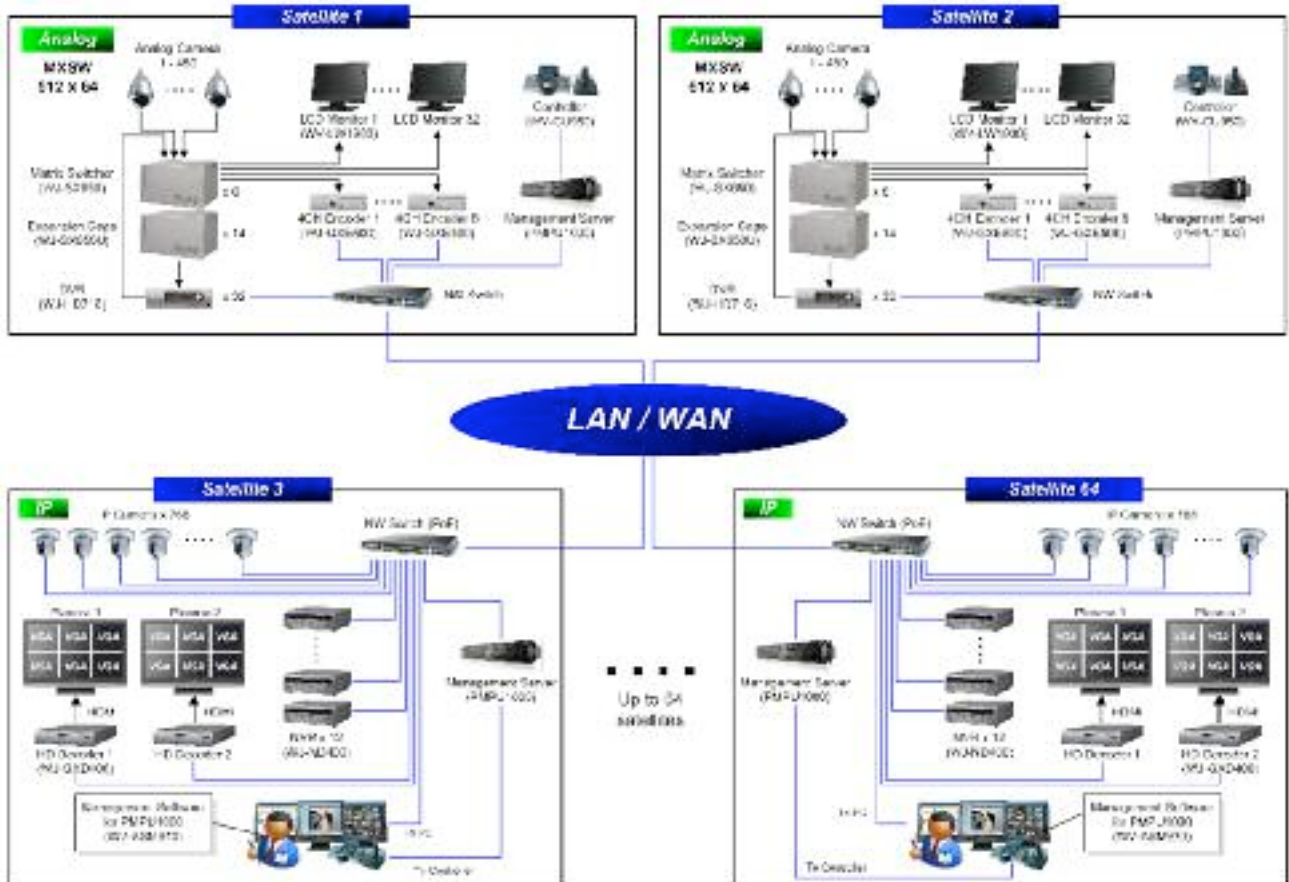
Mid Size IP System



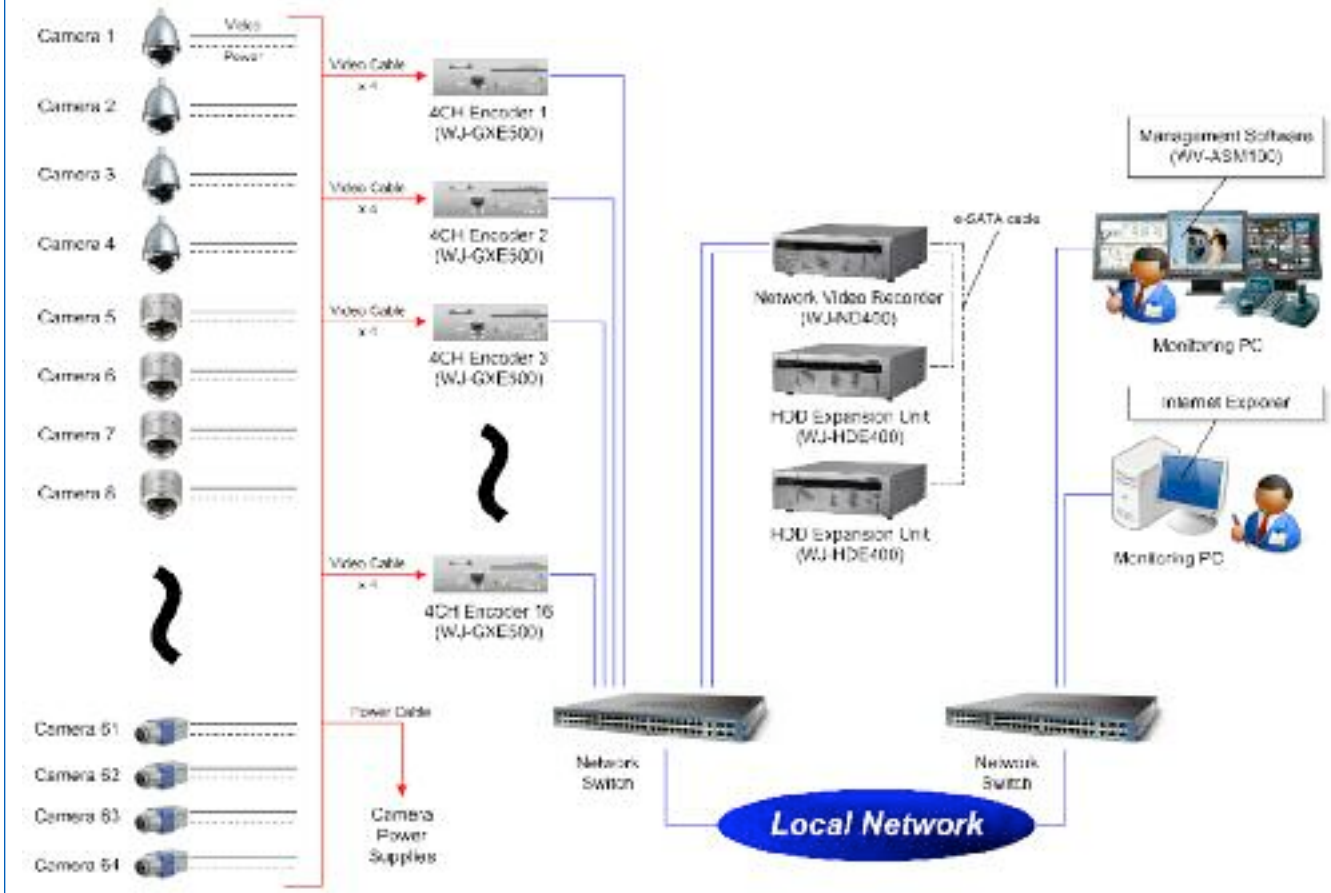
Large IP System



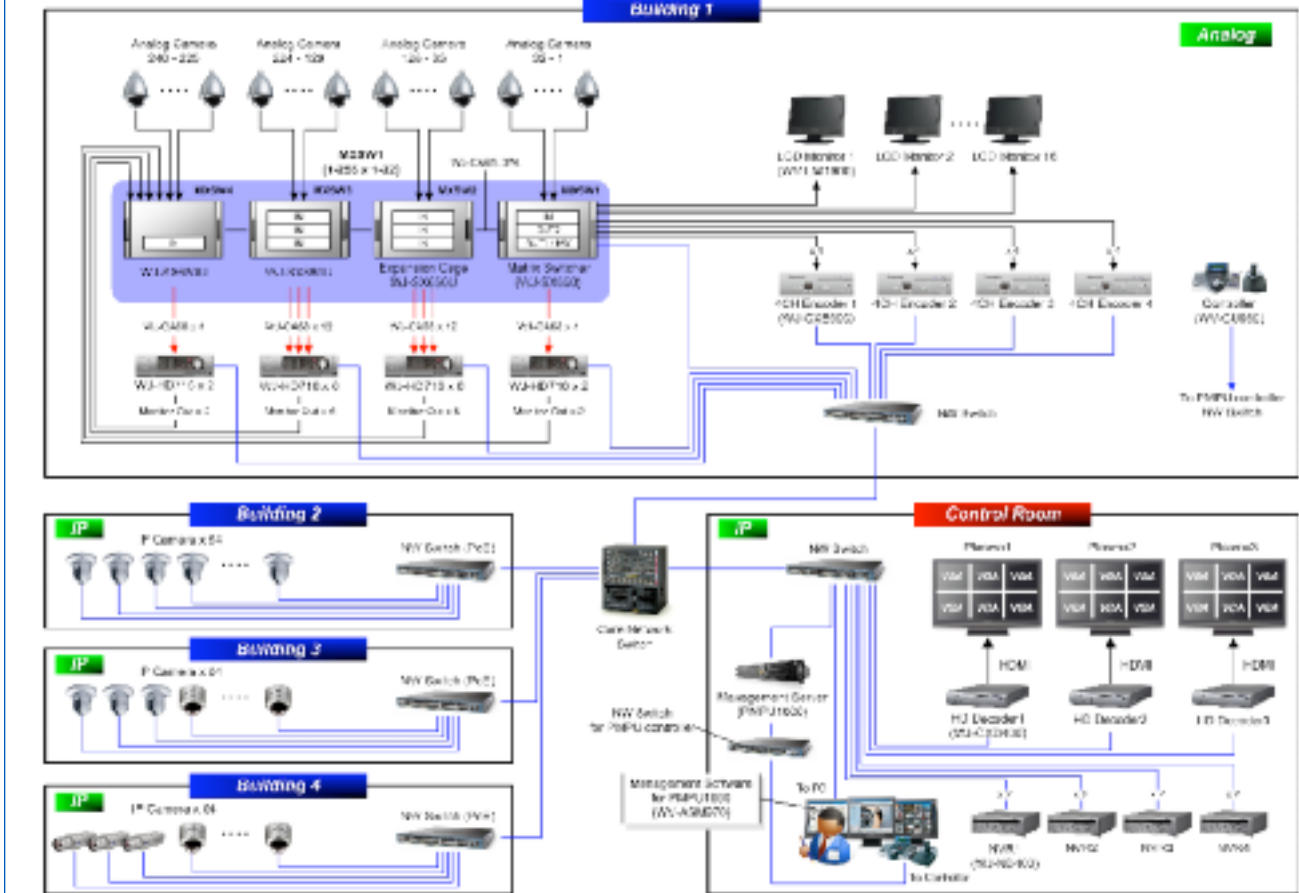
Large Satellite System



Mid Size Hybrid System



Large Hybrid System



User Testimonials



Don Sullivan at Toledo Hospital is confident that whatever happens throughout the hospital, his security department will have video of it.

Healthcare

"For 26 years... we have used Panasonic equipment. It has been very good and reliable. It's just high quality equipment."

*Don Sullivan
Toledo Hospital*



As security auditor for Calcasieu Parish corrections, Mark Piatt was tasked with overseeing a project to implement a new Panasonic video surveillance system.

Corrections

"The Panasonic equipment is very rugged. The Panasonic NVRs went through two hurricanes with no problems."

*Mark Piatt
Calcasieu Parish Sheriff's Office*



Ken Volland (L), property manager, and Nick Sachs (R), asset manager, both of David S. Brown Enterprises Ltd., worked with Robert W. Harry Jr. (C) of Signals Communication Systems Inc. to ensure the Panasonic installation went smoothly.

Transportation

"When you have a system of this size, you want a supplier like Panasonic."

