

Panasonic
ideas for life

Panasonic

WV-NW964



2011 video surveillance systems



Panasonic

WV-NW964





We've got it all covered.

Panasonic video surveillance system solutions deliver superior performance and cost-efficiency for virtually any application. With the most comprehensive line of IP, analog and hybrid products available, you can configure the system that best meets your specific needs without ever compromising quality or reliability. Our latest innovations include i-PRO SmartHD™ cameras and recorders that combine to deliver real-time face detection and face matching, and UniPhier® large-scale integrated chips assure the highest levels of integration. They're advancements that will make any system smarter and more cost-efficient. Any way you see it, Panasonic has got it all covered.



The demand for greater performance and cost efficiency in video surveillance solutions continued to accelerate even during the economic slowdown. At Panasonic, we never stopped looking forward. Our product line-up for 2011 embodies our spirit of innovation with new video surveillance solutions that reflect Panasonic's core expertise in imaging and integrated system solutions.

Our ongoing commitment to research and development enables us to bring new levels of on-board intelligent capabilities to market. Our newest i-PRO SmartHD network solutions featured in this catalog make advanced functions like automatic real-time face detection and face matching practical and affordable for mainstream small to medium size applications. It's just one more way we are working to bring more value and a higher ROI to our customers.

Here you'll find unique characteristics that deliver optimum performance and functionality across our entire video surveillance product portfolio. These products further extend the range of applications for professional video surveillance systems beyond traditional security in areas like manufacturing, retail and traffic analysis, healthcare diagnostics and patient care where these operations can benefit from precise video data.

And our corporate-wide embrace of networked technologies provides an open platform to facilitate higher levels of integration with related business systems including telecommunications, teleconferencing, education, and point-of-sale systems. With the continued migration to networked enterprise level operations, there is no limit to what can be achieved with more intelligent technologies.

As a global technology leader with core competencies that encompass virtually every facet of the electronics industry, Panasonic truly has got it all covered.

Bill Taylor, President, Panasonic System Networks Company of America

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i-PRO Network Cameras

Panasonic i-PRO network cameras keep getting smarter. With the introduction of new i-PRO SmartHD™ cameras, Panasonic delivers a cost-efficient means to instantly enhance and detect individuals' faces. Employing the latest innovations in HD face detection technology, select i-PRO SmartHD cameras seamlessly integrate with our new WJ-NV200 NVR to match stored faces with real-time video, and alert you when unauthorized individuals come into view. Additional new introductions include i-PRO network PTZs, vandal-resistant dome cameras and fixed cameras that deliver the most in-camera intelligence available. **We've got it all covered.**



i - PRO C A M E R A S

WV-SW395**Super Dynamic HD Dome Network Camera**

- 720p HD images up to 30 fps
- 1.3 megapixel double speed MOS sensor
- Multiple H.264 (High profile) and JPEG streams ensure simultaneous real time monitoring and high resolution recording
- UniPhier®, Panasonic's proprietary System LSI platform
- Full frame (up to 30 fps) transmission at 1,280 x 960 image size
- 18x optical zoom with 12x digital zoom (216x total zoom) / 36x extra optical zoom under VGA resolution with 12x digital zoom enabling 432x total zoom
- Super Dynamic and ABS (Adaptive Black Stretch) technologies deliver 128x wider dynamic range compared with conventional cameras
- Face Super Dynamic technology ensures clear images of the face
- H.264 and MPEG-4 are selectable for system migration
- High sensitivity with Day/Night function : 0.5 lx (Color), 0.06 lx (B/W) at F1.6 (Wide)
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise and motion blur in various conditions
- Superior color reproduction by primary (RGB) color filter
- Electronic sensitivity enhancement: auto (up to 16x) / OFF
- Panning with auto flip function can be performed 0 to 360 degrees
- Auto tracking: camera automatically pans and tilts to follow a moving subject and keep it in the center of the image
- Drag and Zoom operation enables finer control
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection function detects the position of human face and information is sent by XML or video stream
- Privacy Zone can mask up to 8 private areas
- Alarm sources including 1 terminal input, VMD and Panasonic alarm command can trigger actions such as SDHC/SD memory recording, FTP image transfer, E-mail notification, Indication on browser, Alarm terminal output, and Panasonic protocol output
- Analog monitor output for easy installation
- Full duplex bi-directional audio allows interactive communication between camera site and monitoring site
- Supports Power over Ethernet Plus (PoE+) IEEE802.3at
- IP66 rated water and dust resistant
- Dehumidification device for use in various weather conditions

**Specs**

Image Sensor	1/3" MOS sensor
Minimum Illumination	0.5 lux in color, 0.06 lux in B/W
Dynamic Range	52dB
Ambient Temperature	-40°~ 122°F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	Mega & Face Super Dynamic, IP66, Day/Night, Auto Tracking, Image Stabilizer, Face Detection, 360° map
Lens	4.7mm ~ 84.6mm/18x optical, 36x with extra optical
Pan Range/Speed	0°~350°/0.5°~100°/sec
Presets	64
I/O Terminals	3
Power/Consumption	24V AC/43W with heater on / PoE Plus 24W
Dimensions	9 7/16" x 14 3/16" (239mm x 360.5mm)
Weight (camera)	10.14 lbs (4.6kg))

Popular Accessories

MOUNTING BRACKETS			
Model No.	PWM20G	PWM20GB	PWM30G
Description	Gooseneck – wall, Black	Gooseneck – wall, Beige	Parapet, Silver
Page Ref.	95	95	95
			PPRM30G
			Extended Parapet, Beige
			95

i - P R O C A M E R A S

**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.	95	95	95	95	95	95	95

i - PRO CAMERAS

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	PIDV7CN	PIDV7SN	POD7CN	POD7CWN
Type	Ceiling	Pendant	Wall	Wall	Pendant	Ceiling	Ceiling	Pendant	Wall
Location	Indoor	Outdoor	Outdoor	Outdoor	Outdoor	Indoor	Indoor	Outdoor	Outdoor
Description	Steel upper housing	Silver color/ clear dome	Silver color/ clear dome	White color/ clear dome	White color/ clear dome	Steel upper housing	Steel upper housing	White color/ clear dome	White color/ clear dome
Comments	Tinted dome	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower	Clear dome	Tinted dome	Includes Heater/Blower	Includes Heater/Blower
Page Ref.	89	92	92	92	92	90	90	91	91

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.	96	97	96	96	97	96

i - P R O C A M E R A S



WV-SC385

Super Dynamic HD Dome Network Camera

- 720p HD images up to 30 fps
- 1.3 Megapixel double speed MOS Sensor
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording
- UniPhier®, Panasonic's proprietary System LSI platform
- Full frame (Up to 30 fps) transmission at 1,280 x 960 image size
- 18x optical zoom with 12x digital zoom enabling 216x zoom / 36x extra optical zoom under VGA resolution with 12x digital zoom enabling 432x zoom
- Super Dynamic and ABS (Adaptive Black Stretch) technologies deliver 128x wider dynamic range compared with conventional cameras
- Face Super Dynamic technology ensures clear images of the face
- H.264 and MPEG-4 are selectable for system migration
- High sensitivity with Day/Night function : 0.5 lx (Color), 0.06 lx (B/W) at F1.6 (Wide)
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise and motion blur in various conditions
- Superior color reproduction by primary (RGB) color filter
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF
- Panning with auto flip function can be performed 0 to 360 degrees
- Auto tracking: camera automatically pans and tilts to follow a moving subject and keeps it in the center of the image
- Drag and Zoom operation enables finer control
- Up to 64 preset positions
- 360 map shot: 8 thumbnail images at 45 deg. intervals make it simple to direct the camera
- Industrial grade Pan/Tilt/Zoom mechanism for high reliability
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection function detects the position of a human face and the information is sent by XML or video stream
- Privacy Zone can mask up to 8 private areas
- Full duplex bi-directional audio allows interactive communication between camera site and monitoring site
- Prioritized stream control
- SDHC/SD Memory card slot for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup upon network failure (JPEG)
- IPv4/IPv6 protocol supported
- Analog Monitor output for easier installation
- Supports SSL, DDNS (viewnetcam, RFC2136)

**Popular Accessories**

Model No.	PISM5V	POSM5V
Description	Indoor vandal-resistant housing	Outdoor vandal-resistant housing

Page Ref. 90 93

Specs

Image Sensor	1/3" type MOS sensor
Minimum Illumination	0.5 lux in color, 0.06 lux in B/W
Dynamic Range	Mega Super Dynamic, 52dB
Ambient Temperature	14° ~ 122°F
Special Features	Mega & Face Super Dynamic, Day/Night, Auto Tracking, Face Detection, 360° map
Lens	4.7mm ~ 84.6mm 18x optical, 36x with extra optical zoom
Pan Range/Speed	0~350°/0.05° ~ 100°/sec
Presets	64
I/O Terminals	3
Power/Consumption	12V DC/PoE 12W
Dimensions	4 17/32" x 6 3/32" (115mm x 155mm)
Weight (camera)	2 lbs (900g)

MOUNTING BRACKETS	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available
Model No.	WV-Q157	WV-Q156C	WV-Q156S	WV-Q155C	WV-Q155S	WV-Q154C	WV-Q154S	WV-Q105
Type	Inner dome cover	Clear dome cover	Smoke dome cover	Clear embedded ceiling mount	Smoke embedded ceiling mount	Clear wall bracket	Smoke wall bracket	Direct ceiling mount
Location	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Page Ref.	98	98	98	97	97	97	97	96



i - PRO C A M E R A S

WV-SC384**HD Dome Network Camera**

- 720p HD images up to 30 fps
- 1.3 Megapixel MOS Sensor
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording
- UniPhier®, Panasonic's proprietary System LSI platform
- Full frame (up to 30 fps) transmission at 1,280 x 960 image size
- 18x optical zoom, 36x extra optical zoom at VGA resolution with 8x digital zoom enabling 288x zoom
- Face Wide Dynamic Range technology ensures clear image of the face
- H.264 and MPEG-4 are selectable for system migration
- High sensitivity with Day/Night function : 0.6 lx (Color), 0.5 lx (B/W) at F1.6 (Wide)
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise and motion blur in various conditions
- Superior color reproduction by primary (RGB) color filter
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF
- Panning with auto flip function can be performed 0 to 360 degrees
- Drag and Zoom operation enables finer control
- Up to 64 preset positions
- 360° map shot: 8 thumbnail images at 45 deg. intervals make it simple to direct the camera
- Industrial grade Pan/Tilt/Zoom mechanism for high reliability
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection function detects the position of a human face and the information is sent by XML or video stream
- Privacy Zone can mask up to 2 private areas
- Full duplex bi-directional audio allows interactive communication between camera site and monitoring site
- Prioritized stream control
- SDHC/SD Memory card slot for manual recording (H.264/JPEG), alarm recording (H.264/JPEG) and backup upon network failure (JPEG)
- IPv4/IPv6 protocol supported
- Analog monitor output for easier installation
- Supports SSL, DDNS (viewnetcam, RFC2136)
- Still images (JPEG) can be viewed on mobile phones via Internet
- ONVIF compliant model

**Specs**

Image Sensor	1/3" type MOS sensor
Minimum Illumination	0.6 lux in color, 0.5 lux in B/W
Dynamic Range	Wide Dynamic
Ambient Temperature	14° ~ 122°F
Special Features	Day/Night, Auto Tracking, Face Detection, Drag and Zoom, 360° map
Lens	4.7mm ~ 84.6mm 18x optical, 36x with extra optical zoom
Pan Range/Speed	0~350°/0.05°~100°/sec
Presets	64
I/O Terminals	3
Power/Consumption	12V DC/PoE 10W
Dimensions	4 17/32" x 6 3/32" (115mm x 155mm)
Weight (camera)	2 lbs (900g)

MOUNTING BRACKETS	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available	Photo Not Available
Model No.	WV-Q157	WV-Q156C	WV-Q156S	WV-Q155C	WV-Q155S	WV-Q154C	WV-Q154S	WV-Q105
Type	Inner dome cover	Clear dome cover	Smoke dome cover	Clear embedded ceiling mount	Smoke embedded ceiling mount	Clear wall bracket	Smoke wall bracket	Direct ceiling mount
Location	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Page Ref.	98	98	98	97	97	97	97	96

i - P R O C A M E R A S



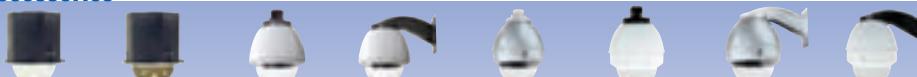
WV-NS202A

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.	88	88	93	93	92	92	92	92

MOUNTING BRACKETS				
Model No.	WV-Q105	WV-Q150S	WV-Q151S	WV-Q152S
Type	Direct Ceiling	Wall	Embedded Ceiling	Ceiling
Location Description	Indoor	Indoor Smoke Dome (also available in Clear Dome, WV-Q150C)	Indoor Smoke Dome (also available in Clear Dome, WV-Q151C)	Indoor Smoke Dome (also available in Clear Dome, WV-Q152C)
Page Ref.	96	97	97	97

i - P R O C A M E R A S

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

- 720p HD images up to 30 fps (WV-SF336/WV-SF335)
- 1.3 Megapixel high sensitivity MOS Sensor
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording
- UniPhier®, Panasonic's proprietary System LSI platform.
- Full frame (Up to 30 fps) transmission at 1,280 x 960 image size, at SVGA 800 x 600 image size
- Wide Dynamic Range and ABS (Adaptive Black Stretch) technologies deliver wider dynamic range compared with conventional cameras
- Face Wide Dynamic Range technology ensures clear images of the face
- H.264 and MPEG-4 are selectable for system migration.
- High sensitivity with Simple Day/Night function: 0.3 lux (Color), 0.2 lux (B/W) at f1.3 (Wide) (WV-SF336/WV-SF335); 0.2 lux (Color), 0.13 lux (B/W) at f1.3 (WV-SF332)
- ABF (Auto Back Focus) ensures easy installation and stable focus in both color and B/W modes (WV-SF336)
- Digital Noise Reduction: 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 (RGB) color filter
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection function detects the position of human face and the information is sent by XML or video stream
- Meta data for VMD is supplied to work with the WJ-ND400 playback VMD function
- Privacy Zone can mask up to 2 private areas
- 2x, 4x digital zoom controlled by browser
- Full duplex bi-directional audio allows interactive communication between camera site and monitoring site.
- JPEG image compression ratio can be changed by alarm so that higher quality images can be provided
- Prioritized stream control
- SDHC/SD Memory card slot for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup upon network failure (JPEG)
- IPv4/IPv6 protocol supported
- Analog Monitor output for easier installation
- 2.8 mm ~ 10 mm, 3.6x Varifocal Auto Iris lens



*Models WV-SF336/WV-SF335 only

**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	PRCM1
Description	Embedded ceiling mount	Smoked dome cover	Embedded mount bracket
Page Ref.	—	—	96



Clear dome standard; smoked dome optional

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

**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. Description Page Ref.	WV-Q173 Recessed ceiling mount bracket 98	WV-NF5S Smoked dome cover —
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i - PRO CAMERAS

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 for water and dust resistance

**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.	99	99	99	99

*Note: Brackets are designed for surface mount cameras only

MISCELLANEOUS			
Model No.	WV-CW4S	WV-Q169	PRCM1
Description	Smoked Dome Cover	Recessed Ceiling Mount	Embedded Mount Bracket
Page Ref.	—	98	96



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

i - P R O C A M E R A S

**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

LENSES	
Model No.	PLA22T3DN
Size	1/3"
Iris	Auto
Type	Wide
Focal Length	2.2mm
Aperture	f1.2
Page Ref.	86
Model No.	PLZ15/33
Size	1/3"
Iris	Auto
Type	Wide
Focal Length	15 ~ 50mm
Aperture	f1.5
Page Ref.	85

MOUNTING BRACKETS*				
Model No.	PCM484S	PHM484S	PPM484S	PWM484S
Type	Corner	Hanging	Pole	Wall
Location	Outdoor	Outdoor	Outdoor	Outdoor
Page Ref.	99	99	99	99

*Note: Brackets are designed for surface mount cameras only

MISCELLANEOUS				
Model No.	WV-CW4H	WV-CW4C	WV-Q169	PRCM1
Description	Heater Unit	Clear Dome Cover	Recessed Ceiling Mount	Embedded Mount Bracket
Page Ref.	—	—	98	96

i - PRO C A M E R A S

WV-SW355/WV-SW352

Super Dynamic HD* Vandal-Resistant Fixed Dome Network Camera

- 720p HD images up to 30 fps (WV-SW355)
- 1.3 Megapixel high sensitivity MOS Sensor
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording
- UniPhier®, Panasonic's proprietary System LSI platform
- Full frame (Up to 30 fps) transmission at 1,280 x 960 image size (WV-SW355)
- Full frame (Up to 30 fps) transmission at SVGA/800 x 600 image size (WV-SW352)
- Super Dynamic and ABS (Adaptive Black Stretch) technologies deliver 128x wider dynamic range compared to conventional cameras
- Face Super Dynamic Range technology ensures clear images of the face
- H.264 and MPEG-4 are selectable for system migration
- High sensitivity with True Day/Night function: WV-SW355: 0.3 lx (Color), 0.05 lx (B/W) at F1.6 (Wide) WV-SW352: 0.2 lx (Color), 0.04 lx (B/W) at F1.6 (Wide)
- VIQS (Variable Image Quality on Specified area) technology allows the designated area to retain higher image quality while the excluded area will have a decreased image quality enabling lower image file size and bit rate
- ABF (Auto Back Focus) ensures easy installation
- Digital Noise Reduction: 3D-DNR ensures noise reduction in various conditions
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF
- Up to 7.2x extra optical zoom under VGA resolution. 2.8-10 mm, 3.6x vari-focal auto iris lens (5.6-20 mm, 7.2x with Extra Optical Zoom under VGA)
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection function detects the position of human face and information is sent by XML or video stream
- Meta data for VMD is supplied to work with the WJ-NV200 /WJ-ND400 NVRs playback VMD function
- Privacy Zone can mask up to 2 private areas
- Full duplex bi-directional audio allows interactive communication between camera site and monitoring site
- Prioritized stream control
- SDHC/SD Memory card slot for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup upon network failure (JPEG)
- IPv4/IPv6 protocol supported
- Supports SSL, DDNS (viewnetcam, RFC2136)
- Still images (JPEG) can be viewed on mobile phones via Internet
- Analog Monitor output for easier installation
- 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



