








i-PRO Network PTZ Cameras

| | | HD 720p | HD 720p | HD 720p | HD 720p | HD 720p | | |
|---|-------|---|---|--|--|--|---|---|
| | |  |  |  |  |  |  |  |
| Model | | WV-SW396 | WV-SC386 | WV-SW395 | WV-SC385 | WV-SC384 | WV-NW964 | WV-NS954 |
| Camera Type | | 1.3 MP Indoor PTZ (Continuous 360°) | 1.3 MP Indoor PTZ (Continuous 360°) | 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°) |
| Super Dynamic | | Mega Super Dynamic | Mega Super Dynamic | Mega Super Dynamic | Mega Super Dynamic | WDR (8x) ¹ | SDIII | SDIII |
| Imaging Device | | 1/4" MOS Sensor Progressive Scan | 1/4" MOS Sensor Progressive Scan | 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 |
| 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 | MPEG-4 JPEG | MPEG-4 JPEG |
| Day/Night | | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Removable IR (D&N) | | Yes | Yes | Yes | Yes | No | Yes | Yes |
| Auto Back Focus | | Auto Focus | Auto Focus | Auto Focus | Auto Focus | Auto Focus | Auto Focus | Auto Focus |
| VIQS | | No | No | No | No | No | No | No |
| Minimum Illumination | Color | 0.5 lux | 0.5 lux | 0.5 lux | 0.5 lux | 0.6 lux | 0.5 lux | 0.5 lux |
| | B/W | 0.06 lux | 0.06 lux | 0.06 lux | 0.06 lux | 0.5 lux | 0.04 lux | 0.04 lux |
| fps JPEG | | 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (640 x 480) | 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) | 30fps (640 x 480) | 30fps (640 x 480) |
| fps H.264 | | 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (1280 x 960) | 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) | 1280 x 960 (JPEG & H.264) | 1280 x 960 (JPEG & H.264) | 640 x 480 (JPEG & MPEG-4) | 640 x 480 (JPEG & MPEG-4) |
| Audio Capability | | 2-way | 2-way | 2-way | 2-way | 2-way | 2-way | 2-way |
| SD Memory Card Slot | | Yes (SDHC) | Yes (SDHC) | Yes (SDHC) | Yes (SDHC) | Yes (SDHC) | Yes (Mini) | Yes |
| 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) | 1fps (JPEG) | 1fps (JPEG) |
| Lens Type | | 3.3mm~119mm | 3.3mm~119mm | 4.7mm~84.6mm | 4.7mm~84.6mm | 4.7mm~84.6mm | 3.8mm~114mm | 3.8mm~114mm |
| Zoom | | 36x (1.3MP) optical 72x (VGA) EX zoom 12x electric | 36x (1.3MP) optical 72x (VGA) EX zoom 12x electric | 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 |
| 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 | 10/100 BASE-TX IP v4 |
| Power | | 24VAC PoE+ (IEEE802.3at) | 12VDC PoE (IEEE802.3af) | 24VAC PoE+ (IEEE802.3at) | 12VDC PoE (IEEE802.3af) | 12VDC PoE (IEEE802.3af) | 24VAC | 24VAC |
| 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) | 24W (PoE+) 43W (AC) | 12W (PoE) 1000mA (DC) | 10W (PoE) 690mA (DC) | 85W (w/ heater) | 15W |
| Operating Temperature | | -58°F~131°F (24VAC) -22°F~131°F (PoE+) | 14°F~122°F | -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 |
| Mobile Phone Support ² | | JPEG PTZ/AUX Control | JPEG PTZ/AUX Control | JPEG PTZ/AUX Control | JPEG PTZ/AUX Control | JPEG PTZ/AUX Control | No | No |
| Security | | ID/PWD Host Authentication HTTPS | ID/PWD Host Authentication HTTPS | ID/PWD Host Authentication HTTPS | ID/PWD Host Authentication HTTPS | ID/PWD Host Authentication HTTPS | ID/PWD Host Authentication | ID/PWD Host Authentication |
| Other Key Features | | Advanced Auto Tracking Drag and Zoom Image Stabilizer Face Detection Face Mega SD IP66 | Advanced Auto Tracking Drag and Zoom Image Stabilizer Face Detection Face Mega SD | Auto Tracking Drag and Zoom Image Stabilizer Face Detection Face Mega SD IP66 | Auto Tracking Drag and Zoom Image Stabilizer Face Detection Face Mega SD | Drag and Zoom Image Stabilizer Face Detection Face WDR | Auto Tracking Drag and Zoom Image Stabilizer IP66 | Auto Tracking Drag and Zoom Image Stabilizer |