*Nick Sachs
David S. Brown Enterprises, Ltd.*

This is a representative listing of key Panasonic analog, hybrid, and i-Pro IP installations. For more installations and detailed application stories, visit panasonic.com/security



Education

Abington School District - Abington, PA
Avon Comm. Schools - Avon, IN
Bibb County School District - Bibb County, GA
Bowling Green University - Bowling Green, OH
Burlington County Technical Schools, Westampton, NJ
Calhoun County Schools - Calhoun County, MI
Camden County Technical School - Berlin, NJ
Carthage Ind. School District - Carthage, TX
Channahassen High School - Channahassen, MN
City College - Ft. Lauderdale, FL
Coatesville School District - Coatesville, PA
Colonial School District - Plymouth Meeting, PA
Duluth Public Schools - Duluth, MN
East Ridge High School - Woodbury, MN
Edinboro University - Edinboro, PA
Fayetteville State University - Fayetteville, NC
Fergus Falls Community College - Fergus Falls, MN
Francis Howell School District - St. Louis, MO
Greenville County Schools - Greenville, VA
Hamilton Board of Education - Hamilton, NJ
Hammond Schools - Hammond, IN
Hardee County School District - Wauchula, FL
Hermantown Schools - Hermantown, MN
Horry County School District - Myrtle Beach, SC
Indian River State College - Fort Pierce, FL
Lancaster School District - Lancaster, PA
Maple Plain Schools - Maple Plain, MN
Proctor Schools - Proctor, MN
St. Anthony / New Brighton Schools - New Brighton, MN
St. Mary's County Public Schools - Bushwood, MD
St. Michael Albertville High School - St. Michael, MN
Texas Christian University - Ft. Worth, TX
Trinity Preparatory School - Winter Park, FL
University of Memphis - Memphis, TN
University of Pennsylvania - Philadelphia, PA
University of Tennessee - Knoxville, TN
Villanova University - Villanova, PA
Greenville County Schools - Greenville, VA

Corrections / Government

Calcasieu Parrish Corrections - Lake Charles, LA
Evesham Fire Department - Evesham, NJ
Government Printing Office - Washington, DC
Huron Valley State Correctional - Ypsilanti, MI
Middletown Municipal Building - Middletown, DE
Midland County Corrections - Midland, MI
NASA - Lanham, MD
Philadelphia Housing Authority - Philadelphia, PA
Ramsey County Library - St. Paul, MN
Shakopee Police and Fire Departments - Shakopee, MN
U.S. Customs - Harpers Ferry, WV

Transportation / Utilities

Amtrak - Bear, DE
City of Tallahassee Electric Utility Services - Tallahassee, FL
Kent County Airport - Grand Rapids, MI
Metro Transit - Minneapolis, MN

Commercial / Industrial / Hospitality

American Kennel Club - Raleigh, NC
Conectiv - Mays Landing, NJ
Dietz and Watson - Delanco, NJ
Indiana-Purdue Ft. Wayne (IPFW) - Ft. Wayne, IN
J.B. Hunt Trucking - Lowell, AR
Lockheed Martin HQ - Rockville, MD
Logan Aluminum - Russellville, KY
Marriott Downtown - Memphis, TN
Moffitt Cancer Center - Tampa, FL
Oberthur Card Systems - Exton, PA
Owatonna Hospital - Owatonna, MN
Pfizer - Kalamazoo, MI
Philadelphia Museum of Art - Philadelphia, PA
Southern Maryland Electric Co-op - Hughesville, MD
Westat - Rockville, MD
Wooddale Church - Eden Prairie, MN

analog

Education

Ardmore Public Schools - Ardmore, OK
Broward County Public Schools - Fort Lauderdale, FL
Miami-Dade Community College - Miami, FL
Millersville University - Millersville, PA
Philadelphia Community College - Philadelphia, PA
Robinsdale Schools - Robinsdale, MN
University of Minnesota - Minneapolis, MN

Corrections / Government

Atlantic City Housing Authority - Atlantic City, NJ
Library of Congress - Washington, DC
Nuclear Regulatory Commission - Rockville, MD
Stearns County - St. Cloud, MN

Transportation / Utilities

Amtrak - Harrisburg, PA
BAE Shipyard - Norfolk, VA
Basin Electric - Bismark, ND
Duke Energy - Charlotte, NC
Owing Mills Metro Center - Owing Mills, MD

Commercial / Industrial / Hospitality

Continental Tire - Gastonia, NC
E.I. Dupont - Wilmington, DE
Gaylord Palms Hotel & Conference Center - Kissimmee, FL
Little Sisters of the Poor - St. Paul, MN
Minneapolis Convention Center - Minneapolis, MN
QVC - West Chester, PA
S&D Coffee - Concord, NC