*Model WV-SW355

**Specs**

Image Sensor	1/3" type MOS sensor
Resolution	WV-SW355: 1,280 x 960 (H.264, JPEG), 640 x 480 (MPEG-4) WV-SW352: 800 x 600 (H.264, JPEG), 640 x 480 (MPEG-4)
Minimum Illumination	0.3 lux (WV-SW355), 0.2 lux (WV-SW352)
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Progressive scan
Special Features	MEGA Super Dynamic, H.264, vandal resistant, Auto Back Focus, Face Detection, IPv4/IPv6
Lens	2.8mm ~ 10mm, 3.6x
Power	12V DC, PoE
Dimensions	6 15/32" x 5 3/4" x 7 9/16" (164mm x 146mm x 191.5mm)
Weight	3.53 lbs (1.6kg)

MISCELLANEOUS				
Model No.	WV-Q169	WV-CW4S	WV-SW3H	PRCM1
Description	Recessed Ceiling Mount	Smoked Dome Cover	Heater unit	Embedded Mount Bracket
Page Ref.	98	—	—	96

i - PRO C A M E R A S


WV-SF346/WV-SF342
Vandal-Resistant Fixed Dome Network Camera Series

- 720p HD images up to 30fps (WV-SF346)
- 1.3 Megapixel high sensitivity MOS Sensor
- Multiple H.264 (High profile) and JPEG streams ensure simultaneous real time monitoring and high resolution recording
- UniPhier®, Panasonic's proprietary System LSI platform
- Full frame (Up to 30 fps) transmission at 1,280 x 960 image size (WV-SF346), at SVGA/800 x 600 image size (WV-SF342)
- Wide Dynamic Range and ABS (Adaptive Black Stretch) technologies deliver wider dynamic range
- Face Wide Dynamic Range technology ensures clear images of the face
- H.264 and MPEG-4 are selectable for system migration
- High sensitivity with Simple Day/Night function
 - WV-SF346: 0.3 lx (Color), 0.2 lx (B/W) at F1.3 (Wide)
 - WV-SF342: 0.2 lx (Color), 0.13 lx (B/W) at F1.3 (Wide)
- ABF (Auto Back Focus) ensures easy installation (WV-SF346)
- Focus Assist for onscreen adjustments (WV-SF342)
- Digital Noise Reduction: 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 (RGB) color filter
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection function detects the position of a human face and the information is sent by XML or video stream
- Privacy Zone can mask up to 2 private areas
- 2x, 4x digital zoom controlled by browser
- Alarm sources including 1 terminal input, VMD and Panasonic alarm command can trigger actions such as SDHC/SD memory recording, FTP image transfer, E-mail notification, Indication on browser, Alarm terminal output, and Panasonic protocol output
- Full duplex bi-directional audio allows interactive communication between camera site and monitoring site
- Prioritized stream control
- SDHC/SD Memory card slot for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup upon network failure (JPEG)
- IPv4/IPv6 protocol supported
- Analog Monitor output for easier installation
- 2.8 mm ~ 10 mm, 3.6x Varifocal Auto Iris lens

i-PRO
SmartHD**Specs**

Image sensor	1/3" type MOS sensor
Resolution	WV-SF346: 1,280 x 960 (H.264, JPEG); 640 x 480 (MPEG-4) WV-SF342: 800 x 600 (H.264, JPEG); 640 x 480 (MPEG-4)
Min. Illum.	0.3 lux in color (WV-SF346), 0.2 lux in color (WV-SF342)
Ambient Temp.	14° ~ 122° F
Scan Method/Pixels	Progressive
Special Features	Face Detection, Day/Night, Auto Back Focus (WV-SF346), SDHC/SD memory card slot
Lens	2.8mm ~ 10mm, 3.6x varifocal auto iris lens
I/O Terminals	1
Power/Consumption	12V DC/320 mA / PoE, 4.2W
Dimensions	5 1/8" x 3 5/8" (129.5mm x 93mm)
Weight (camera)	approx. 1.4 lbs (640g)

Popular Accessories

Photo Not Available		
Model No.	WV-Q105	PRCM1
Description		Embedded Mount Bracket
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i - P R O C A M E R A S

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

- Progressive scan ensures clear images with less 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 at f1.4
 - WV-SP305: 0.3 lux in color, 0.2 lux in B/W at f1.4
 - WV-SP302: 0.2 lux in color, 0.13 lux in B/W at f1.4
- 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
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- 2x, 4x digital zoom controlled by browser
- Privacy zone can mask up to two areas
- SDHC/SD Memory card slot for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup upon network failure (JPEG)
- JPEG image compression ratio can be changed by alarm so that higher quality image can be provided
- Prioritized stream control
- Internet mode: H.264/MPEG-4 images can be transmitted over HTTP protocol
- Full duplex bi-directional audio allows interactive communication between camera and monitoring site
- Analog video out
- IPv4/IPv6 protocol supported



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

**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.	86	87	85

i - PRO C A M E R A S



*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	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

HOUSINGS	
Model No.	POH1000
Placement	Outdoor
Style	Bullet
Description	10" - Ltwt. Aluminum
Comments	Available with Heater/Blower (POH1000HB)
Page Ref.	94

LENSES	
Model No.	PLAMP0550
Size	1/3"
Iris	Auto
Type	10x
Focal Length	5-50mm
Aperture	f1.4
Page Ref.	86

Model No.	PLAMP0550	PLAMP2406	PLAMP2812
Size	1/3"	1/3"	1/3"
Iris	Auto	Auto	Auto
Type	10x	2.5x	4x
Focal Length	5-50mm	2.4-6mm	2.8-12mm
Aperture	f1.4	f1.2	f1.4
Page Ref.	86	86	86
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i - PRO C A M E R A S

WV-SP105/WV-SP102

Network Cameras

- 720p HD images up to 30 fps (WV-SP105 only)
- 1.3 Megapixel high sensitivity MOS Sensor (WV-SP105)
- 0.32 Megapixel high sensitivity MOS Sensor (WV-SP102)
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording
- UniPhier®, Panasonic's proprietary System LSI platform
- Full frame (Up to 30 fps) transmission at 1,280 x 960 image size (WV-SP105), 640 x 480 image size (WV-SP102)
- 2x extra zoom under VGA resolution (WV-SP105 only)
- 2x, 4x digital zoom controlled by browser
- ABS (Adaptive Black Stretch) technologies deliver wider dynamic range compared with conventional cameras
- High sensitivity with simple Day/Night function: 0.8 lx (color), 0.4 lx (B/W) at f2.2 (WV-SP105); 2.0 lx (color), 1.3 lx (B/W) at f2.0 (WV-SP102)
- Digital Noise Reduction: 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 (RGB) color filter
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF (WV-SP105)
- Auto (Up to 8x) / OFF (WV-SP102)
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Privacy Zone can mask up to 2 private areas
- Prioritized stream control
- Internet mode: H.264 images can be transmitted over HTTP protocol
- IPv4/IPv6 protocol supported

**Specs**

Image Sensor	1/3 type MOS sensor (WV-SP105), 1/5 type MOS sensor (WV-SP102)
Minimum Illumination	0.8 lux in color, 0.4 lux in B/W (WV-SP105), 2.0 lux in color, 1.3 lux in B/W (WV-SP102)
Ambient Temperature	32° ~ 104° F
Special Features	HD, Day/Night, Adaptive Black Stretch
Power/Consumption	12V DC, 200 mA (WV-SP105), 140 mA (WV-SP102)
Dimensions	2 5/32" x 2 5/32" x 4 13/16" (55mm x 55mm x 122mm))
Weight (camera)	0.4 lbs (180g)

i-PRO Network Camera Lineup Chart

i-PRO

		HD 720p SmartHD CVI/HDCVI	HD 720p SmartHD CVI/HDCVI	HD 720p SmartHD CVI/HDCVI				 HD 1080p
Model		WV-SW395	WV-SC385	WV-SC384	WV-NW964	WV-NS954	WV-NS202A	WV-NW502S
Camera Type		1.3 MP Outdoor PTZ (360° w/ auto flip)	1.3 MP Indoor PTZ (360° w/ auto flip)	1.3 MP Indoor PTZ (360° w/ auto flip)	Outdoor PTZ (Continuous 360°)	Indoor PTZ (Continuous 360°)	Indoor PTZ (0~350°)	3.0 MP Outdoor vandal dome
Super Dynamic		Mega Super Dynamic	Mega Super Dynamic	WDR (8x) ¹⁾	SDIII	SDIII	SDIII	Mega Super Dynamic
Imaging Device		1/3" MOS Sensor Progressive Scan	1/3" MOS Sensor Progressive Scan	1/3" MOS Sensor Progressive Scan	1/4" CCD Progressive Output	1/4" CCD Progressive Output	1/4" CCD Progressive Output	1/3" CCD Progressive Scan
Video Compression		H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG	MPEG-4 JPEG	MPEG-4 JPEG	MPEG-4 JPEG	H.264 MPEG-4 JPEG
Day/Night		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Removable IR (D&N)		Yes	Yes	No	Yes	Yes	No	Yes
Auto Back Focus		Auto Focus	Auto Focus	Auto Focus	Auto Focus	Auto Focus	Auto Focus	Yes
VIQS		Future support	Future support	Future support	No	No	No	No
Minimum Illumination	Color	0.5 lux	0.5 lux	0.6 lux	0.5 lux	0.5 lux	0.7 lux	3MP: 2.0 lux 1.3MP: 1.0 lux
	B/W	0.06 lux	0.06 lux	0.5 lux	0.04 lux	0.04 lux	0.5 lux	3MP: 0.16 lux 1.3MP: 0.08 lux
fps JPEG		30fps (1280 x 960)	30fps (1280 x 960)	30fps (1280 x 960)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	5fps (2048 x 1536) 30fps (1280 x 960)
fps MPEG-4		30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)
fps H.264		30fps (1280 x 960)	30fps (1280 x 960)	30fps (1280 x 960)	-	-	-	15fps (1920 x 1080) 30fps (1280 x 960)
Max Image Resolution * MPEG-4 (640 x 480)		1280 x 960 (JPEG & H.264)	1280 x 960 (JPEG & H.264)	1280 x 960 (JPEG & H.264)	Max 640 x 480 (JPEG & MPEG-4)	Max 640 x 480 (JPEG & MPEG-4)	Max 640 x 480 (JPEG & MPEG-4)	2048 x 1536 (JPEG) 1920 x 1080 (H.264)
Audio Capability		2-way	2-way	2-way	2-way	2-way	2-way (Half-duplex)	2-way
SD Memory Card Slot		Yes (SDHC)	Yes (SDHC)	Yes (SDHC)	Yes (Mini)	Yes	Yes	Yes (SDHC)
SD Card Recording		30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)	1fps (JPEG)	1fps (JPEG)	1fps (JPEG)	30fps (H.264) 1fps (JPEG)
Lens Type		4.7mm~84.6mm	4.7mm~84.6mm	4.7mm~84.6mm	3.8mm~114mm	3.8mm~114mm	3.8mm~83mm	2.8x vari-focal 2.8mm~8.0mm
Zoom		18x (1.3MP) optical 36x (VGA) EX optical 12x electric	18x (1.3MP) optical 36x (VGA) EX optical 12x electric	18x (1.3MP) optical 36x (VGA) EX optical 8x electric	30x optical 10x electric	30x optical 10x electric	22x optical 10x electric	2.8x optical 4x electric
Network		10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4	10/100 BASE-TX IP v4	10/100 BASE-TX IP v4	10/100 BASE-TX IP v4/v6
Power		24VAC PoE+ (IEEE802.3at)	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	24VAC	24VAC	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)
Alarm In-/Outputs		2/1	2/1	2/1	2/1	2/1	2/1	2/1
Max Power Consumption		24W (PoE+) 43W (AC)	12W (PoE) 1000mA (DC)	10W (PoE) 690mA (DC)	85W (w/ heater)	15W	12W (PoE) 1000mA (DC)	7.6W (PoE) 630mA (DC)
Operating Temperature		-40°F~122°F (24VAC) -30°F~122°F (PoE+)	14°F~122°F	14°F~122°F	-40°F~122°F	14°F~122°F	14°F~122°F	-22°F~122°F
Mobile Phone Support ²⁾		JPEG PTZ/AUX Control	JPEG PTZ/AUX Control	JPEG PTZ/AUX Control	No	No	No	No
Security		ID/PWD Host Authentication HTTPS	ID/PWD Host Authentication HTTPS	ID/PWD Host Authentication HTTPS	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication
Other Key Features		Auto Tracking Drag and Zoom Image Stabilizer Face Detection Face Mega SD IP66	Auto Tracking Drag and Zoom Image Stabilizer Face Detection Face WDR	Drag and Zoom Image Stabilizer Face Detection Face WDR	Auto Tracking Drag and Zoom Image Stabilizer IP66	Auto Tracking Drag and Zoom Image Stabilizer	Auto Tracking Drag and Zoom Image Stabilizer	Face Detection Face Mega SD Dehumidification Device IP66

*1: WDR (Wide Dynamic Range) *2: See the supported mobile phones on the Panasonic web site

i-PRO Network Camera Lineup Chart

i-PRO

	HD 720p			HD 720p			HD 720p
Model	WV-SW355	WV-SW352	WV-NW484S	WV-SF346	WV-SF342	WV-SF336	WV-SF335
Camera Type	1.3 MP outdoor vandal dome	Outdoor vandal dome	Outdoor vandal dome	1.3 MP Indoor vandal dome	Indoor vandal dome	1.3MP Indoor dome	1.3MP Indoor dome
Super Dynamic	Mega Super Dynamic	Super Dynamic	SDIII	WDR (8x) ¹	WDR (8x) ¹	WDR (8x) ¹	WDR (8x) ¹
Imaging Device	1/3" MOS Sensor Progressive Scan	1/3" MOS Sensor Progressive Scan	1/3" CCD Progressive Output	1/3" MOS Sensor Progressive Scan	1/3" MOS Sensor Progressive Scan	1/3" MOS Sensor Progressive Scan	1/3" MOS Sensor Progressive Scan
Video Compression	H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG	MPEG-4 JPEG	H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG
Day/Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Removable IR (D&N)	Yes	Yes	Yes	No	No	No	No
Auto Back Focus	Yes (Lens ABF)	Yes (Lens ABF)	Yes	Yes (Lens ABF)	Focus Assist	Yes (Lens ABF)	Focus Assist
VIQS	Yes	Yes	No	Future Support	Future Support	Future Support	Future Support
Minimum Illumination	Color	0.3 lux	0.2 lux	0.6 lux	0.3 lux	0.2 lux	0.3 lux
	B/W	0.05 lux	0.04 lux	0.08 lux	0.2 lux	0.13 lux	0.2 lux
fps JPEG	30fps (1280 x 960)	30fps (800 x 600)	30fps (640 x 480)	30fps (1280 x 960)	30fps (800 x 600)	30fps (1280 x 960)	30fps (1280 x 960)
fps MPEG-4	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)
fps H.264	30fps (1280 x 960)	30fps (800 x 600)	-	30fps (1280 x 960)	30fps (800 x 600)	30fps (1280 x 960)	30fps (1280 x 960)
Max Image Resolution * MPEG-4 (640 x 480)	1280 x 960 (JPEG & H.264)	800 x 600 (JPEG & H.264)	Max 640 x 480 (JPEG & MPEG-4)	1280 x 960 (JPEG & H.264)	800 x 600 (JPEG & H.264)	1280 x 960 (JPEG & H.264)	1280 x 960 (JPEG & H.264)
Audio Capability	2-way	2-way	No	2-way	2-way	2-way	2-way
SD Memory Card Slot	Yes (SDHC)	Yes (SDHC)	Yes	Yes (SDHC)	Yes (SDHC)	Yes (SDHC)	Yes (SDHC)
SD Card Recording	30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)	1fps (JPEG)	30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)
Lens Type	3.6x vari-focal 2.8mm~10.0mm	3.6x vari-focal 2.8mm~10.0mm	2.0x vari-focal 3.8mm~8.0mm	3.6x vari-focal 2.8mm~10.0mm	3.6x vari-focal 2.8mm~10.0mm	3.6x vari-focal 2.8mm~10.0mm	3.6x vari-focal 2.8mm~10.0mm
Zoom	3.6x optical 7.2x (VGA) EX optical 4x electric	3.6x optical 7.2x (VGA) EX optical 4x electric	2x optical 4x electric	3.6x optical 4x electric	3.6x optical 4x electric	3.6x optical 4x electric	3.6x optical 4x electric
Network	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6
Power	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	24VAC/12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)
Alarm In-/Outputs	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Max Power Consumption	11.5W (PoE) 1.1 A (DC)	11.5W (PoE) 1.1 A (DC)	12W (PoE) 16 W (AC) 920mA (DC)	4.2W (PoE) 320mA (DC)	4.2W (PoE) 320mA (DC)	4.2W (PoE) 320mA (DC)	3.5W (PoE) 280mA (DC)
Operating Temperature	-22°F~122°F	-22°F~122°F	-22°F~122°F	14°F~122°F	14°F~122°F	14°F~122°F	14°F~122°F
Mobile Phone Support²	JPEG PTZ Control	JPEG PTZ Control	No	No	No	No	No
Security	ID/PWD Host Authentication HTTPS	ID/PWD Host Authentication HTTPS	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication
Other Key Features	Face Detection Face Mega SD Dehumidification Device Heater PoE ³ IP66	Face Detection Face Super Dynamic Dehumidification Device Heater PoE ³ IP66	Dehumidification Device Heater PoE ³ IP66	Face Detection Face WDR	Face Detection Face WDR	Face Detection Face WDR	Face Detection Face WDR