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

i-PRO Network PTZ and Fixed Dome Cameras

| | | HD 1080p | | HD 720p | | HD 720p | | |
|---|-------|---|---|--|--|---|---|---|
| | |  |  |  |  |  |  |  |
| | | | SmartHD | ONVIF | SmartHD | ONVIF | SmartHD | SmartHD |
| Model | | WV-NS202A | WV-NW502S | WV-SW355 | WV-SW352 | WV-NW484S | WV-SF346 | WV-SF342 |
| Camera Type | | Indoor PTZ (0~350°) | 3.0 MP Outdoor vandal dome | 1.3 MP outdoor vandal dome | Outdoor vandal dome | Outdoor vandal dome | 1.3 MP Indoor vandal dome | Indoor vandal dome |
| Super Dynamic | | SDIII | Mega Super Dynamic | Mega Super Dynamic | Super Dynamic | SDIII | WDR (8x) *1 | WDR (8x) *1 |
| Imaging Device | | 1/4" CCD Progressive Output | 1/3" CCD Progressive Scan | 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 |
| Video Compression | | MPEG-4 JPEG | H.264 MPEG-4 JPEG | H.264 MPEG-4 JPEG | H.264 MPEG-4 JPEG | 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) | | No | Yes | Yes | Yes | Yes | No | No |
| Auto Back Focus | | Auto Focus | Yes | Yes (Lens ABF) | Yes (Lens ABF) | Yes | Yes (Lens ABF) | Focus Assist |
| VIQS | | No | Yes | Yes | Yes | No | Yes | Yes |
| Minimum Illumination | Color | 0.7 lux | 3MP: 2.0 lux 1.3MP: 1.0 lux | 0.3 lux | 0.2 lux | 0.6 lux | 0.3 lux | 0.2 lux |
| | B/W | 0.5 lux | 3MP: 0.16 lux 1.3MP: 0.08 lux | 0.05 lux | 0.04 lux | 0.08 lux | 0.2 lux | 0.13 lux |
| fps JPEG | | 30fps (640 x 480) | 5fps (2048 x 1536) 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (800 x 600) | 30fps (640 x 480) | 30fps (1280 x 960) | 30fps (800 x 600) |
| 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 | | - | 15fps (1920 x 1080) 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (800 x 600) | - | 30fps (1280 x 960) | 30fps (800 x 600) |
| Max Image Resolution * MPEG-4 (640 x 480) | | 640 x 480 (JPEG & MPEG-4) | 2048 x 1536 (JPEG) 1920 x 1080 (H.264) | 1280 x 960 (JPEG & H.264) | 800 x 600 (JPEG & H.264) | 640 x 480 (JPEG & MPEG-4) | 1280 x 960 (JPEG & H.264) | 800 x 600 (JPEG & H.264) |
| Audio Capability | | 2-way (Half-duplex) | 2-way | 2-way | 2-way | No | 2-way | 2-way |
| SD Memory Card Slot | | Yes | Yes (SDHC) | Yes (SDHC) | Yes (SDHC) | Yes | Yes (SDHC) | Yes (SDHC) |
| SD Card Recording | | 1fps (JPEG) | 30fps (H.264) 1fps (JPEG) | 30fps (H.264) 1fps (JPEG) | 30fps (H.264) 1fps (JPEG) | 1fps (JPEG) | 30fps (H.264) 1fps (JPEG) | 30fps (H.264) 1fps (JPEG) |
| Lens Type | | 3.8mm~83mm | 2.8x vari-focal 2.8mm~8.0mm | 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 |
| Zoom | | 22x optical 10x electric | 2.8x optical 4x electric | 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 |
| Network | | 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 | 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) | 24VAC/12VDC PoE (IEEE802.3af) | 12VDC PoE (IEEE802.3af) | 12VDC PoE (IEEE802.3af) |
| Alarm In-/Outputs | | 2/1 | 2/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| Max Power Consumption | | 12W (PoE) 1000mA (DC) | 7.6W (PoE) 630mA (DC) | 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) |
| Operating Temperature | | 14°F~122°F | -22°F~122°F | -22°F~122°F | -22°F~122°F | -22°F~122°F | 14°F~122°F | 14°F~122°F |
| Mobile Phone Support *2 | | No | No | JPEG | JPEG | No | JPEG | JPEG |
| Security | | ID/PWD Host Authentication | ID/PWD Host Authentication | ID/PWD Host Authentication HTTPS | ID/PWD Host Authentication HTTPS | 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 Dehumidification Device IP66 | 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 |