Hybrid

Education

Bay District Schools - Panama City, FL
Evansville School Corp. - Evansville, IN
Ft. Bend Ind. School District - Houston, TX
Norfolk State University - Norfolk, VA
Old Dominion University - Norfolk, VA
Palm Beach County School District - West Palm Beach, FL
West Chester University - West Chester, PA

Corrections / Government

Allen County Jail - Ft. Wayne, IN
FEMA/NETC - Emmittsburg, MD
State of New Jersey - Trenton, NJ

Transportation / Utilities

DFW Airport - Ft. Worth, TX
Entergy - Little Rock, AR
Southwest Airlines - Dallas, TX

Commercial / Industrial / Hospitality

Bank of America - Wilmington, DE
Giant Foods - Carlisle, PA
Lincoln Financial Field - Philadelphia, PA
Munson Hospital - Traverse City, MI
Pinnacle's River City Casino - St. Louis, MO
SPX Corporation - Charlotte, NC



Panasonic Training University

Panasonic regards knowledge and information as central to understanding our technology, our products, and the industry overall. Through P-Tech, Panasonic offers a variety of topical course subjects for end users, dealers, integrators, and A&E's. Our training university is staffed by highly capable, professional Panasonic subject matter experts, as well as reputable guest trainers from within the industry.

Classroom training

Instructor-lead classroom training takes place throughout the year across the country. Subjects include:

- Best Practices for Video Surveillance Systems
- i-Pro Network Products
- Network Infrastructure
- Solving Real Problems with IP Video

Webcasts

Webcasts provide an easy, cost-effective and convenient way to learn from anywhere with an internet connection. Regularly scheduled webcasts are held on key subjects including:

- Network Switches and Protocols
- Network Design for the Security Professional
- And more...

Past webcasts can be retrieved through our archives on the P-Tech website.

Self-paced online training

Panasonic offers a comprehensive selection of product-specific online training modules, providing an interactive and convenient way to learn more about Panasonic analog, i-Pro IP, and hybrid products.

Continuing education

Many of Panasonic's classroom courses are eligible for Continuing Education Credits and/or recertification through organizations such as ASIS International, NICET, NTS, and BiCSi.

For more detailed and up-to-date information, visit panasonic.com/P-Tech.



i-Pro Certified Reseller Program

Panasonic Security Systems offers the i-Pro Certified Reseller (IPCR) Program to train highly capable channel resellers who can design, implement, and support newly emerging opportunities in the IP/IT security space.

Key benefits include:

- Free training through P-Tech
- Quick and easy availability of Panasonic's leading i-Pro IP product lineup
- Subsidized demo equipment
- Resource-rich sales and marketing materials
- And more...

Potential i-Pro Certified Resellers must be accepted for candidacy and obtain training provided by Panasonic.

For more detailed information about the certification process and training requirements, visit panasonic.com/P-Tech.



spec assist

spec assist, Panasonic's award winning video surveillance system design tool, provides valuable information and resources for systems integrators, dealers, consultants, architect & engineers, and end users to help formulate bids and proposals. All on a handy DVD, spec assist contains bid specifications for Panasonic video surveillance systems products, along with CAD illustrations, operating instructions, spec sheets and calculator tools to optimize system configurations and proposals.

spec assist also includes product literature and video demonstrations in addition to product selectors, estimators and calculators, product operating instructions, housing and lens compatibility charts, presentations and much more. The convenient search function makes finding information quick and easy.

spec assist is available at no cost to professional system designers, installers, and security professionals. Make sure you have the most updated version by ordering your free DVD at panasonic.com/security.



Panasonic Solution Developer Network (PSDN)

Panasonic's continually expanding Panasonic Solution Developer Network (PSDN) now boasts more than 125+ worldwide partners. The program promotes interoperability and integration capabilities for Panasonic video surveillance solutions and participating equipment and software manufacturers.

PSDN offers a unified API to simplify integration, along with interface protocols, software development tools, and technical information and support to efficiently integrate Panasonic's leading line of i-Pro network video surveillance products.

Panasonic is committed to providing resellers with expanded product solutions and endusers with seamless system capabilities to meet their security needs.

PSDN partners include:



For a complete list of PSDN members and more information on our program, visit psdn.info.

CUSTOMER SUPPORT

To place, modify or check an order, or make shipping changes.