*1: WDR (Wide Dynamic Range) *2: See the supported mobile phones on the Panasonic web site *3: Heater optional

i-PRO Network Camera Lineup Chart

i-PRO

			HD 1080p	HD 720p	HD 720p		HD 720p	
Model	WV-SF332	WV-NP502	WV-SP306	WV-SP305	WV-SP302	WV-SP105	WV-SP102	
Camera Type	800x600 Indoor dome	3.0 MP box	1.3 MP box	1.3 MP box	800x600 box	1.3 MP box	Box	
Super Dynamic	WDR (8x) ¹	Mega Super Dynamic	WDR (8x) ¹	WDR (8x) ¹	WDR (8x) ¹	No	No	
Imaging Device	1/3" MOS Sensor Progressive Scan	1/3" CCD Progressive Scan	1/3" MOS Sensor Progressive Scan	1/3" MOS Sensor Progressive Scan	1/3" MOS Sensor Progressive Scan	1/3" MOS Sensor Progressive Scan	1/5" MOS Sensor Progressive Scan	
Video Compression	H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG	H.264 MPEG-4 JPEG	H.264 JPEG	H.264 JPEG	
Day/Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Removable IR (D&N)	No	Yes	Yes	No	No	No	No	
Auto Back Focus	Focus Assist	Yes	Yes (Lens ABF)	Focus Assist	Focus Assist	No	No	
VIQS	Future Support	No	Future Support	Future Support	Future Support	No	No	
Minimum Illumination	Color	0.2 lux	3MP: 2.0 lux 1.3MP: 1.0 lux	0.3 lux	0.3 lux	0.2 lux	0.8 lux	2.0 lux
	B/W	0.13 lux	3MP: 0.16 lux 1.3MP: 0.08 lux	0.05 lux	0.2 lux	0.13 lux	0.4 lux	1.3 lux
fps JPEG	30fps (800 x 600)	5fps (2048 x 1536) 30fps (1280 x 960)	30fps (1280 x 960)	30fps (1280 x 960)	30fps (800 x 600)	30fps (1280 x 960)	30fps (640 x 480)	
fps MPEG-4	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	30fps (640 x 480)	-	-	
fps H.264	30fps (800 x 600)	15fps (1920 x 1080) 30fps (1280 x 960)	30fps (1280 x 960)	30fps (1280 x 960)	30fps (800 x 600)	30fps (1280 x 960)	30fps (640 x 480)	
Max Image Resolution * MPEG-4 (640 x 480)	800 x 600 (JPEG & H.264)	2048 x 1536 (JPEG) 1920 x 1080 (H.264)	1280 x 960 (JPEG & H.264)	1280 x 960 (JPEG & H.264)	800 x 600 (JPEG & H.264)	1280 x 960 (JPEG & H.264)	640 x 480 (JPEG & H.264)	
Audio Capability	2-way	2-way	2-way	2-way	2-way	No	No	
SD Memory Card Slot	Yes (SDHC)	Yes (SDHC)	Yes (SDHC)	Yes (SDHC)	Yes (SDHC)	No	No	
SD Card Recording	30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)	30fps (H.264) 1fps (JPEG)	No	No	
Lens Type	3.6x vari-focal 2.8mm~10.0mm	Optional	Optional	Optional	Optional	Fixed focal length 3.54mm	Fixed focal length 2.00mm	
Zoom	3.6x optical 4x electric	4x electric	4x electric	4x electric	4x electric	2x (VGA) Ex optical	No	
Network	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	10/100 BASE-TX IP v4/v6	
Power	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	12VDC PoE (IEEE802.3af)	
Alarm In-/Outputs	1/1	2/1	1/1	1/1	1/1	No	No	
Max Power Consumption	3.5W (PoE) 280mA (DC)	7.6W (PoE) 630mA (DC)	4.4W (PoE) 350mA (DC)	3.4W (PoE) 270mA (DC)	3.4W (PoE) 270mA (DC)	2.8W (PoE) 200mA (DC)	2.0W (PoE) 140mA (DC)	
Operating Temperature	14°F~122°F	14°F~122°F	14°F~122°F	14°F~122°F	14°F~122°F	32°F~104°F	32°F~104°F	
Mobile Phone Support ²	No	No	No	No	No	No	No	
Security	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication	ID/PWD Host Authentication	
Other Key Features	Face Detection Face WDR	Face Detection Face Mega SD	Face Detection Face WDR	Face Detection Face WDR	Face Detection Face WDR	ABS ⁴	ABS ⁴	

¹: WDR (Wide Dynamic Range) ²: See the supported mobile phones on the Panasonic web site ⁴: ABS (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 Accessories***Photo Not Available*

Model No.	BB-HCA3A	PISM5V	POSM5V
Description	AC power supply	Indoor vandal-resistant housing	Outdoor vandal-resistant housing
Page Ref.	—	90	93



NETWORK CAMERAS



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

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



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

Photo Not Available		
Model No.	BB-HCA3A	BB-HCA10A
Description	AC power supply	Flush Mount Ceiling Bracket
Page Ref.	—	—

NETWORK CAMERAS

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



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

Popular Accessory

Photo Not Available

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



NETWORK CAMERAS



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



BB-HCM531A/BB-HCM511A

PTZ Network Cameras

- Pan/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

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

**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

	<i>Photo Not Available</i>		<i>Photo Not Available</i>		
Model No.	BB-HCA7A		PRCM1	BB-HCA11A	PISM5V
Description	AC power supply		Embedded mount bracket	Bracket	Indoor vandal-resistant housing
Page Ref.	—	96	—	90	93 POSM5V Outdoor vandal-resistant housing

NETWORK CAMERAS



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 (JPEG only)
- Scheduled preset position recording
- E-mail alert when alarm is detected
- Search images quickly via keyword or date/time



S E R V E R / M A N A G E M E N T S Y S T E M



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

CONVERTERS

BY-HPE11KT**Coaxial-LAN Converter with PoE Function**

- Easily migrate from an analog system to a network system using existing coaxial cable
- Implement over long distances (up to 1,640' for PoE connections and 6,561' for non-PoE connections) when using RG-6/U coaxial cable
- High speed digital data transmission up to 45 Mbps
- Built-in PoE function powers select Panasonic network cameras while eliminating the need to install power outlets for each camera
- No set-up required, just move the coaxial cable to the coaxial – LAN converter
- Kit includes center and camera adaptors
- Meets PoE standards (IEEE802.3af)

**i-PRO
SmartHD****Popular Accessory**

A small, dark grey metal bracket designed for mounting equipment in a rack.	
Model No.	BY-HCA10
Description	Rack mount bracket



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-HCM735A	BB-HCM547A	BB-HCM531A	BB-HCM371A
Camera Type	Pan/tilt	Outdoor* 1.3 Megapixel pan/tilt	Outdoor* PTZ	Outdoor* Pan/tilt	Wireless Outdoor* Pan/tilt
Imaging Device	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, MPEG-4, H.264	Motion JPEG, MPEG-4	Motion JPEG, MPEG-4	Motion JPEG
PoE	Yes	Yes	Yes	Yes	No
Minimum Illumination (color night view mode)	2lux (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 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
Image Resolution	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
SD Memory Card Slot	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°	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)	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
I/O Terminals	3	3	3	3	3
Analog Video Output	NTSC/PAL	NTSC/PAL	NTSC/PAL	NTSC/PAL	No
Security	User ID/Password	User ID/Password, SSL	User ID/Password, SSL	User ID/Password	User ID/Password
Operating Temperature	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 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



i-PRO Recorders and Software

The difference between a conventional network recording device and a Network Video Recorder is a matter of intelligence. Our new WJ-NV200 NVR clearly distinguishes itself with embedded real time face matching technology that eliminates the need and expense of external software. It provides real time face matching to match registered face images with a face detected by a Panasonic i-PRO SmartHD™ camera. Just another example of Panasonic technology that makes advanced functionality available for every level of application. **We've got it all covered.**



NETWORK VIDEO RECORDERS

WJ-ND400 Series
Network Video Recorder (NVR)

- H.264, MPEG-4 and JPEG multi-format recording
- Up to 64 network cameras can be connected and recorded simultaneously
- Supports various Axis camera models
- No per camera license fees
- Expandable up to 54 HDD slots
- Recording modes: manual, schedule, event (pre/post), emergency, external timer
- Panasonic camera control: pan/tilt, zoom, focus, brightness, preset position, and auto mode (depending 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 (works with supported i-PRO cameras and WJ-NT314)
- 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

**Specs**

Max Storage	18 TB (internal), 108 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	28.6 lbs (without canister or HDDs)
Alarm/Control Ports	32 alarm inputs

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.	—	41	42	—



NETWORK VIDEO RECORDERS


WJ-ND300A Series
Network Video Recorder (NVR)

- Up to 32 network cameras can be connected and recorded
- H.264, 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

i-PRO**H264
MPEG-4
JPEG****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
Page Ref.	—	—	41	42

NETWORK VIDEO RECORDERS

WJ-ND200 Series

Network Video Recorder (NVR)

- H.264, 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 to meet application requirements
- Flexible playback controls: go to date (jump to specific time/date), go to last (jump to 5 sec. ~ 5 min. before the recording ends)
- 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



Specs

Max Storage	1000 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

Popular Accessories

Model No.	ST320REM	WV-ASM100	WV-ASM100L
Description	320 GB removable HDD	Management Software	Management Software-Light
Page Ref.	—	41	42



NETWORK VIDEO RECORDERS


WJ-NV200 Series
Network Video Recorder (NVR)

- H.264, MPEG-4 and JPEG multi format
- Up to 16 network cameras can be connected and recorded
- Quick setup via automatic camera detection and simple setup wizard without the use of PC
- 'Referenced recording days' is automatically calculated by frame rate, image quality and HDD capacity
- Simple mouse operation with new GUI without the use of a PC
- Quick intuitive search with calendar and timeline
- RTSP over HTTP supported for monitoring via the Internet
- Live images from up to 16 cameras can be displayed simultaneously
- Supports Full HD output (HDMI) which can display recorded images and live images in High Definition
- Real Time Face Matching function matches registered face images with a face displayed on live images - only 1 channel with cameras supports face detection (WV-NP502, WV-SP306, WV-SP305 recommended)
- Face matching alarm is notified by Buzzer / E-mail / Panasonic alarm / Terminal output / Indicator
- Various alarm sources include 9x Terminal inputs, 16x Camera alarm, Panasonic Alarm Protocol
- Flexible alarm actions include Alarm recording, E-mail notification, Alarm message, Camera positioning, Terminal output, Panasonic alarm protocol output, Buzzer and Indicator
- Camera control: Pan/Tilt, Zoom, Focus, Brightness, Preset Position, Auto mode
- Audio recording and playback from select i-PRO network cameras, G.726 (ADPCM) 32 kbps
- Flexible Playback Controls: Goto Date (Jump to specific time/date), Goto Last (Jump to 30 sec. before the recording ends)
- Various Display Modes: Spot, Multi-screen (4 / 16 split screen display, 3 / 6 / 9 / 16 split screen display on a full screen)
- Various Recording Modes: Schedule, Event (Pre/Post)
- Filtered Search: Time & Date, Event Type, Camera number, Timeline
- Recorded images can be downloaded to a PC
- Downloadable viewer software allows playback of images downloaded from the Recorder
- Built-in network interface (10Base-T / 100Base-TX / 1000Base-T) for recording and client access
- Up to 2 clients can monitor image and control WJ-NV200 simultaneously
- Up to 2 HDDs can be installed - 3.5 inch Serial ATA HDD

**Specs**

Max Storage	6 TB (internal, 3TB HDD)
Network	1 - 100 Mbps
Power Source	120 VAC, 60 Hz, 45 W
Ambient Op. Temperature	41° ~ 113° F
Dimensions	16 17/32" x 3 15/32" x 11 13/16" (excludes feet)
Weight	approx. 14 lbs
Alarm/Control Ports	9 alarm inputs/16x camera alarms

RECORDING MANAGEMENT SOFTWARE

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-ND400/ND300A/NV200/ND200 NVR series, WJ-HD716/HD616/HD300A DVR series and i-PRO network cameras and encoders
- Up to 100 recorders, 64 encoders and 256 directly connected cameras can be registered. Up to 6,400 cameras and 256 cameras on the encoders are automatically registered on the software
- 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
- Minimum PC Requirements:
 - CPU
 - Intel Core 2 Duo 2.66 GHz or faster
 - Intel Core i7-920 or faster (during H.264 operation)
 - RAM
 - 1GB or more
 - 3GB or more (during H.264 operation)
 - Video card
 - VRAM: 128MB or more, compatible with Microsoft DirectX 9.0c or later
 - OS
 - Microsoft Windows 7 Professional 32bit/64bit
 - Microsoft Windows Vista Business SP2 32bit/64bit
 - Microsoft Windows XP Home SP3, Microsoft Windows XP Professional SP3

**i-PRO****H.264
MPEG-4
JPEG****Accessory**

Model No.	WV-CU950
Description	System Controller
Page Ref.	79

See Management Software Comparison Chart on page 71

RECORDING MANAGEMENT SOFTWARE



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-ND400/ND300A/NV200/ND200 NVR series, WJ-HD716/HD616/HD300A DVR series and i-PRO network cameras and encoders
- Up to 100 recorders, 64 encoders and 256 directly connected cameras can be registered. Up to 6,400 cameras and 256 cameras on the encoders are automatically registered on the software
- 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
- Minimum PC Requirements:
 - CPU
Intel Core 2 Duo 2.66 GHz or faster
Intel Core i7-920 or faster (during H.264 operation)
 - RAM
1GB or more
3GB or more (during H.264 operation)
 - Video card
VRAM: 128MB or more, compatible with Microsoft
DirectX 9.0c or later
 - OS
Microsoft Windows 7 Professional 32bit/64bit
Microsoft Windows Vista Business SP2 32bit/64bit
Microsoft Windows XP Home SP3, Microsoft Windows XP Professional SP3

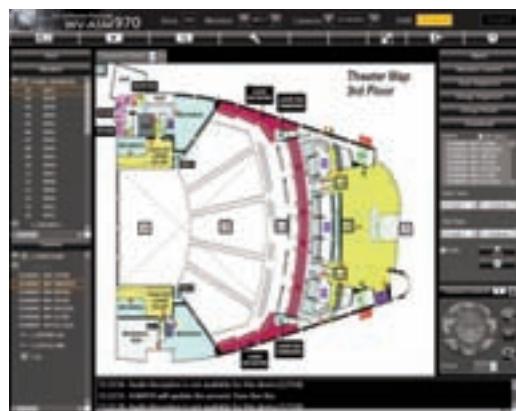


See Management Software Comparison Chart on page 71

MANAGEMENT SOFTWARE

WV-ASM970**Management Software for PMPU1000**

- Dedicated GUI (Graphic User Interface) for PMPU1000
- Two monitor operation is available (1st: map & operation, 2nd: live and playback video)
- Multi-split screen (1/4/7/9/10/13/16 split) support
- Up to 30 ips/camera can be displayed in 16 split-screen in H.264 1.5 Mbps mode with 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
- File converter is included; converts Panasonic file format to MP4
- One license per PMPU1000 server
- License includes up to 64 WV-ASM970 installations
- Minimum PC Requirements:
 - CPU
Intel Core™2 Quad Q9650 or faster
Intel Core™ 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)



Operation Window



Video Window



Camera Control Panel



Playback Control Panel



File Converter



i-PRO Encoders and Decoders

Panasonic makes it easy to integrate your analog cameras on a network platform with the performance features you want. Our encoders and decoders feature advanced built-in video analytics, High Definition quality, multi-format output for viewing and recording, and multiplex combinations to accommodate multiple cameras. **We've got it all covered.**



ENCODERS / DECODERS

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)

**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)



- 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

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 the 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 Accessory

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

**Popular Accessories**

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



Analog Cameras

Panasonic continues to introduce new imaging solutions that make any analog platform smarter. Our Super Dynamic 5 camera technology produces superior resolution images with features like Adaptive Black Stretch (ABS), intelligent Video Motion Detection (i-VMD) and enhanced Day/Night operation. Available in a wide variety of configurations, Super Dynamic 5 cameras are the most advanced analog imaging devices available for professional security applications. **We've got it all covered.**



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



SDIII
Super Dynamic



30X
OPTICAL ZOOM

IP66

**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	PWM30G
Description	Gooseneck – wall, Black	Gooseneck – wall, Beige	Parapet, Black
Page Ref.	95	95	95
			PPRM30G
			Extended Parapet, Black
			95
			PPRM30GB
			Extended Parapet, Beige
			95

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

**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	PWM20G Gooseneck – wall, Black	PWM20GB Gooseneck – wall, Beige	PWM20GS Gooseneck – wall, Silver	PWM30G Parapet, Black	PWM30GB Parapet, Beige	PPRM30G Extended Parapet, Black	PPRM30GB Extended Parapet, Beige
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.	95	95	95	95	95	95	95

MISCELLANEOUS
Model No.
Description
Page Ref.