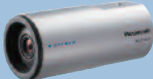

*1: WDR (Wide Dynamic Range) *2: See the supported mobile phones on the Panasonic web site *3: Heater optional

i-PRO Network Fixed Dome Cameras

| | | HD 720p | | HD 720p | | HD 720p | | HD 720p | |
|---|-------|---|---|---|---|--|---|---|--|
| | |  |  |  |  |  |  |  | |
| | | SmartHD | SmartHD | SmartHD | SmartHD | SmartHD | SmartHD | SmartHD | |
| Model | | WV-SW155 | WV-SW152 | WV-SF135 | WV-SF132 | WV-SF336 | WV-SF335 | WV-SF332 | |
| Camera Type | | 1.3MP Outdoor vandal dome | 800x600 Outdoor vandal dome | 1.3MP Indoor dome | Indoor dome | 1.3MP Indoor dome | 1.3MP Indoor dome | 800x600 Indoor dome | |
| Super Dynamic | | Mega Super Dynamic | Super Dynamic | No | No | 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" MOS Sensor Progressive Scan | 1/5" 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 JPEG | H.264 JPEG | H.264 JPEG | H.264 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) | | No | No | No | No | No | No | No | |
| Auto Back Focus | | No | No | No | No | Yes (Lens ABF) | Focus Assist | Focus Assist | |
| VIQS | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Minimum Illumination | Color | 0.8 lux | 0.6 lux | 0.8 lux | 2.0 lux | 0.3 lux | 0.3 lux | 0.2 lux | |
| | B/W | 0.6 lux | 0.4 lux | 0.6 lux | 1.3 lux | 0.2 lux | 0.2 lux | 0.13 lux | |
| fps JPEG | | 30fps (1280 x 960) | 30fps (800 x 600) | 30fps (1280 x 960) | 30fps (640 x 480) | 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (800 x 600) | |
| fps MPEG-4 | | - | - | - | - | 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 (640 x 480) | 30fps (1280 x 960) | 30fps (1280 x 960) | 30fps (800 x 600) | |
| Max Image Resolution * MPEG-4 (640 x 480) | | 1280 x 960 (JPEG & H.264) | 800 x 600 (JPEG & H.264) | 1280 x 960 (JPEG & H.264) | 640 x 480 (JPEG & H.264) | 1280 x 960 (JPEG & H.264) | 1280 x 960 (JPEG & H.264) | 800 x 600 (JPEG & H.264) | |
| Audio Capability | | No | No | No | No | 2-way | 2-way | 2-way | |
| SD Memory Card Slot | | Yes (SDHC) | Yes (SDHC) | No | No | Yes (SDHC) | Yes (SDHC) | Yes (SDHC) | |
| SD Card Recording | | 30fps (H.264) 1fps (JPEG) | 30fps (H.264) 1fps (JPEG) | No | No | 30fps (H.264) 1fps (JPEG) | 30fps (H.264) 1fps (JPEG) | 30fps (H.264) 1fps (JPEG) | |
| Lens Type | | Fixed focal length 1.95mm | Fixed focal length 1.95mm | Fixed focal length 1.95mm | Fixed focal length 1.95mm | 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 | | 2x (VGA) Ex zoom | 2x (VGA) Ex zoom | 2x (VGA) Ex zoom | No | 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/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 | | PoE (IEEE802.3af) | PoE (IEEE802.3af) | PoE (IEEE802.3af) | PoE (IEEE802.3af) | 12VDC PoE (IEEE802.3af) | 12VDC PoE (IEEE802.3af) | 12VDC PoE (IEEE802.3af) | |
| Alarm In-/Outputs | | No | No | No | No | 1/1 | 1/1 | 1/1 | |
| Max Power Consumption | | 2.7W (PoE) | 2.7W (PoE) | 2.6W (PoE) | 2.2W (PoE) | 4.2W (PoE) 320mA (DC) | 3.5W (PoE) 280mA (DC) | 3.5W (PoE) 280mA (DC) | |
| Operating Temperature | | -22°F~122°F | -22°F~122°F | 32°F~104°F | 32°F~104°F | 14°F~122°F | 14°F~122°F | 14°F~122°F | |
| Mobile Phone Support *2 | | JPEG | JPEG | JPEG | JPEG | JPEG | JPEG | JPEG | |
| Security | | ID/PWD Host Authentication HTTPS | 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 | |
| Other Key Features | | Face Detection Face Mega SD IP66 compatible with EN50155 | Face Detection Face Mega SD IP66 compatible with EN50155 | Face Detection ABS *4 | Face Detection ABS *4 | 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 *4: ABS (Adaptive Black Stretch)