Toll-Free Phone: 877.733.3689

Toll-Free Fax: 877.665.5647

TECHNICAL SUPPORT

For technical support on installation,
programming and configuration.

Toll-Free Phone: 800.528.6747

Toll-Free Fax: 888.809.6198

e-mail: psditech@us.panasonic.com

HEADQUARTERS

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Secaucus, NJ 07094**

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panasonic.com/security

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TECHNOLOGY IN DETAIL GUIDE



22x optical zoom Equates to 3.8mm to 83mm focal length lens with 10x digital zoom, providing 220x total zoom capability.



30x optical zoom Equates to 3.8mm to 114mm focal length lens with 10x digital zoom, providing 300x total zoom capability.



ABS Adaptive Black Stretch technology makes the dark areas of a scene clearly visible.



Auto Back Focus Optimizes the back focus automatically for clear, sharp images. The CCD position automatically adjusts when changing from color to B/W mode, eliminating any focus shift problems. Virtually eliminates post-installation manual adjustments.



Day/Night Camera will automatically or manually switch from color mode (daytime) to B/W mode (night time) to achieve optimal viewing.



Day/Night IR Considered “true” Day/Night, this technology offers the most effective transition from color (daytime) to B/W mode (nighttime). As daylight fades, the camera senses the lower light levels and mechanically removes the IR cut filter instantly switching to a more sensitive B/W mode.



Face Detection Provides better subject identification by detecting the position of the human face (up to 8 individuals) and transmitting the data via XML or video stream.



H.264 A new video compression format that offers high video resolution at lower file sizes.



IP66 “Ingress Protection 66” - the 66 refers to ingress protection for dust, and water from heavy seas, or water projected in powerful jets shall not enter the enclosure in harmful quantities.



i-Pro Intelligent and professional IP video security solutions exclusively from Panasonic. The series combines Panasonic’s performance, reliability and quality with the latest advancements in IP technology.



i-Pro MEGA Super Dynamic Exclusive Panasonic technology offers 128x dynamic range, plus Adaptive Black Stretch (ABS) for exceptional resolution even in low light; auto image stabilization and face detection to enhance image details. Check individual product specifications.



i-Pro Smart HD Offers a unique combination of high performance features, including: HD picture quality images with Panasonic’s UniPhier LSI processor, Intelligent Technology including face detection, energy efficiency and bandwidth savings, and simple installation/set-up and operation.

TECHNOLOGY IN DETAIL GUIDE



Megapixel A resolution of one million pixels.



MPEG-4/JPEG Selectable compression technologies. MPEG-4 is a Wavelet-based file that delivers professional quality audio and video streams over a wide range of bandwidths. Defined by the Moving Pictures Expert Group (MPEG) and was standardized in October 1998. JPEG is the standard for compressing still images. It produces high quality images but typically requires more space for storage. Defined by the Joint Photographic Experts Group.



PoE Power over Ethernet (IEEE802.3af).



Ready Tuff Panasonic Vandal-resistant camera designation.



SDIII Offers numerous camera performance attributes including: 128x dynamic range; pixel-based digital contrast correction; Intelligent Technology features such as Auto Image Stabilization, Auto Scene Change Detection, Auto Back Focus, Auto Tracking; 30x optical zoom (300x electronically); adaptive digital noise reduction; 540 lines of color resolution; and extreme low light sensitivity in color (0.5 lux) and B/W (0.06 lux). Check individual products for exact specifications.



SD5 Exclusive Panasonic technology offers 128x dynamic range, plus Adaptive Black Stretch (ABS) for exceptional resolution even in low light, intelligent Video Motion Detection (i-VMD) includes object detection (removal and left behind), scene change detection when lens is covered, removed, defocused and auto image stabilization. Check individual product specifications.



SD/SDHC "Secure Digital"- A small memory card featuring a high data transfer rate and encryption capability to protect content.



Up-the-Coax Supports up-the-coax (coaxial cable) signal transmission and control.

MODEL NUMBER	PAGE(S)	MODEL NUMBER	PAGE(S)	MODEL NUMBER	PAGE(S)
BB-HCA3A	22,23,25,27	PHM484S	13,14,49,50, 100	POD9C	8,9,45,46, 94
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BB-HCA10A	23	PICSD	46, 90	POD9CW	8,9,45,46, 94
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