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 keeps it in center of the 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	89	92	92	92	92

MOUNTING BRACKETS			
Model No.	WV-Q105	WV-Q116	WV-Q117
Type	Direct ceiling mount	Embedded ceiling mount	Suspended ceiling mount
Location	Indoor	Indoor	Indoor
Comments			1" cable opening
Page Ref.	96	96	97

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

**Popular Accessories**

HOUSINGS							
Model No.	PDM9	PIDV7CN	PIDV7SN	POD9C	POD9CW	POD9CT	POD9CWT
Type	Drop Ceiling	Ceiling	Ceiling	Pendant	Wall	Pendant	Wall
Location	Indoor	Indoor	Indoor	Outdoor	Outdoor	Outdoor	Outdoor
Description	For suspended ceiling	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	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower	Includes Heater/Blower
Page Ref.	89	90	90	92	92	92	92

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.	96	97	97

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

FIXED DOME CAMERAS

WV-CF504**Super Dynamic 5 Fixed Dome Camera**

- Super Dynamic 5 delivers superior image by combining Super Dynamic, ABS (Adaptive Black Stretch) and i-VMD (intelligent- Video Motion Detection) technology
- High resolution: 650 TV lines typical (Color mode), 700 TV lines minimum (B/W mode)
- High sensitivity with Day/Night function: 0.1 lx (Color), 0.01 lx (B/W) 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 detection (removal and left behind), scene change detection when lens is covered, spray painted, removed or defocused
- ABF (Auto Back Focus) 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 (NTSC), 1/120 (PAL) to 1/10,000 s
- 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
- 16 alphanumeric camera title display
- Multi -language: English, French, Italian, Spanish, German, Russian
- Monitor output for easier installation
- 3-way hinge (horizontal, vertical and swivel rotation) for easy installation
- Mounting options: surface mount or embedded ceiling mount

**Specs**

Image Sensor	1/3" type CCD
Resolution (Horizontal)	650 lines in color, 700 in B/W
Minimum Illumination	0.1 lux in color, 0.01 lux in B/W at f1.4
Ambient Temperature	14° ~ 122° F
Special Features	Super Dynamic 5, Day/Night, Auto Back Focus (ABF), i-VMD
Scan Method/Pixels	Interlace/976 (H) x 494 (V)
Lens	2x vari-focal/3.8 ~ 8 mm
Power/Consumption	24V AC/602 Hz, 3.4W, 12V DC/280 mA
Dimensions	5 15/16" x 5 1/16" H (151 mm x 129 mm)

Popular Accessories

Photo Not Available



Model No.	WV-Q175	WV-CW4S
Description	Embedded ceiling mount	Smoked Dome 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 areas
- 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)



ABS

WV-CF294
Series
only**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.	96	—

VANDAL - RESISTANT CAMERAS



Clear dome standard; smoked dome optional

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

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 situations
- 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



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	Interlace/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

Popular Accessories

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

Page Ref. 99 99 99 99 96 98

*Note: Brackets are designed for surface mount cameras only

LENSES	PLA22T3DN	PLZ15/33
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.	86	85

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

VANDAL - RESISTANT CAMERAS

WV-CW364**Vandal-Resistant Fixed Dome Camera**

- High resolution: 540 TV lines
- High sensitivity with true Day/Night function: 0.6 lx (Color): 0.05 lx (B/W)
- ABS (Adaptive Black Stretch) enhances visibility of dark area without degrading image quality in bright areas
- Vandal-resistant mechanism for high reliability
- IP66 rated water and dust resistant - compatible with IEC60529 measurement standard
- Adjustment features include: BLC (Back Light Compensation), ATW (Auto Tracing White Balance) and ALC (Automatic Light Control)
- 2 White Balance modes are selectable with Dip Switch: ATW (Auto Tracking White Balance) / AWC (Automatic White Balance Control)
- 2.8 ~ 10 mm 3.6x vari-focal Auto Iris lens
- Internal/Multiplexed Vertical Drive (VD2) synchronization
- Monitor output for easier lens adjustment upon installation
- 3-way hinge (horizontal, vertical and swivel rotation) for easy installation
- Mounting options: flush mount, surface mount and embedded ceiling mount
- Optional heater maintains operating temperature -30 °C ~ +50 °C (-22 °F ~ 122 °F)

**Specs**

Image Sensor	1/3" CCD
Resolution (Horizontal)	525 lines in color
Minimum Illumination	0.6 lux in color, 0.05 lux in B/W at f1.4 (wide)
Dynamic Range	50dB
Ambient Temperature	-22° - 122° F (with optional heater WV-CW5H)
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	IP66 rated, vandal-resistant, Day/Night
Lens	3.6x vari-focal/2.8 - 10m
Power/Consumption	24V AC, 12V DC/3 W (with optional heater)
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



MISCELLANEOUS			<i>Photo Not Available</i>
Model No.	WV-0169	WV-CW4S	WV-CW5H
Description	Recessed Ceiling Mount	Smoked Dome Cover	Heater unit
Page Ref.	98	—	

VANDAL - RESISTANT CAMERAS

**WV-CW334****Vandal-Resistant Fixed Dome Camera**

- High resolution: 540 TV lines
- High sensitivity with simple Day/Night function: 0.6 lx (Color): 0.4 lx (B/W)
- ABS (Adaptive Black Stretch) enhances visibility of dark area without degrading image quality in bright areas
- Vandal-resistant mechanism for high reliability
- IP66 rated water and dust resistant -compatible with IEC60529 measurement standard
- Various adjustment features including BLC (Back Light Compensation), ATW (Auto Tracing White Balance) and ALC (Automatic Light Control)
- 2 White Balance modes are selectable with Dip Switch: ATW (Auto Tracking White Balance) / AWC (Automatic White Balance Control)
- 2.8 - 10 mm, 3.6x vari-focal Auto Iris lens
- Internal/Multiplexed Vertical Drive (VD2) synchronization
- Monitor output for easier lens adjustment upon installation
- 3-way hinge (horizontal, vertical and swivel rotation) for easy installation
- Mounting options: flush mount, surface mount and embedded ceiling mount
- Optional heater maintains operating temperature -30 °C ~ +50 °C (-22 °F ~ 122 °F)

IP66
standard**Specs**

Image Sensor	1/3" CCD
Resolution (Horizontal)	525 lines in color
Minimum Illumination	0.6 lux in color, 0.4 lux in B/W at f1.3 (wide)
Ambient Temperature	-22° - 122° F (with optional heater WV-CW5H)
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	IP66 rated, vandal-resistant, simple Day/Night
Lens	3.6x vari-focal/2.8 - 10mm
Power/Consumption	24V AC, 12V DC/3 W (with optional heater)
Dimensions	6 7/16" x 5 3/4" x 7 9/16" (164mm x 146mm x 191.5mm)
Weight (camera)	2.53 lbs (1.27kg)

MISCELLANEOUS	Photo Not Available		
Model No.	WV-Q169	WV-CW4S	WV-CW5H
Description	Recessed Ceiling Mount	Smoked Dome Cover	Heater unit
Page Ref.	98	—	—

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.	87	87	85

HOUSINGS			
Model No.	POH1000	POH1500	POH1500HB
Placement	Outdoor	Outdoor	Outdoor
Style	Bullet	Bullet	Bullet
Description	10" - Lwt. Aluminum	15" - Lwt. Aluminum	15" - Lwt. Aluminum
Comments	Available with Heater/Blower (POH1000HB)	Available with Heater/Blower (POH1500HB)	Heater/Blower
Page Ref.	94	94	94

BRACKETS		
Model No.	PUM8	PWM800
Placement	Indoor	Outdoor
Type	Wall	Wall
Comments	Maximum weight = 3 lbs	Use with POH1000/1500 housings
Page Ref.	96	96

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.	85	85	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.	96	96

HOUSINGS		
Model No.	POH1000	POH1500
Placement	Outdoor	Outdoor
Style	Bullet	Bullet
Description	10" - Ltwt. Aluminum	15" - Ltwt. Aluminum
Comments	Available with Heater/Blower (POH1000HB)	Available with Heater/Blower (POH1500HB)
Page Ref.	94	94

FIXED COLOR CAMERAS



WV-CP290 Series

Day/Night Camera

- New high performance Digital Signal Processor (DSP)
- High resolution: 540 TV lines
- High sensitivity with Day/Night function: 0.6 lx (Color), 0.04 lx (B/W) at F1.2
- IR cut filter switches on/off to enhance the sensitivity in B/W mode
- Signal-to-Noise Ratio: 50 dB (equivalent to AGC Off, Weight On)
- ABS (Adaptive Black Stretch) enhances visibility of dark area without degrading image quality in bright areas
- Adjustment features include: BLC (Back Light Compensation), ATW (Auto Tracing White Balance) and ALC (Automatic Light Control)
- 2 White Balance modes are selectable with Dip Switch: ATW (Auto Tracking White Balance) / AWC (Automatic White Balance Control)
- Internal / Line-lock / Multiplexed Vertical Drive (VD2) synchronization
- CS-mount lenses. DC-servo ALC lenses
- WV-CP290: 120V AC, 60 Hz; WV-C P294: 24V AC, 60 Hz or 12V DC

**Specs**

Image Sensor	1/3" CCD
Resolution (Horizontal)	540 lines in color
Minimum Illumination	0.8 lux in color, 0.05 in B/W with <i>f</i> 1.4 lens
Ambient Temperature	14° ~ 122° F
Scan Method/Pixels	Interlace/768 (H) x 494 (V)
Special Features	Adaptive Black Stretch, Day/Night
Power/Consumption	120V AC 60 Hz, 2.5W (WV-CP290), 24V AC, 50 Hz, 12V DC/240mA (WV-CP294)
Dimensions	2 15/16" x 2 9/16" x 5 3/8" (75mm x 65mm x 137)
Weight (camera)	approx. 0.77 lb (350g)

Popular Accessories

LENSES	WV-LZ62/8S	WV-LZA61/2S
Model No.	WV-LZ62/8S	WV-LZA61/2S
Size	1/3"	1/3"
Iris	Auto	Auto
Type	8x Vari-focal (ALC)	2x Vari-focal (ALC)
Focal Length	5-40mm	3.8-8mm
Aperture	<i>f</i> 1.6 (W) - <i>f</i> 1.9 (T)	<i>f</i> 1.4 (W) - <i>f</i> 1.8 (T)
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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.

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 Fixed or Dome

Model		Type	Camera			Lens				Housing		Mount	
			Color	WV-NP502 (i-PRO)	WV-CP504 (analog)	WV-CS954 (analog)	5-50mm Vari-Focal Telephoto Day/Night	2.4-6mm	2.8-12mm	Built-in Zoom Lens with PTZ	Standard Bullet	Outdoor Dome	Wall or Outdoor Dome
FIXED	POCNP502LMP05			●			●			●		●	
NETWORK DAY/ NIGHT	POCNP502LMP24			●				●		●	●	●	
DOME w/PTZ	POS954D			●			●			●	●	●	●
SDIII DAY/ NIGHT	POS954DW			●			●			●	●	●	
FIXED	POC504L2					●			●	●	●	●	
ANALOG DAY/ NIGHT	POC504L5					●		●			●	●	

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-CW364	WV-CW334
Camera Type	Outdoor PTZ	Indoor PTZ	Indoor PTZ	Outdoor Vandal	Outdoor Vandal	Outdoor Vandal
Super Dynamic	SDIII	SDIII	No	SD5	Adaptive Black Stretch	Adaptive Black Stretch
Imaging Device	1/4"	1/4"	1/4"	1/3"	1/3"	1/3"
Day/Night	Yes	Yes	No	Yes	Yes	Yes (Simple)
Auto Back Focus	Auto focus	Auto focus	Auto focus	Yes	No	No
Minimum Illumination (w/clear dome when applicable)						
Color	0.5lux	0.5lux	1.0lux	0.1lux	0.6lux	0.6lux
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		0.01lux	0.05lux	0.4lux
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)	Adaptive Black Stretch IP66 rated	Adaptive Black Stretch IP66 rated
Horiz. Resolution	540 lines	540 lines	510 lines	650 lines	540 lines	540 lines
Focal Length	3.8mm-114mm	3.8mm-114mm	3.79mm-83.4mm	2.1x vari-focal 3.8mm-8.0mm CS lens mount	3.6x vari-focal 2.8-10mm	3.6x vari-focal 2.8-10mm
Zoom	30x optical/ 10x digital	30x optical/ 10x digital	22x optical/ 10x digital	2.1x optical/ 2x digital	3.6x 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	Yes
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 14 W w/heater DC 280mA	AC 13.1 W w/heater	AC 13.1 W w/heater
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 -22°F – 122°F When optional heater used

Fixed Dome and Fixed Box Camera Lineup



WV-CF504	WV-CF324	WV-CF294/284	WV-CW384	WV-CL930 series	WV-CP500 series	WV-CP290 series
Indoor Fixed Dome	Ruggedized Indoor Minidome	Indoor Minidome	Outdoor Fixed Box	Fixed Box	Fixed Box	Fixed Box
SD5	Adaptive Black Stretch	Adaptive Black Stretch	SDIII	No	SD5	Adaptive Black Stretch
1/3"	1/4"	1/4"	1/3"	1/2"	1/3"	1/3"
Yes	Yes (Simple)	Yes (Simple)	Yes	Yes	Yes	Yes
Yes	Lens ABF	WV-CF294: Lens ABF WV-CF284: N/A	Yes	Yes	Yes	No
0.1lux	0.9lux	0.9lux	0.65lux	0.09lux	0.3lux (w/o sens up)	0.8lux
			0.065lux(w/10x sens up)	0.003lux (w/32x sens up)	0.01lux (w/32x sens up)	
0.01lux		0.9lux	0.09lux	0.008lux	0.4lux (w/o sens up)	0.05lux
			0.009ux (w/10x sens up)	0.0003lux (w/32x sens up)	0.015lux (w/32x sens up)	
Super Dynamic 5 intelligent VMD Auto Back Focus	Adaptive Black Stretch Metal body Polycarbonate dome cover	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)	Adaptive Black Stretch
650 lines	540 lines	540 lines	540 lines	540 lines	650 lines	540 lines
2.1x vari-focal 3.8mm-8.0mm CS lens mount	3.6x vari-focal 2.8mm-10.0mm	WV-CF294: 3.6x vari-focal, 2.8-10.0mm WV-CF284: 2.1x vari-focal, 2.8-6.0mm	8x vari-focal 5mm-40mm (Built-in) CS lens mount	Lens optional CS lens mount	Lens optional CS lens mount	Lens optional CS lens mount
2.1x optical/ 2x digital	3.6x optical	WV-CF294: 3.6x optical WV-CF284: 2.1x optical	2x digital	Yes	2x digital	N/A
i-VMD (Intelligent VMD)	No	No	Yes	Yes	i-VMD (Intelligent VMD)	No
Yes	No	No	Yes	Yes	Yes	No
Yes	No	No	Yes	Yes	Yes	No
No	No	No	Yes	No	No	No
24VAC/12VDC	24VAC/12VDC	24VAC/12VDC	Camera 24VAC/12VDC Heater 24VAC	WV-CL930:120VAC WV-CL934: 24VAC/12VDC	WV-CP500:120VAC WV-CP504: 24VAC/12VDC	WV-CP290: 120VAC WV-CP294: 24VAC/12VDC
AC 3.4 W DC 280mA	AC 2.7 W DC 220mA	WV-CF294: AC 3.0 W DC 220mA WV-CF284: AC 2.7 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	120VAC 2.5 W 24VAC 2.9 W 12VDC 240mA
14°F – 122°F	14°F – 122°F	14°F – 122°F	-22°F – 122°F (Heater On)	14°F – 122°F	14°F – 122°F	14°F – 122°F



Recording Solutions

Panasonic continues to build on our reputation for advanced recording solutions with advanced H.264 real time recorders that conserve storage space without compromising image quality. They deliver a combination of features that provide extreme versatility including DVD back-up recording and archiving, scalable on-board storage, dual streaming viewing and playback, and network interfaces. And with our powerful management control software, you can easily control and program multiple DVRs and cameras via an easy to use Graphic User Interface (GUI). **We've got it all covered.**



DIGITAL VIDEO RECORDERS

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 provides 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 (1,920 x 1,080) 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
- RTSP over HTTP supported for monitoring via the Internet
- 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

**Specs**

Max. Hard Drives	1TB base unit (up to 8 HDDs internally, 62 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				
Description	1TB HDD in canister (9 HDD bays)	Hard disk expansion unit	WJ-HDB601 RAID 5/6 board	WJ-HDB611 DVD Drive	WV-ASM100 Management Software	WV-ASM100L Management Software Light
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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 provides 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 (1,920 x 1,080) 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
- RTSP over HTTP supported for monitoring via the Internet
- 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

Specs

Max. Hard Drives	1TB base unit (up to 8 HDDs internally, 62 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

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

ACCESSIONY

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



RECORDING MANAGEMENT SOFTWARE

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-ND400/ND300A/NV200/NV200 NVR series, WJ-HD716/HD616/HD300A DVR series and i-PRO network cameras and encoders
- Up to 100 recorders, 64 encoders and 256 directly connected cameras can be registered. Up to 6,400 cameras and 256 cameras on the encoders are automatically registered on the software
- 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
- Minimum PC Requirements:
 - CPU
Intel Core 2 Duo 2.66 GHz or faster
Intel Core i7-920 or faster (during H.264 operation)
 - RAM
1GB or more
3GB or more (during H.264 operation)
 - Video card
VRAM: 128MB or more, compatible with Microsoft DirectX 9.0c or later
 - OS
Microsoft Windows 7 Professional 32bit/64bit
Microsoft Windows Vista Business SP2 32bit/64bit
Microsoft Windows XP Home SP3, Microsoft Windows XP Professional SP3



Optional Equipment Shown

Accessory

	i-PRO	Panasonic
Model No.	WV-CU950	
Description	System Controller	
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See Management Software Comparison Chart on page 71

RECORDING MANAGEMENT SOFTWARE



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-ND400/ND300A/NV200/ND200 NVR series, WJ-HD716/HD616/HD300A DVR series and i-PRO network cameras and encoders
- Up to 100 recorders, 64 encoders and 256 directly connected cameras can be registered. Up to 6,400 cameras and 256 cameras on the encoders are automatically registered on the software
- 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
- Minimum PC Requirements:
 - CPU
Intel Core 2 Duo 2.66 GHz or faster
Intel Core i7-920 or faster (during H.264 operation)
 - RAM
1GB or more
3GB or more (during H.264 operation)
 - Video card
VRAM: 128MB or more, compatible with Microsoft DirectX 9.0c or later
 - OS
Microsoft Windows 7 Professional 32bit/64bit
Microsoft Windows Vista Business SP2 32bit/64bit
Microsoft Windows XP Home SP3, Microsoft Windows XP Professional SP3