i-PRO Network Fixed Box Cameras

| | | HD 1080p | HD 720p | HD 720p | | HD 720p | |
|--|-------|---|---|---|--|---|---|
|  | |  |  |  |  |  |  |
| | | | <i>SmartHD</i> | <i>SmartHD</i> | <i>SmartHD</i> | <i>SmartHD</i> | <i>SmartHD</i> |
| Model | | WV-NP502 | WV-SP306 | WV-SP305 | WV-SP302 | WV-SP105 | WV-SP102 |
| Camera Type | | 3.0 MP Box | 1.3 MP Box | 1.3 MP Box | 800x600 Box | 1.3 MP Box | Box |
| Super Dynamic | | Mega Super Dynamic | WDR (8x) *1 | WDR (8x) *1 | WDR (8x) *1 | No | No |
| Imaging Device | | 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 JPEG | H.264 JPEG |
| Day/Night | | Yes | Yes | Yes | Yes | Yes | Yes |
| Removable IR (D&N) | | Yes | Yes | No | No | No | No |
| Auto Back Focus | | Yes | Yes (Lens ABF) | Focus Assist | Focus Assist | No | No |
| VIQS | | Yes | Yes | Yes | Yes | Yes | Yes |
| Minimum Illumination | Color | 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 | 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 | | 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) | - | - |
| fps H.264 | | 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) | | 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 | No | No |
| SD Memory Card Slot | | 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) | No | No |
| Lens Type | | Optional | Optional | Optional | Optional | Fixed focal length 3.54mm | Fixed focal length 2.00mm |
| Zoom | | 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 |
| 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) |
| Alarm In-/Outputs | | 2/1 | 1/1 | 1/1 | 1/1 | No | No |
| Max Power Consumption | | 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 | 32°F~104°F | 32°F~104°F |
| Mobile Phone Support *2 | | No | JPEG | JPEG | JPEG | JPEG | JPEG |
| 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 |
| Other Key Features | | 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

| | | | | | | |
|--|--|--|---|--|---|---|
|  |  |  |  |  |  |  |
| 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) | <i>f</i> 2.4 69°/51° 20°/104° 57°/114° | <i>f</i> 2.0 66°/50° 20°/104° 57°/114° | <i>f</i> 2.4 69°/51° 104° 53° | <i>f</i> 1.9 (wide)- <i>f</i> 2.8 (tele) 73°/55° 350° 82° | <i>f</i> 1.6 (wide)- <i>f</i> 3.6 (tele) 51°/38° 350° 120° on table/90° on ceiling | <i>f</i> 1.6 (wide)- <i>f</i> 3.6 (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 | 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 Cameras