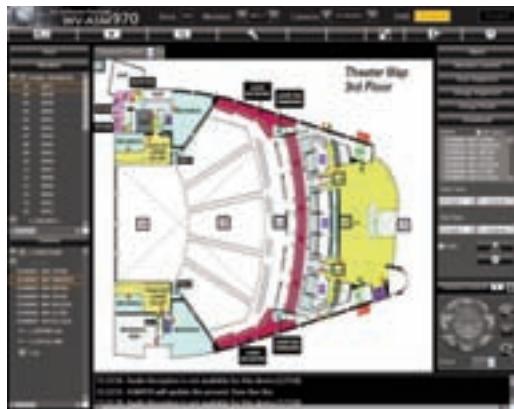
See Management Software Comparison Chart on page 71

RECORDING MANAGEMENT SOFTWARE

WV-ASM970

Management Software for PMPU1000

- Dedicated GUI (Graphic User Interface) for PMPU1000
- Two monitor operation is available (1st: map & operation, 2nd: live and playback video)
- Multi-split screen (1/4/7/9/10/13/16 split) support
- Up to 30 ips/camera can be displayed in 16 split-screen in H.264 1.5 Mbps mode with 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
- File converter is included; converts Panasonic file format to MP4
- One license per PMPU1000 server
- License includes up to 64 WV-ASM970 installations
- Minimum PC Requirements:
 - CPU
 - Intel Core™2 Quad Q9650 or faster
 - Intel Core™ 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)



Operation Window



Video Window



Camera Control Panel



Playback Control Panel



File Converter

See Management Software Comparison Chart on page 71

Recorders & Encoders/Decoders Lineup Chart

Network Video Recorders

			
Model	WJ-ND400	WJ-ND300	WJ-NV200
Supported Video Compression	H.264 / MPEG-4 / M-JPEG	H.264 / MPEG-4 / M-JPEG	H.264 / MPEG-4 / M-JPEG
Max. HDD	9 drives (internal) 54 drives (w/ external)	4 drives (internal) 28 drives (w/ external)	2 drives (internal)
Max. Storage	18TB (internal, 2TB HDD) 108TB (w/ external, 2TB HDD)	8TB (internal, 2TB HDD) 56TB (w/ external, 2TB HDD)	6TB (internal, 3TB HDD)
Max. IP Camera	64 at H.264 2Mbps	32 at H.264 2Mbps	16 at H.264 4Mbps
Supported Video Resolution	3MP (2048 x 1536), 1.3MP (1280 x 960), VGA (640 x 480), QVGA (320 x 240)	1.3MP (1280x960), VGA (640x480), QVGA (320x240)	1.3MP (1280x960), VGA (640x480), QVGA (320x240)
Max. Recording Rate (Total)	Approx. 1,920fps (30 fps at 64 cameras)	Approx. 960fps (30 fps at 32 cameras)	Approx. 480fps (30 fps at 16 cameras)
RAID Support	RAID5/6	RAID5 Optional (WJ-NDB301)	No
Max. Network Bandwidth	128Mbps (Camera recording) 72Mbps (PC monitoring)	64Mbps (Camera recording) 32Mbps (PC monitoring)	64Mbps (Camera recording) 32Mbps (PC monitoring) 13Mbps (HDMI out monitoring)
Network I/F	2x 1Gbps, 1x 10Mbps	2x 100Mbps, 1x 10Mbps	1x 1Gbps
Supported Camera Brands	Panasonic, Axis (JPEG, MPEG4)	Panasonic, Axis (JPEG)	Panasonic, Axis (JPEG)
Alarm/Control Ports	32 terminal alarm inputs/outputs, Control/AUX	16 terminal alarm inputs/outputs, Control/AUX	9 terminal alarm inputs/outputs
RTP over HTTP (For internet monitoring)	Will support in June 2010 (tentative)	No	Yes
Functions	Metadata smart search	-	HD1080i HDMI Output (Built-in Decoder) Real-time face matching, mouse operation
Power Consumption	120 VAC, 60Hz/Approx. 170W	120 VAC, 60Hz/Approx. 85W	120 VAC, 60Hz/Approx. 45W
Rack Mountable	Yes	Yes	Optional
Remote Monitoring	Yes (Microsoft Internet Explorer), WV-ASM100/100L, WV-ASM970	Yes (Microsoft Internet Explorer), WV-ASM100/100L, WV-ASM970	Yes (Microsoft Internet Explorer), WV-ASM100/100L, WV-ASM970

Digital Video Recorders

		
Model	WJ-HD716	WJ-HD616
Video Inputs	16	16
Video Loop Through	Yes (16)	Yes (16)
Audio Inputs	4	4
Monitor Out	2x HDMI, 2x Composite (BNC) (All: Multiscreen)	2x HDMI, 2x Composite (BNC) (All: Multiscreen)
Audio Outputs	2	2
Recording Video Compression	H.264	H.264
Max. HDD	4 drives (internal) 31 drives (w/ external)	4 drives (internal) 31 drives (w/ external)
Max. Storage	8TB (internal, 2TB HDD) 62TB (w/ external, 2TB HDD)	8TB (internal, 2TB HDD) 62TB (w/ external, 2TB HDD)
Recording Resolution	Frame (720x480) Field (720x240)	Frame (720x480) Field (720x240)
Max. Recording Rate (Total)	480ips at Field (720x240) 240ips at Frame (720x480)	240ips at Field (720x240) 120ips at Frame (720x480)
RAID Support	RAID5/6 Optional (WJ-HDB601)	RAID5/6 Optional (WJ-HDB601)
Network I/F	2x 100Mbps	2x 100Mbps
HDMI Cascade	Up to 3 extention units	Up to 3 extention units
Coax PTZ Control	16 (for Panasonic camera)	8 (for Panasonic camera)
RS485 Camera Interface	2x RS485, 2/4 wire, half duplex (for 1-16 CH)	2x RS485, 2/4 wire, half duplex (for 1-16 CH)
Alarm/Control Ports	16 terminal alarm inputs/outputs, 1 alarm reset input, 1 alarm suspend input	16 terminal alarm inputs/outputs, 1 alarm reset input, 1 alarm suspend input
Copy Ports	Built-in SD/SDHC slot CD/DVD burner (Optional: WJ-HDB611)	Built-in SD/SDHC slot CD/DVD burner (Optional: WJ-HDB611)
RTP over HTTP (for Internet monitoring)	Yes	Yes
Functions	Dual HD1080i HDMI Outputs, mouse operation, timeline bar search, SD5 Link	Dual HD1080i HDMI Outputs, mouse operation, timeline bar search, SD5 Link
Power	120 VAC, 60Hz	120 VAC, 60Hz
Power Consumption	Approx. 130W	Approx. 130W
Rack Mountable	Yes	Yes
Remote Monitoring	Yes (Microsoft Internet Explorer), WV-ASM100/100L, WV-ASM970	Yes (Microsoft Internet Explorer), WV-ASM100/100L, WV-ASM970

Encoders/Decoders

	
Model	WJ-GXE500
Product Type	4CH Video Encoder
Supported Video Compression	H.264 / MPEG-4 / M-JPEG
Video Inputs	4
Audio Inputs	1
Supported Video Resolution	D1 (720x480), VGA (640x480), QVGA (320x240)
Max. fps	30fps/ch at H.264 in all resolutions
Functions	Face Detection (CH1 only), Dual Stream, RTP over HTTP
Power Consumption	POE, 12VAC/6W
Rack Mountable	Optional (WV-Q204/1S, WV-Q204/2S)
Model	WJ-GXD400
Product Type	6CH HD1080i Video Decoder
Supported Video Compression	H.264 / MPEG-4 / M-JPEG
Video Outputs	HDMI x1NTSC Composite (BNC) x1
Audio Outputs	RCA x1
Display Pattern	Single (1x 1280x960) 3 split-screen (1x 1280x960, 2x VGA) 6 split-screen (6x VGA)
Max. .fps	30fps/ch at H.264 in VGA
Functions	HD1080i HDMI Output
Power/Power Consumption	12VDC/12VDC, 1.4A
Rack Mountable	Optional (WV-Q204/1S, WV-Q204/2S)

Management Software Comparison Chart

Functions			WV-ASM100 (Ver. 8.0) Management Software	WV-ASM100L (Ver. 8.0) Management Software - Light
				
Main Functions/Description			Live / Playback / Control	Live / Playback / Control
Supported Video Formats			H.264 / MPEG-4 / M-JPEG	H.264 / MPEG-4 / M-JPEG
Supported Devices	Camera	Direct	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
	Recorder	NVR	WJ-ND400, WJ-ND300/300A, WJ-ND200, WJ-NV200 series	WJ-ND400, WJ-ND300/300A, WJ-ND200, WJ-NV200 series
		DVR	WJ-HD716/616, WJ-HD309A/316A, WJ-RT416 series	WJ-HD716/616, WJ-HD309A/316A, WJ-RT416 series
	Encoder		WJ-GXE500, WJ-NT304/NT314	WJ-GXE500, WJ-NT304
	Controller		WV-CU950	No
Max. Devices	Camera	Direct	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)
		Via Encoder	256	256
	Recorder		100	100
		Encoder	64	64
	Controller		1	No
Camera Control			Yes (PTZ, Preset, Auto mode etc.)	Yes (PTZ, Preset, Auto mode etc.)
Recorder Control			Yes (Playback, REC etc.)	Yes (Playback, REC etc.)
Multi-screen Pattern			1 / 4 / 9 / 16	1 / 4 / 9 / 16
Display Performance			30 ips x 16 screens @ MPEG4 2 Mbps/H.264 1.5 Mbps	30 ips x 16 screens @ MPEG4 2 Mbps/H.264 1.5 Mbps
AVMD Display (Frame and Tracking Line)			Yes	No
Multiple Monitors Supported			Yes (Up to 3 monitors: Operation / Live / Map)	No
Map Function			Yes	No
Audio ³			Yes (Live: 2-way, Playback: 1-way)	Yes (Live: 2-way, Playback: 1-way)
Supported Alarm			Panasonic Alarm Protocol	Panasonic Alarm Protocol
Event Search (T&D, Event type etc.)			Yes	Yes
VMD Search			Yes (with WJ-ND400 series)	No
Image Download			Yes	Yes

¹Except model WV-NM100²Specific models only. Camera control is not supported. Only JPEG supported.



Encoders and Decoders

Panasonic makes it easy to integrate your analog cameras on a network platform with the performance features you want. Our encoders and decoders feature advanced built-in video analytics, High Definition quality, multi-format output for viewing and recording, and multiplex combinations to accommodate multiple cameras. **We've got it all covered.**



ENCODERS / DECODERS

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 is supplied by simply connecting a LAN cable – IEEE802.3af compliant)



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)



- 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

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	H.264, 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 Accessory



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



Popular Accessories



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



Matrix and Control Systems

Panasonic puts you in complete control of video surveillance operations with management control software-driven server solutions. Configurable for system configurations with over 1,000+ IP and/or analog cameras, multiple controllers and displays, Panasonic server based solutions provide intelligent and versatile functionality. Features include intuitive GUIs with site map overlays, advanced multi-group and tour sequences, scalable system expansion, and seamless integration with Panasonic's complete line of video surveillance solutions.

We've got it all covered.



MANAGEMENT SERVER

PMPU1000

System Management Server

- Linux based system management server
- No device license fees
- Satellite feature allows linking 64 PMPU1000 standalone systems to a global system with universal cross network access
- Supports up to 2,048 alarm inputs and various alarm source types and management
- Supports up to 2,048 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	1,023	Consult Panasonic for system design	512
Logical Monitors	1,024		64
DVR/NVR	64		32
Controllers	64		64
Alarms	2,048		1,024
Sequences	128		128
Steps per Sequence	64		64
Registered Users	512		512
Satellites	64		64

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

Supported Devices

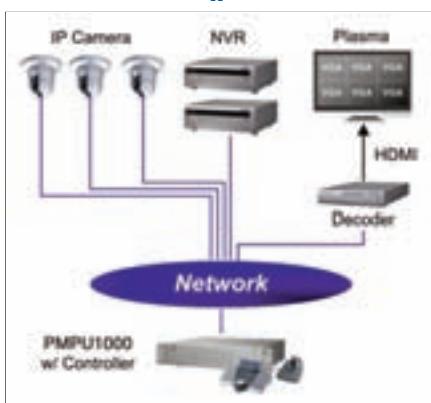
Analog	Matrix Switchers	WJ-SX650, WJ-SX850 series
	DVRs	WJ-HD300/300A, WJ-RT416, WJ-HD616, WJ-HD716 series
	Analog Cameras	Supported via Matrix Switcher or DVR
IP	IP Cameras	All i-PRO cameras except for WV-NM100
	NVRs	WJ-ND400, WJ-ND300/300A, WJ-ND200 series
	Encoders	WJ-GXE500, WJ-NT304, WJ-NT314
	Decoder	WJ-GXD400
	Controller	WV-CU950
	Management Software	WV-ASM970

Optional System Components

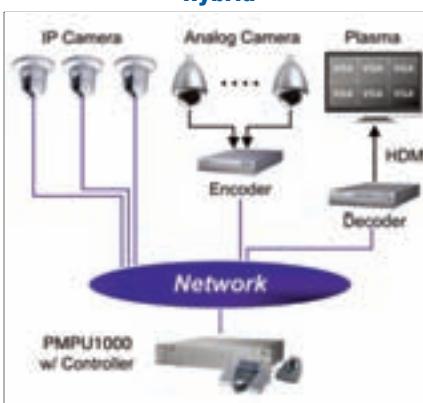


Model No.	WV-ASM970
Description	Management software unit for archiving
Page Ref.	77

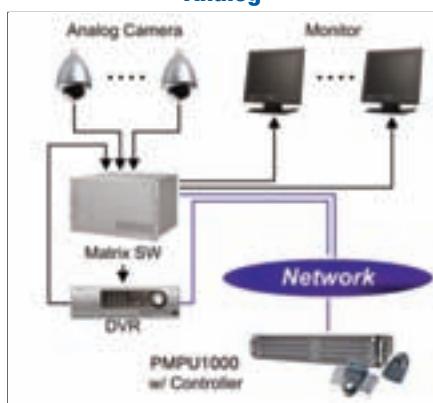
IP



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

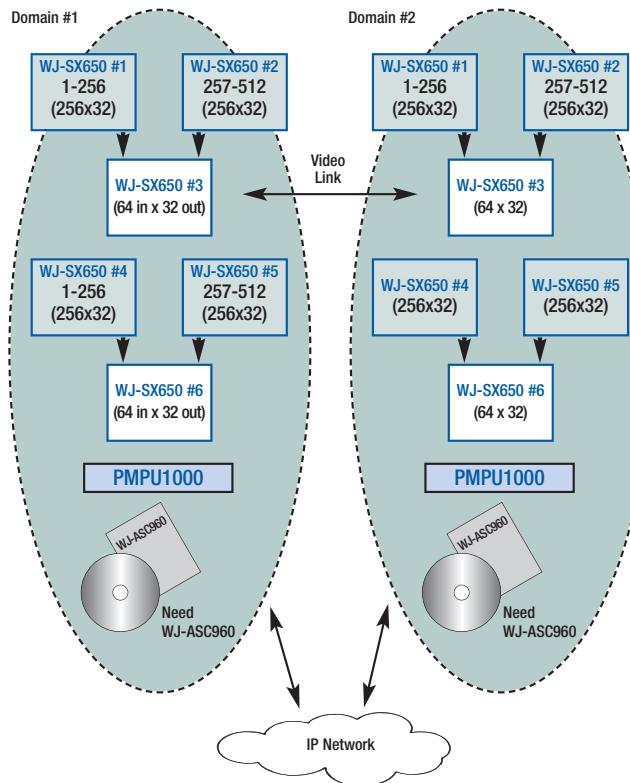
*¹ In PS-Data mode
*² In Terminal mode



Accessories

			Photo Not Available						
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

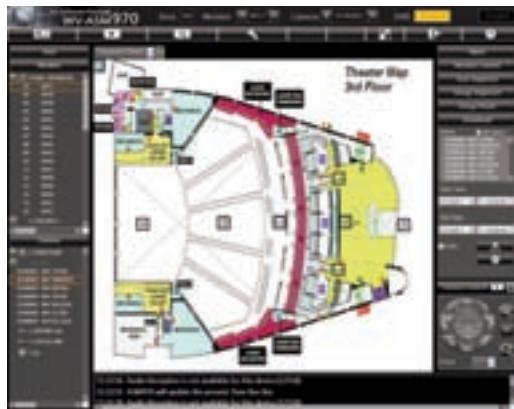


MANAGEMENT SOFTWARE

WV-ASM970

Management Software for PMPU1000

- Dedicated GUI (Graphic User Interface) for PMPU1000
- Two monitor operation is available (1st: map & operation, 2nd: live and playback video)
- Multi-split screen (1/4/7/9/10/13/16 split) support
- Up to 30 ips/camera can be displayed in 16 split-screen in H.264 1.5 Mbps mode with 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
- File converter is included; converts Panasonic file format to MP4
- One license per PMPU1000 server
- License includes up to 64 WV-ASM970 installations
- Minimum PC Requirements:
 - CPU
Intel Core™2 Quad Q9650 or faster
Intel Core™ 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)



Operation Window



Video Window



Camera Control Panel



Playback Control Panel



File Converter

See Management Software Comparison Chart on page 71

CONTROL SYSTEMS



WV-CU650 System Controller

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

PS•Data

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

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

CONTROL SYSTEMS

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/seuttle
- 10Base-T/100Base-TX Ethernet port
- RS485 data port for PS•Data link or terminal mode



PS•Data

Controller Compatibility

	WV-CU950
WJ-SX650	Yes*
WV-ASM100	Yes

*PMPU1000, WJ-PB650E01 is needed



LCD Displays

Panasonic LCD displays deliver the resolution and reliable operation you demand for head-end operations. They feature 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. **We've got it all covered.**



LCD DISPLAYS

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/m ² (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/m ² (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/m ² (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.	PRMK08
Description	Optional rack mount kit
Page Ref.	—

L C D D I S P L A Y S**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/m ² (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

Photo Not Available

Model No.	PRMK08
Description	Optional rack mount kit
Page Ref.	—



Accessories

Panasonic offers a comprehensive line of camera lenses, housings and brackets to outfit any of our IP and analog cameras to fit exactly where you need them. Our wide selection of high quality lenses feature precision optics in various fixed and zoom focal ranges to focus in on what you need to see. And our indoor and outdoor line of camera housings allows you to position cameras in the most hostile environments, or seamlessly blend them into the backgrounds of the most aesthetically pleasing spaces. **We've got it all covered.**



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-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



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*



For Camera/Lens Compatibility, Visit Pages 100-101

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

**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

For Camera/Lens Compatibility, Visit Pages 100-101

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

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

1 / 3 " L E N S E S**PLZ27/5DN**
1/3" Vari-focal
Day/Night Lens²

- Wide-angle lens
- f1.3 aperture ratio
- 2.7–13.5 mm focal length (5x)
- Auto iris

**PLZ20/5**
1/3" Vari-focal Lens¹

- Wide-angle lens
- f1.6 aperture ratio
- 20.0–100.0 mm focal length (5x)
- Auto iris

**PLZ5/10**
1/3" Vari-focal Lens²

- Wide-angle lens
- f1.6 aperture ratio
- 5.0–50.0 mm focal length (10x)
- Auto iris

**PTVR0916DC**
1/3" Vari-focal Lens¹

- f1.6 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
- f1.8 aperture ratio
- 7–70 mm focal length
- Manual iris
- For WV-CL930 camera series

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

- 6x motorized lens
- f1.2 aperture ratio
- 8.5–51 mm focal length
- Auto iris



1. OEM partnership w/Tamron

2. OEM partnership w/Fujinon

For Camera/Lens Compatibility, Visit Pages 100-101

INDOOR DOME HOUSINGS



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-SC385/384, WV-SF336/335/332, WV-SF346/342, WV-NF284, WV-CF324, WV-CF294, WV-CF284, WV-CF504



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-SC385/384, WV-SF336/335/332, WV-SF346/342, WV-NF284, WV-CF324, WV-CF294, WV-CF284, WV-CF504

INDOOR DOME HOUSINGS

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" (HxD)
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



■ Clear lower dome shown

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

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-CS954, WV-CS574



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 ¾" 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-SC385/384,
WV-SF336/335/332, WV-CF324, WV-CF504,
WV-CF294/284

Popular Accessory

Photo Not Available

Model No.	PWMSM5V
Description	1" NPT gooseneck wall mount
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-NS202A, WV-SC385/384, WV-CS954,
WV-CS574

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



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-NS202A, WV-SC385/384, WV-CS954,
WV-CS574

POD7CWN Outdoor Dome Housing

Includes same features as POD7CN, except:

- Wall mount style for PTZ dome cameras



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-CP500 Series, WV-SP105/102,
WV-CP290 Series

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



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-CP500 Series, WV-SP105/102,
WV-CP290 Series

POD8CWF Outdoor Dome Housing

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



Popular Accessories

MOUNTING BRACKETS	PWM20G	PWM20GB	PWM30G	PWM30GB	PPRM30G	PPRM30GB	PWBT1621	PACA2	PAPM3	PMSM5
Model No.	PWM20G	PWM20GB	PWM30G	PWM30GB	PPRM30G	PPRM30GB	PWBT1621	PACA2	PAPM3	PMSM5
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	Pendant shroud
Page Ref.	95	95	95	95	95	95	—	95	95	93

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



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



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



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

Popular Accessories

MOUNTING BRACKETS										
Model No. Description	PWM20G Gooseneck wall mount, black	PWM20GB Gooseneck wall mount, beige	PWM30G Parapet mount (inside wall), black	PWM30GB Parapet mount (inside wall), beige	PPRM30G Parapet mount (outside wall), black	PPRM30GB Parapet mount (outside wall), beige	PWB1621 Ground loop isolation transformer	PACA2 Corner mount adapter black	PAPM3 Pole mount adapter, black	PMMS5 Pendant shroud
Page Ref.	95	95	95	95	95	95	—	95	95	93

OUTDOOR VANDAL-RESISTANT HOUSINGS

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, WV-CS574, WV-SC385/384

PODV7CPNS

Outdoor Vandal-Resistant Housing

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



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, WV-CS574, WV-SC385/384

PODV7CWNS

Outdoor Vandal-Resistant Housing

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



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, WV-NS954, WV-NS202A

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



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, WV-NS954, WV-NS202A

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



Specs

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

Camera Compatibility:

WV-NS202A, WV-CF294/284, WV-CF504, WV-CF324, WV-SC385/384, WV-SF346/342, WV-SF336/335/332

POSM5V

Outdoor Vandal-Resistant Housing

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



PMSM5

Pendant Shroud

- Sunshield
- 1.5" collar convert for POSM5V

Popular Accessories

MOUNTING BRACKETS										
Model No. Description Page Ref.	PWM20G Gooseneck wall mount, black 95	PWM20GB Gooseneck wall mount, beige 95	PWM30G Parapet mount (inside wall), black 95	PWM30GB Parapet mount (inside wall), beige 95	PPRM30G Parapet mount (outside wall), black 95	PPRM30GB Parapet mount (outside wall), beige 95	PWB1621 Ground loop isolation transformer —	PACA2 Corner mount adapter black 95	PAPM3 Pole mount adapter, black 95	PMSM5 Pendant shroud 93

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



POH1000NWM Outdoor Housing

Includes same features as POH1000, plus:

- Intelligently operates from a PoE Plus, IEEE 802.3at input to power the H&B system and compliant camera
- Midspan included
- Standard combination wall/pole mount option
- Easy camera installation using only one network cable
- Built-in thermostatically controlled H&B
- Lightweight aluminum chassis
- Vandal-resistant polycarbonate viewing window



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

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-CL930 Series, WV-CP500 Series, WV-CP290 Series, WV-SP105/102

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	120-240VAC, 50-60 Hz (midspan input)
Dimensions	8.6" x 8.6" x 8.4" (HxWxD)
Weight	7 lbs.

Camera Compatibility:

WV-NP502, WV-CL930 Series, WV-CP500 Series, WV-CP290 Series, WV-SP105/102

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-CL930 Series, WV-CP500 Series, WV-CP290 Series, WV-SP105/102

Popular Accessory

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

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

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

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



**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)



**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



**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



**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



**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



MOUNTING BRACKETS



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



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



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



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-Q116 Embedded Ceiling Installation Bracket

- For WV-CS954 camera

MOUNTING BRACKETS

WV-Q117
Suspended Ceiling
Installation Bracket

- For WV-CS954 and WV-CS574 cameras



WV-Q118
Wall Mount Bracket

- For WV-CS954 and WV-CS574 cameras



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

- For WV-NS202A network PTZ camera



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

- For WV-NS202A network PTZ camera



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

- For WV-NS202A network PTZ camera



WV-Q154C - Clear Dome
WV-Q154S - Smoke Dome
Wall Mount Bracket

- For WV-SC385 and WV-SC384 network PTZ cameras



WV-Q155C - Clear Dome
WV-Q155S - Smoke Dome
Embedded Ceiling Mount Bracket

- For WV-SC385 network PTZ camera



MOUNTING BRACKETS



**WV-Q156C -
Clear Dome Cover
WV-Q156S -
Smoke Dome Cover**

■ For WV-SC385 network PTZ camera



**WV-Q157
Inner Dome Cover**

■ For WV-SC385
network PTZ camera



**WV-Q169
Embedded Ceiling Mount
Bracket**

■ For WV-NW484S camera



**WV-Q173
Embedded Ceiling
Mount Bracket**

■ For WV-NF302 camera



**WV-Q174
Recessed Ceiling Bracket**

■ For WV-SF330 Series network cameras

VANDAL-RESISTANT CAMERA BRACKETS

PS484S

Vandal-Resistant Shroud

- Weatherproof
- Durable cast aluminum construction
- 1 ½" 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



Recommended Camera and Lens Combinations

i-PRO

Lens Models					Camera Models	WV-NW502S	WV-NW484S	WV-NP502	WV-SF306/305/302
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-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					
1/3"	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

Camera Models					WV-CW504 Series	WV-CL930 series	WV-CP500 series	WV-CP290 series
Lens Models								
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-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		●		●
1/3"	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

Housing and Camera Cross Reference Chart (refer to individual specifications for more detail)																							
	Housing Features					Camera Models																	
Housing Model	Indoor	Outdoor	Pendant Mount	Wall Mount	Smoke Dome	Heater/Blower	Recessed Ceiling	Clear Dome	WV-NS202A	WV-NS954	WV-SP105/T02	WV-CS954	WV-CS574	WV-CF324	WV-CF504	WV-CF294/284	WV-CW504F/S	WV-CW364/334	WV-GP290 Series	WV-GP500 Series	WV-CF504	WV-CF294/284	
PDM9	●										●												
PID5CN	●							●			●	●	●				●	●	●				
PID5SN	●							●			●	●	●				●	●	●				
PID9	●							●						●	●		●	●					
PIDV7CN								●						●	●		●	●					
PIDV7SN								●						●	●		●	●					
PISM5V	●	●	●	●						●	●		●	●			●	●	●				
POD7CN		●	●					●		●	●	●				●	●	●					
POD7CWN		●		●				●		●	●	●				●	●	●					
POD8CF		●	●					●				●				●	●			●	●		
POD8CWF		●		●				●				●				●	●			●	●		
POSM5V		●								●			●	●	●			●	●	●			
PRCM1	●							●		●			●	●	●		●	●	●	●	●	●	●
PS484S													●	●			●	●	●		●	●	
PPM484S													●	●			●	●	●		●	●	
PCM484S													●	●			●	●	●		●	●	
PHM484S													●	●			●	●	●		●	●	
PWM484S													●	●			●	●	●		●	●	

Housing and Camera Cross Reference Chart

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	Heater/Blower	Clear Dome	POD9C (SILVER)	POD9CT (WHITE)	POD9CW (SILVER)	POD9CWT (WHITE)	PODV7CPNS	PODV7CWNS	POH1000	POH1000HB	POH1000NWM	POH1500HB	PPFD9C	PRCM1	PS484S	PPM484S	PCM484S	PHM484S	PWM484S
POD9C (SILVER)								●																
POD9CT (WHITE)		●							●															
POD9CW (SILVER)		●			●		●	●	●	●	●													
POD9CWT (WHITE)		●			●		●	●	●	●	●													
PODV7CPNS		●	●	●			●					●								●	●	●	●	●
PODV7CWNS		●	●		●		●	●	●			●							●	●	●	●	●	
POH1000	●	●			●							●								●	●	●	●	●
POH1000HB		●					●					●								●	●	●	●	●
POH1000NWM		●					●					●								●	●	●	●	●
POH1500HB		●					●					●								●	●	●	●	●
PPFD9C		●					●	●	●										●	●				
PRCM1												●	●											
PS484S												●	●											
PPM484S												●	●											
PCM484S												●	●											
PHM484S												●	●											
PWM484S												●	●											

Housing and Bracket Compatibility Chart

Housing and Bracket Compatibility Chart

								
		Page		95	95	95	95	95
				PACA2/PACA2B	PAPM3/PAPM3B	PHM5	PPMF12D	PPRM30G/30GB
Housing		Page	Description	Outdoor corner mount bracket	Outdoor pole mount adapter	Hanging mount bracket	Pendant mount bracket	Extended parapet mount
POD7CN		91	Outdoor dome housing, pendant	w/ optional PWM20G series	w/ optional PWM20G series	●	●	●
POD7CWN		91	Outdoor dome housing, wall bracket	●	●			
POD8CF		91	Outdoor pendant mount housing for fixed cameras	w/ optional PWM20G series	w/ optional PWM20G series	●	●	●
POD8CWF		91	Outdoor pendant mount housing for fixed cameras, wall bracket	●	●			
POD9C		92	Outdoor pendant mount housing, silver	w/ optional PWM20G series	w/ optional PWM20G series	●	●	●
POD9CT		92	Outdoor pendant mount housing, white	w/ optional PWM20G series	w/ optional PWM20G series	●	●	●
POD9CW		92	Outdoor housing, wall mount, silver	●	●			
POD9CWT		92	Outdoor housing, wall mount, white	●	●			
PODV7CPNS		93	Outdoor vandal-resistant housing, pendant, white	w/ optional PWM20G series	w/ optional PWM20G series	●	●	●
PODV7CWNS		93	Outdoor vandal-resistant housing, wall mount, white	●	●			
PODV9CPT		93	Outdoor vandal-resistant housing, pendant, white	w/ optional PWM20G series	w/ optional PWM20G series	●	●	●
PODV9CWT		93	Outdoor vandal-resistant housing, wall mount, white	●	●			
POH1000		94	10" outdoor fixed box housing					
POH1000HB		94	10" outdoor fixed box housing with heater/blower					
POH1000NWM		94	10" outdoor fixed box housing with heater/blower and PoE+					
POH1500		94	15" outdoor fixed box housing					
POH1500HB		94	15" outdoor fixed box housing with heater/blower					
PPFD9C		94	Pressurized dome housing	w/ optional PWM20G series	w/ optional PWM20G series	●	●	●

Housing and Bracket Compatibility Chart

							
		Page		95	95	95	95
				PSRCW2000B	PWM20G/PWM20GB/PWM20GS	PWM30G/30GB	PWM800
Housing		Page	Description	Outdoor parapet roof top bracket	Parapet mount	Parapet mount	Outdoor wall/pole mount
POD7CN		91	Outdoor dome housing, pendant		●	●	
POD7CWN		91	Outdoor dome housing, wall bracket	●			
POD8CF		91	Outdoor pendant mount housing for fixed cameras		●	●	
POD8CWF		91	Outdoor pendant mount housing for fixed cameras, wall bracket	●			
POD9C		92	Outdoor pendant mount housing, silver		●	●	
POD9CT		92	Outdoor pendant mount housing, white		●	●	
POD9CW		92	Outdoor housing, wall mount, silver	●			
POD9CWT		92	Outdoor housing, wall mount, white	●			
PODV7CPNS		93	Outdoor vandal-resistant housing, pendant, white		●	●	
PODV7CWNS		93	Outdoor vandal-resistant housing, wall mount, white	●			
PODV9CPT		93	Outdoor vandal-resistant housing, pendant, white		●	●	
PODV9CWT		93	Outdoor vandal-resistant housing, wall mount, white	●			
POH1000		94	10" outdoor fixed box housing				●
POH1000HB		94	10" outdoor fixed box housing with heater/blower				●
POH1000NWM		94	10" outdoor fixed box housing with heater/blower and PoE+				●
POH1500		94	15" outdoor fixed box housing				●
POH1500HB		94	15" outdoor fixed box housing with heater/blower				●
PPFD9C		94	Pressurized dome 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 is provided as an example only. Contact your local Panasonic representative for system design assistance.

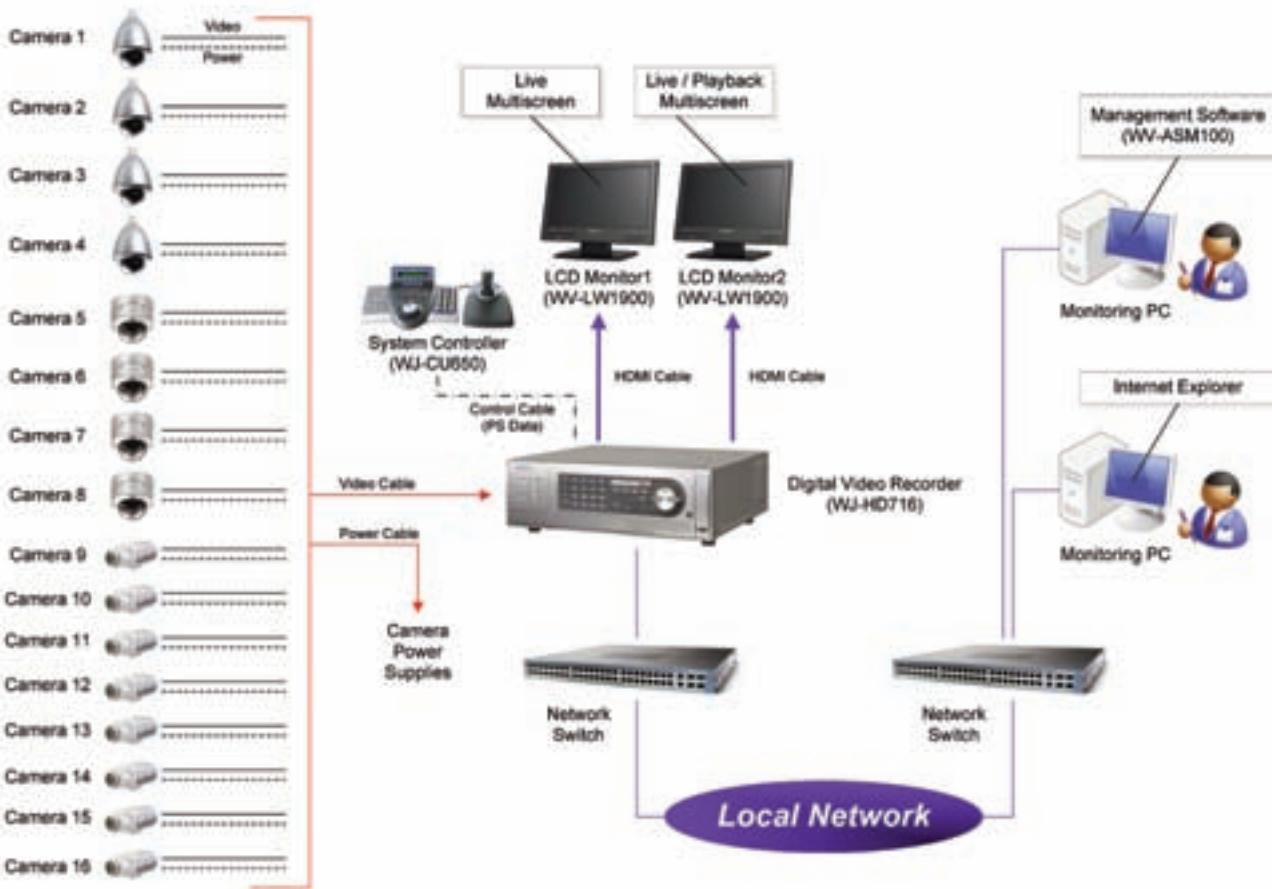
Product Information

Symbol	Description	Model
	SDIII 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)
	SD5/Mega Super Dynamic Vandal Fixed Dome Camera Day/Night, Progressive output, Auto Back Focus, IP66 H.264/MPEG-4/JPEG, PoE, SD card (IP model only)	WV-CW504S (Analog) WV-NW502S (IP)
	Mega Super Dynamic PTZ IP Camera 1.3 Megapixel, Day/Night, 18x optical zoom (1.3MP) H.264/MPEG-4/JPEG, PoE, SD card	WV-SC385
	1.3 Megapixel Day/Night IP Camera Progressive scan, H.264/MPEG-4/JPEG, WDR Auto Back Focus, PoE, SDHC card	WV-SP306
	SD5 Day/Night Analog Camera Auto Back Focus, i-VMD Adaptive Digital Noise Reduction	WV-CP504
	Full High Definition Video Decoder HDMI interface, Up to 6 split screens, MPEG-4/JPEG	WJ-GXD400
	4CH H.264/MPEG-4/JPEG Video Encoder 30ips/ch @VGA, H.264, SDHC card	WJ-GXE500
	64CH High Density Network Video Recorder H.264/MPEG-4/JPEG, Up to 64 camera, Up to 54 HDDs RAID5/6	WJ-ND400 series
	16CH All-in-One Network Video Recorder H.264/MPEG-4/JPEG, Up to 16 camera, Up to 2 HDDs	WJ-NV200
	16CH Digital Video Recorder 480 ips 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	PMPU1000
	● WV-ASM100 System Management Software 16 split screens, 3 monitors output (OperationLiveMap) Supports IP camera, joystick controller, DVR & NVR ● WV-ASM970 System Management Software for PMPU1000 16 split screens, 2 monitors output (OperationMap/Video), DVR & NVR	WV-ASM100 WV-ASM970