| | | | | | |
|---|---|--|--|---|---|
|  |  |  |  |  |  |
| 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) | <i>f</i> 2.8 54°/40° 120° 65° | <i>f</i> 2.4 69°/51° 104° 53° | <i>f</i> 1.9 (wide)- <i>f</i> 2.8 (tele) 73°/55° 350° 82° | <i>f</i> 2.8 54°/40° 120° 65° | <i>f</i> 3.5 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

analog PTZ and Fixed Dome Cameras



| Model | WV-CW974/964 | WV-CW594 | WV-CS954 | WV-CS584 | WV-CS574 | WV-CW504S/F |
|--|--|--|--|--|-----------------------------|---|
| Camera Type | Outdoor PTZ | Outdoor PTZ | Indoor PTZ | Indoor PTZ | Indoor PTZ | Outdoor Vandal |
| Wide Dynamic | SDIII | SD6 | SDIII | SD6 | No | SD5 |
| Imaging Device | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/3" |
| Day/Night | Yes | Yes | Yes | Yes | No | Yes |
| Removable IR (D & N) | Yes | Yes | Yes | Yes | No | Yes |
| Focus | Auto focus | Auto focus | Auto focus | Auto focus | Auto focus | Auto Back Focus |
| Minimum Illumination (w/clear dome when applicable) | | | | | | |
| Color | 0.5lux | 0.5lux | 0.5lux | 0.5lux | 1.0lux | 0.1lux |
| Color w/enhancement | 0.02lux @ 32x sens up | 0.02lux @ 32x sens up | 0.02lux @ 32x sens up | 0.02lux @ 32x sens up | 0.032lux @ 32x sens up | 0.003lux @ 32x sens up |
| B/W | 0.04lux | 0.04lux | 0.04lux | 0.04lux | N/A | 0.01lux |
| B/W w/enhancement | 0.0013lux @ 32x sens up | 0.0013lux @ 32x sens up | 0.0013lux @ 32x sens up | 0.0013lux @ 32x sens up | N/A | 0.0003lux @ 32x sens up |
| Key Features | Advanced auto tracking w/PTZ (WV-CW974) Auto tracking w/pan/tilt (WV-CW964) Privacy zone masking | Auto tracking w/pan/tilt Privacy zone masking | Auto tracking w/pan/tilt Privacy zone masking | Auto tracking w/pan/tilt Privacy zone masking | Privacy zone masking | Intelligent VMD (object abandonment/removal, loitering, direction) Dehumidification device |
| Horiz. Resolution | 540 lines | 650 lines | 540 lines | 650 lines | 510 lines | 650 lines |
| Focal Length | 3.8mm-114mm | 3.3mm-119mm | 3.8mm-114mm | 3.3mm-119mm | 3.79mm-83.4mm | 3.8mm-8.0mm vari-focal CS lens mount |
| Zoom | 30x optical/ 10x digital | 36x optical/ 20x digital | 30x optical/ 10x digital | 36x optical/ 20x digital | 22x optical/ 10x digital | 2.1x optical/ 2x digital |
| Motion Detection | Yes | Yes | Yes | Yes | Yes | i-VMD (Intelligent VMD) |
| On Screen Display | Yes | Yes | Yes | Yes | Yes | Yes |
| Image Stabilization | Yes | Yes | Yes | Yes | No | Yes |
| Light Control | ALC | ALC | ALC | ALC | ALC | ALC/ALC+ |
| IP66 | Yes | Yes | No | No | No | Yes |
| Power | 24VAC | 24VAC | 24VAC | 24VAC | 24VAC | 24VAC/12VDC |
| Power Consumption | Camera 17 W w/heater 62 W | 98 W | 13 W | 4.3 W | 13 W | AC 3.4W (w/o heater) AC 14W (w/heater) DC 280mA (w/o heater) |
| Operating Temp. | -40°F – 122°F | -58°F – 122°F | 14°F – 122°F | 14°F – 122°F | 14°F – 122°F | 14°F – 122°F -22°F – 122°F When optional heater used |