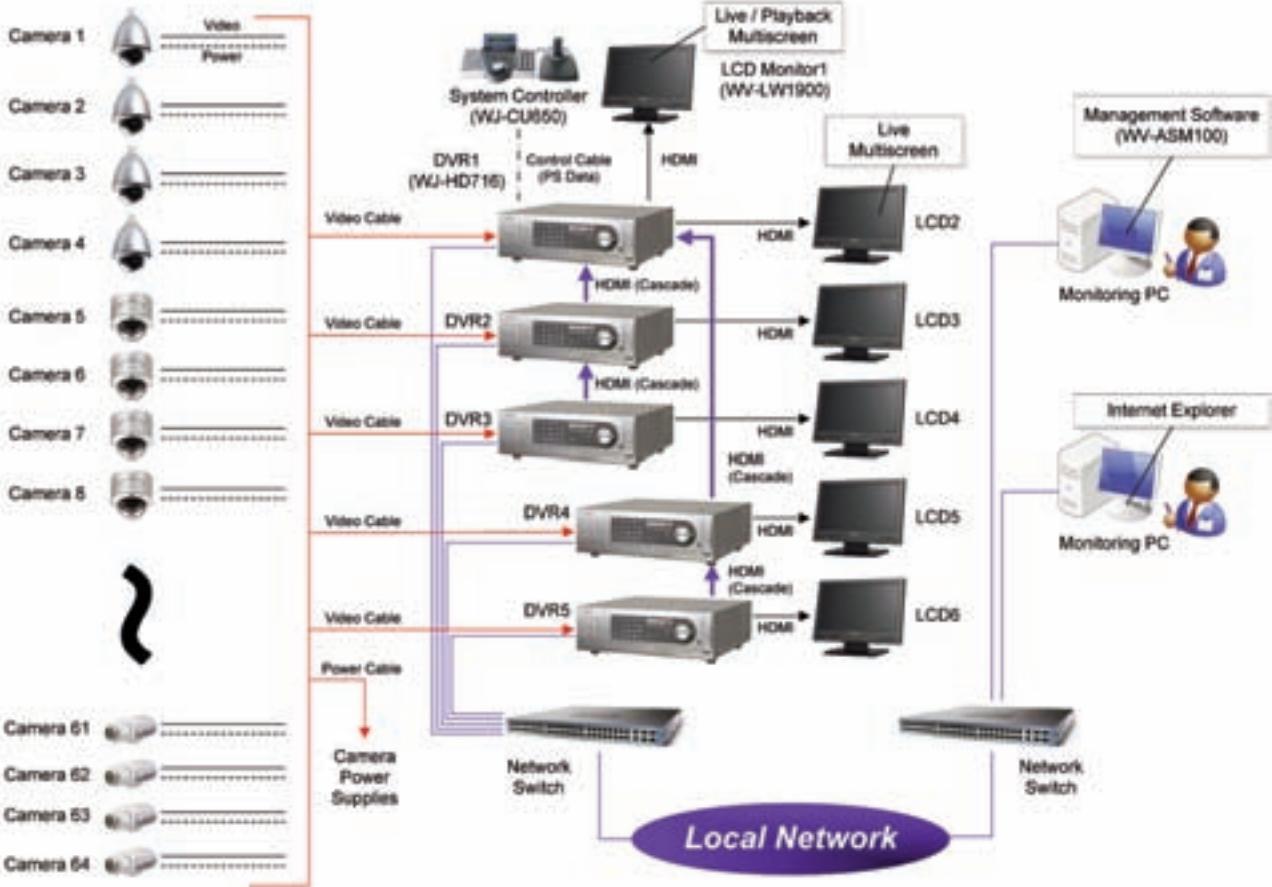
Cable Information

Symbol	Description
—	Network Cable: CAT5E or CAT6 cable
→	Video Cable: Coaxial cable
HDMI → HDMI	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

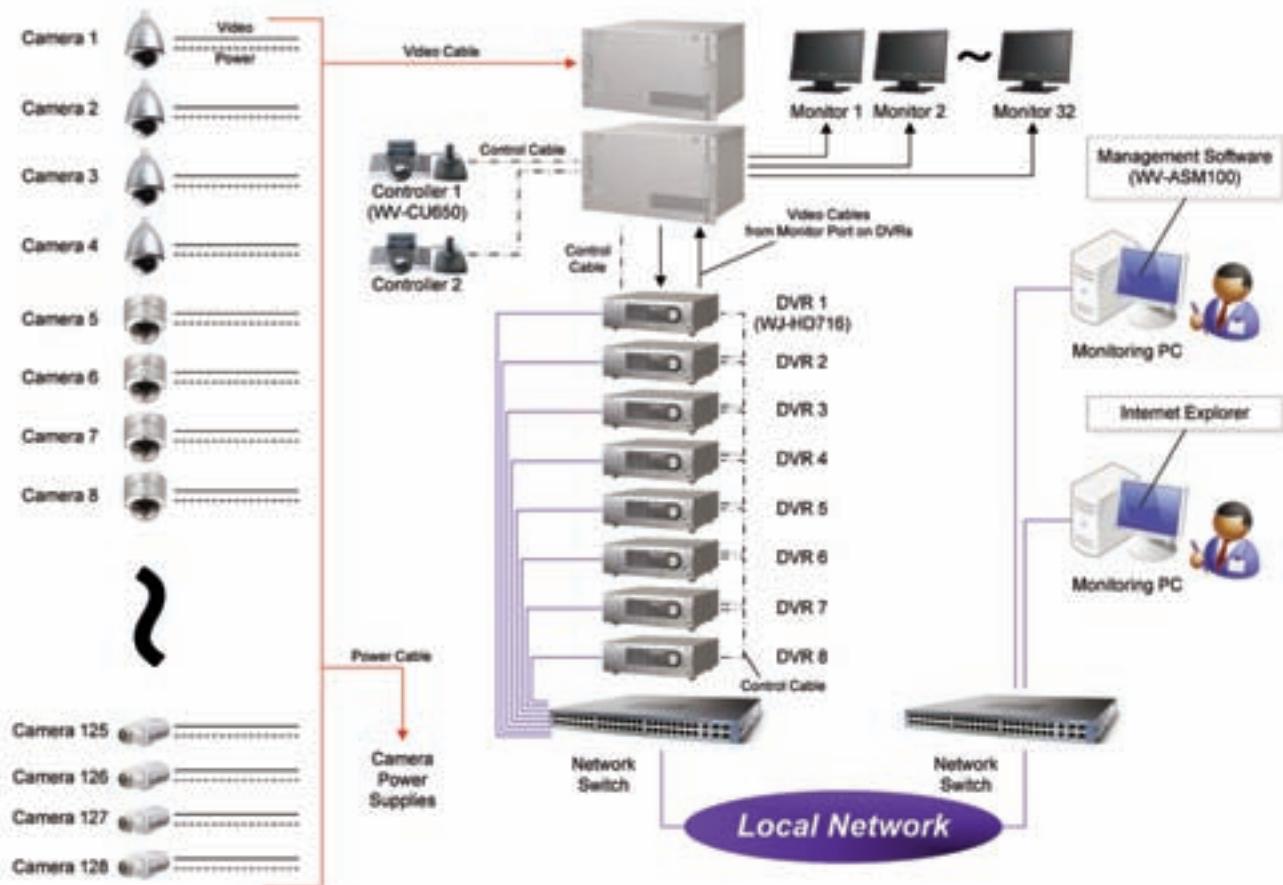
Small Analog System



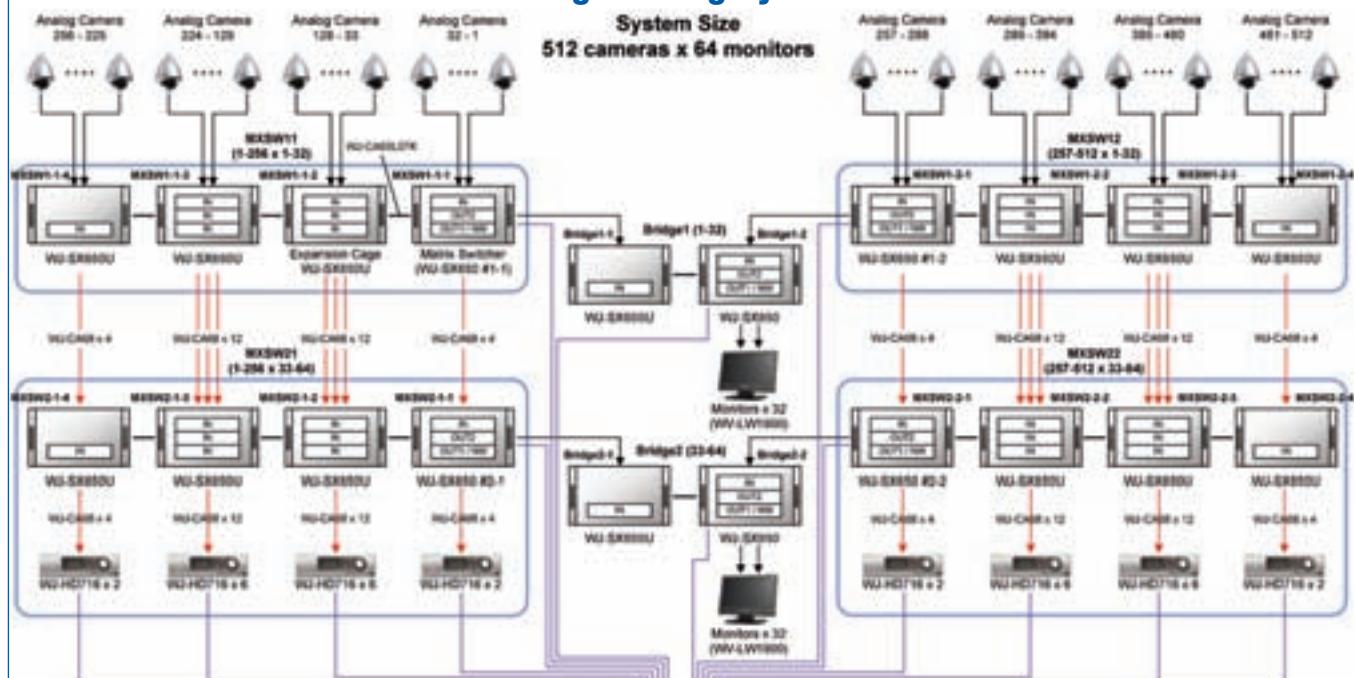
Mid Size Analog System



Large Analog System (Single Site)



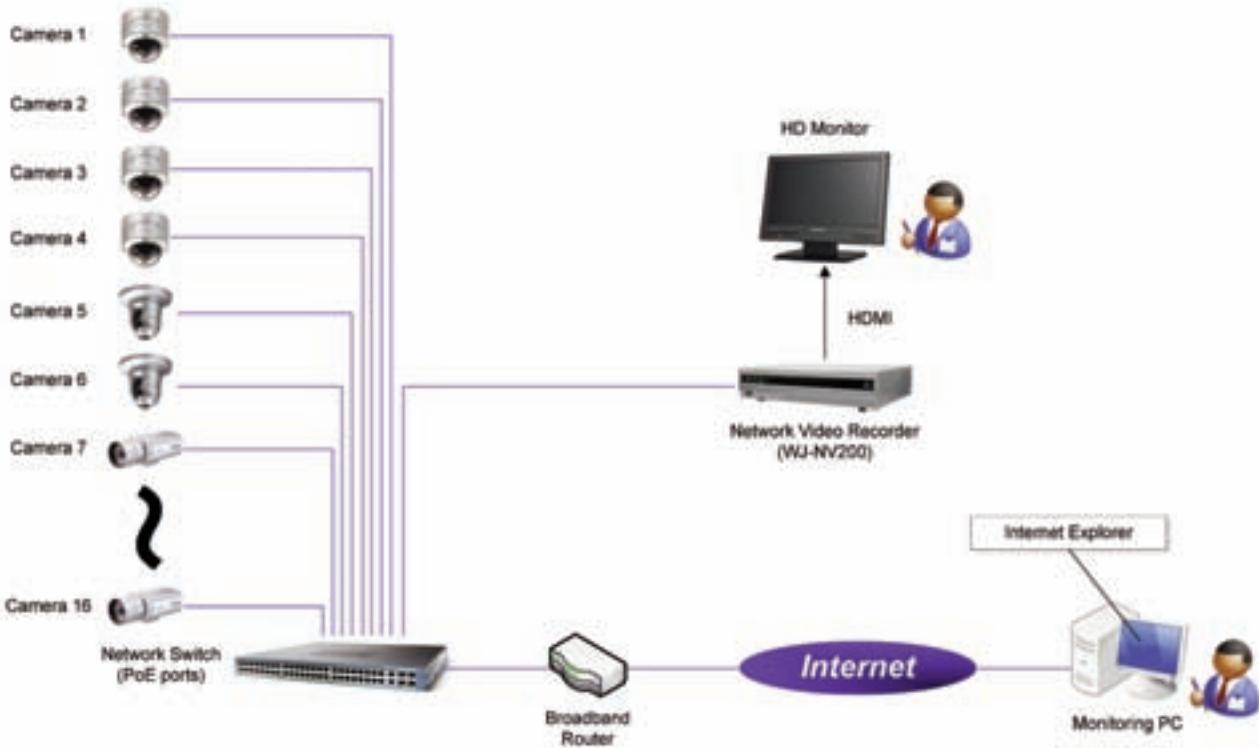
Large Analog System



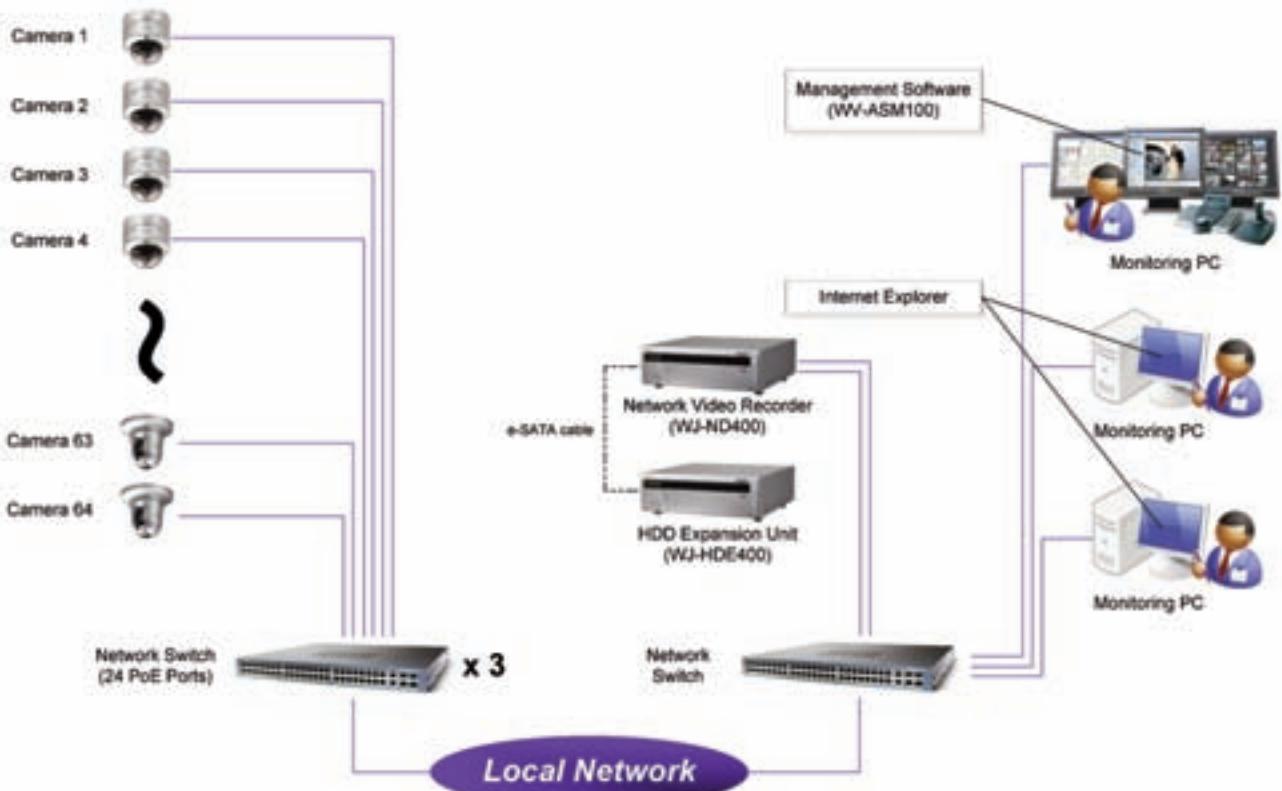
Symbols

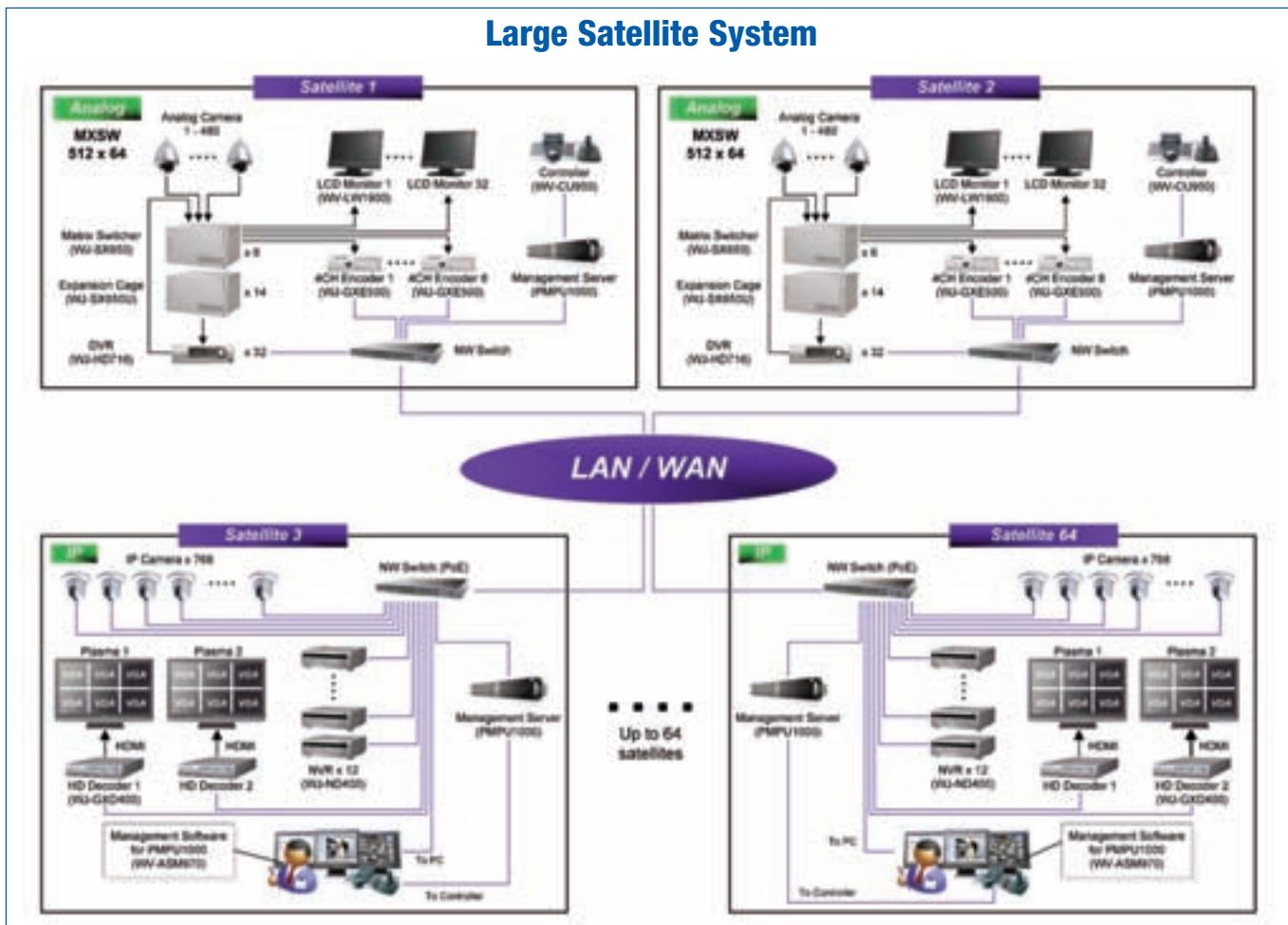
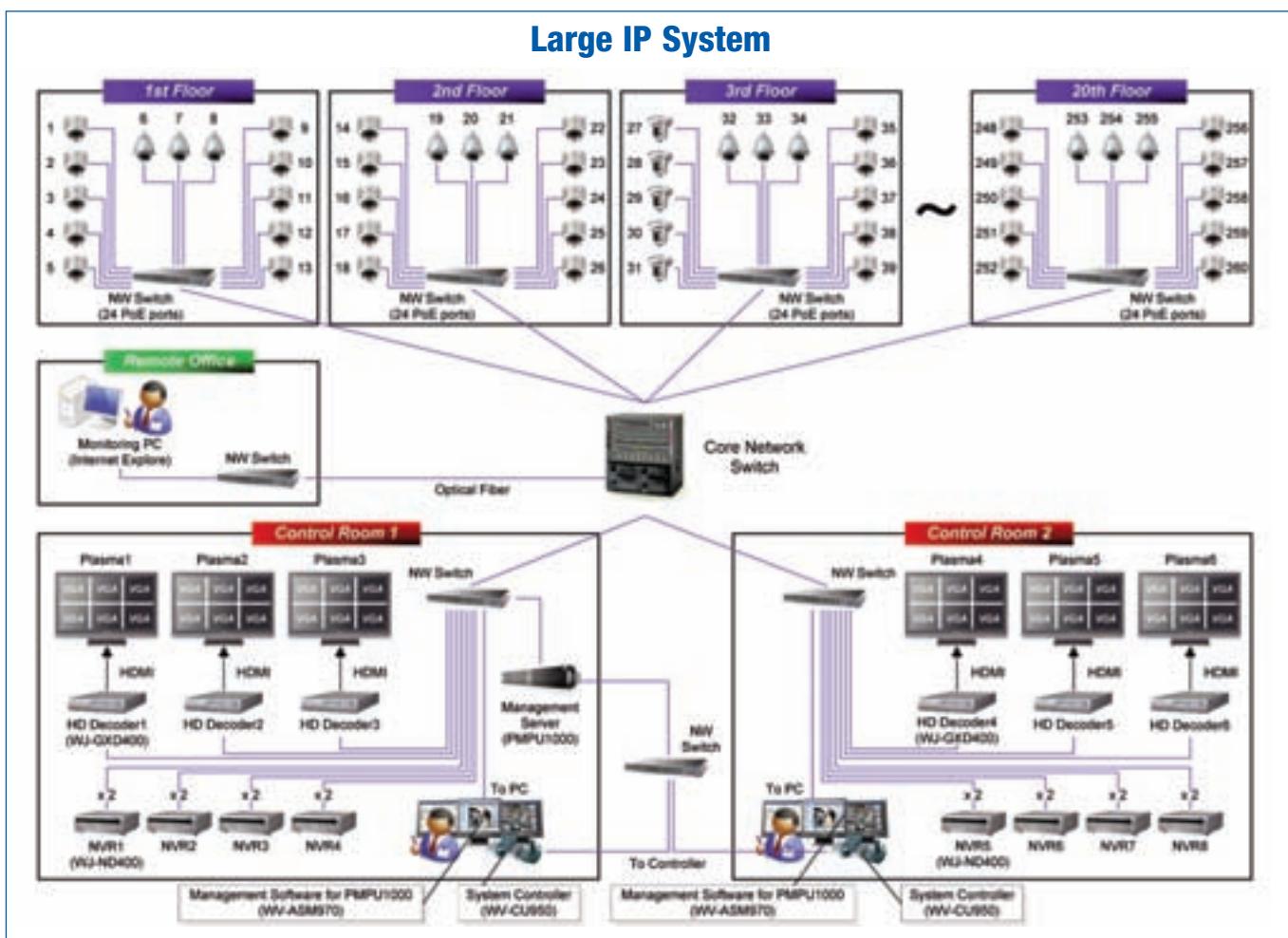
	Video Input Board (WJ-PINIC32)
	Video Output Board (WJ-PINPM48)
	Network Board (WJ-PINBLT01)
	Video Cable (Cable)
	Control Cable (WJ-CAMR)
	Network Cable (CAT5E)
	Expansion Cable Kit (WJ-CAMR/LT01)

Small IP System

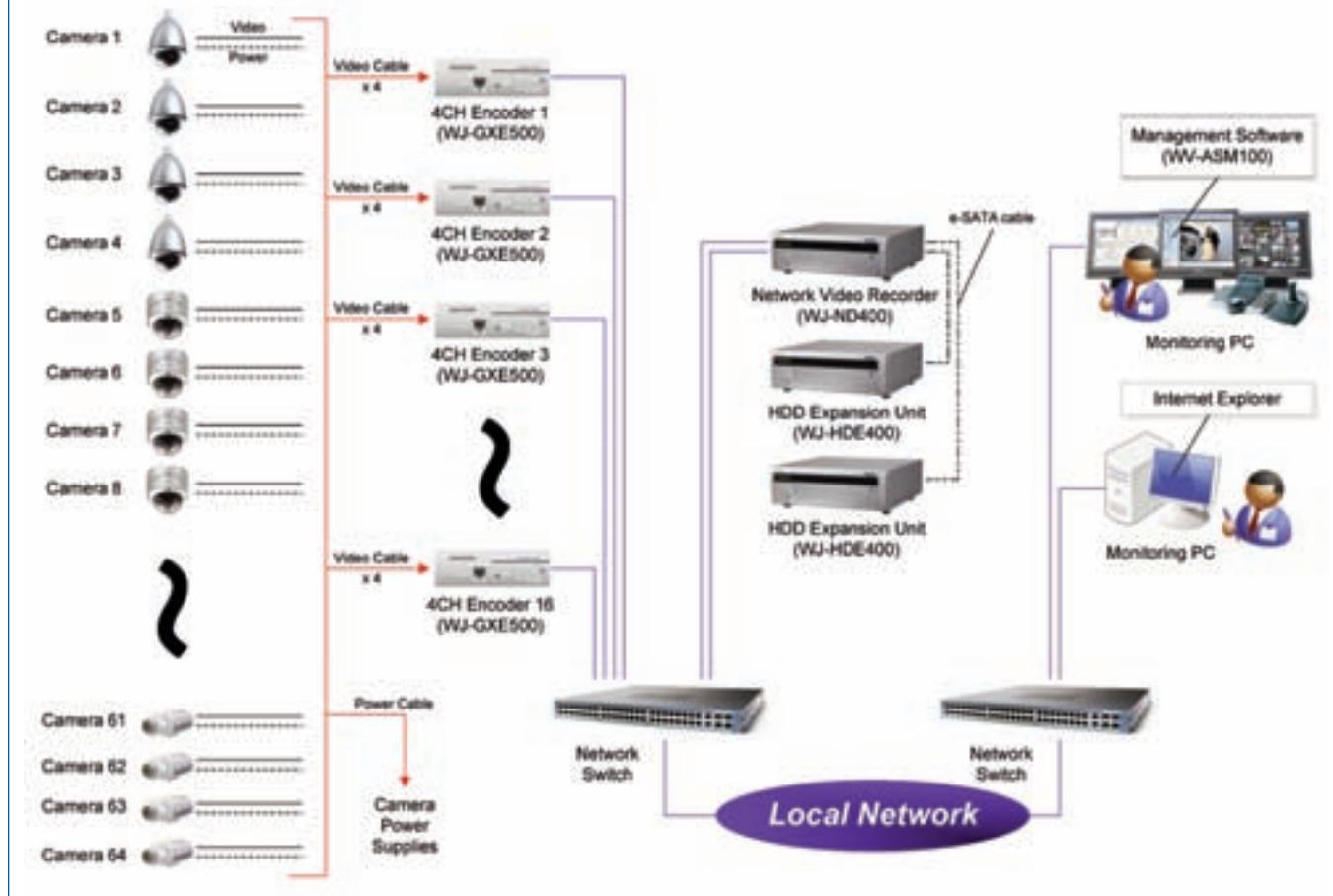


Mid Size IP System

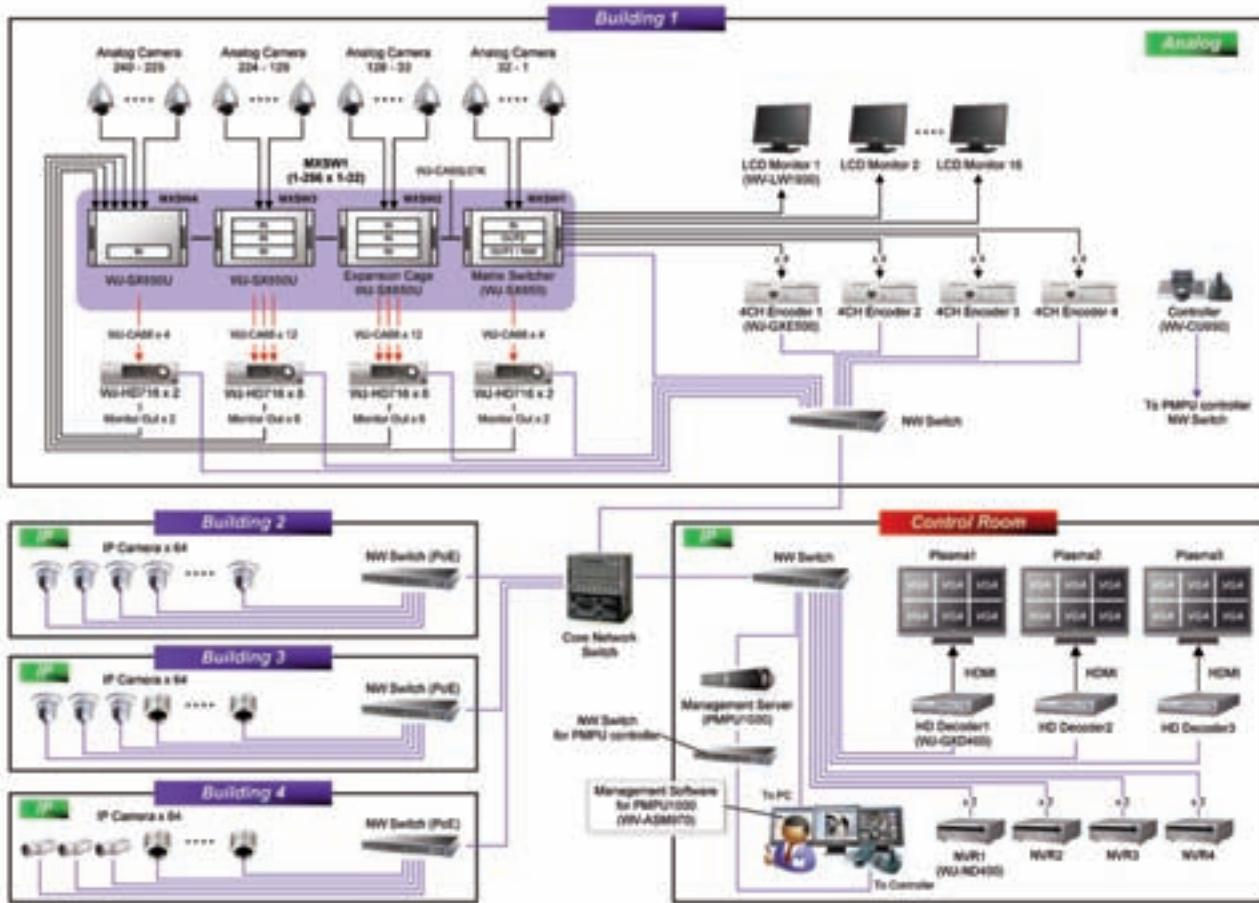




Mid Size Hybrid System



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 Voland (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
 Chanhassen High School - Chanhassen, 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 Parish 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



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 - Bismarck, 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



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 - Emmitsburg, 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.

C U S T O M E R S U P P O R T

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

Toll-Free Phone: 877.733.3689

Toll-Free Fax: 877.665.5647

T E C H N I C A L S U P P O R T

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

H E A D Q U A R T E R S

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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 SmartHD 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.


**H.264/
MPEG-4/JPEG**

Selectable compression technologies. H.264 is also known as MPEG-4 AVC and is currently one of the most commonly used formats for the recording, compression and distribution of high definition video. H.264 offers better quality at lower file sizes than both MPEG-2 and MPEG-4. 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
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.


UniPhier LSI

(large scale integrated circuit): this proprietary next generation image processing chip provides superior HD image quality utilizing half the data size. The advanced high-density chip technology enables delivery of multiple H.264 and JPEG video streams for simultaneous real-time monitoring and HD recording with enhanced interoperability. It also features a unique processing platform that allows Panasonic to share software and hardware resources across multiple Panasonic product lines.


Up-the-Coax

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

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