analog Fixed Dome Cameras



| Model | WV-CW364 | WV-CW334 | WV-CF504 | WV-CF324 | WV-CF294/284 | WV-CF354/344 |
|---|--|--|--|----------------------------|---|--|
| Camera Type | Outdoor Vandal | Outdoor Vandal | Indoor Minidome | Ruggedized Indoor Minidome | Indoor Minidome | Indoor Minidome |
| Wide Dynamic | No | No | SD5 | No | No | No |
| Imaging Device | 1/3" | 1/3" | 1/3" | 1/4" | 1/4" | 1/3" |
| Day/Night | Yes | Yes | Yes | Yes | Yes | Yes (Electrical) |
| Removable IR (D & N) | Yes | No | Yes | No | No | No |
| Focus | N/A | N/A | Auto Back Focus | Auto Focus | WV-CF294: Auto Focus WV-CF284: N/A | WV-CF354: Auto focus WV-CF344: N/A |
| Minimum Illumination <small>(w/clear dome when applicable)</small> | | | | | | |
| Color | 0.6lux | 0.6lux | 0.1lux | 0.9lux | 0.9lux | 0.08lux |
| Color w/enhancement | N/A | N/A | 0.003lux (32x sens up) | N/A | N/A | 0.0025lux (32x sens up) 0.00016lux (512x sens up) |
| B/W | 0.05lux | 0.4lux | 0.01lux | 0.6lux | 0.6lux | 0.05lux |
| B/W w/enhancement | N/A | N/A | 0.0003lux (32x sens up) | N/A | N/A | 0.0016lux (32x sens up) 0.00010lux (512x sens up) |
| Key Features | Adaptive Black Stretch | Adaptive Black Stretch | Intelligent VMD (object abandonment/ removal, loitering, direction) | Adaptive Black Stretch | Adaptive Black Stretch | Adaptive Black Stretch Lens Distortion Compensation |
| Horiz. Resolution | 540 lines | 540 lines | 650 lines | 540 lines | 540 lines | 650 lines |
| Focal Length | 2.8-10.0mm vari-focal | 2.8-10.0mm vari-focal | 3.8mm-8.0mm vari-focal CS lens mount | 2.8mm-10.0mm vari-focal | WV-CF294: 2.8-10.0mm vari-focal WV-CF284: 2.8-6.0mm vari-focal | 2.8-10mm vari-focal |
| Zoom | 3.6x optical | 3.6x optical | 2.1x optical/ 2x digital | 3.6x optical | WV-CF294: 3.6x optical WV-CF284: 2.1x optical | 3.6x optical/ 2x digital |
| Motion Detection | No | No | i-VMD (Intelligent VMD) | No | No | Yes |
| On Screen Display | No | No | Yes | No | No | Yes |
| Image Stabilization | No | No | Yes | No | No | Yes |
| Light Control | ALC | ALC | ALC/ALC+ | ALC | ALC | ALC/ALC+/ELC |
| IP66 | Yes | Yes | No | No | No | No |
| Power | 24VAC/12VDC | 24VAC/12VDC | 24VAC/12VDC | 24VAC/12VDC | 24VAC/12VDC | 24VAC/12VDC |
| Power Consumption | AC 2.9 W (w/o heater) AC 13.1 W w/heater DC 250mA (w/o heater) | AC 2.9 W (w/o heater) AC 13.1 W w/heater DC 250mA (w/o heater) | AC 3.4 W DC 280mA | AC 2.7 W DC 220mA | WV-CF294: AC 3.0 W DC 265mA WV-CF284: AC 2.7 W DC 220mA | AC 2.1 W DC 180mA |
| Operating Temp. | 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 | 14°F – 122°F | 14°F – 122°F | 14°F – 122°F |

analog Fixed Box Cameras



| Model | WV-CW384 | WV-CL930 series | WV-CP500 series | WV-CP290 series | WV-CP310/314 | WV-CP300/304 |
|---|---|---|--|--|--|--|
| Camera Type | Outdoor Fixed Box | Fixed Box | Fixed Box | Fixed Box | Fixed Box | Fixed Box |
| Wide Dynamic | SDIII | No | SD5 | No | No | No |
| Imaging Device | 1/3" | 1/2" | 1/3" | 1/3" | 1/3" | 1/3" |
| Day/Night | Yes | Yes | Yes | Yes | Yes | Yes |
| Removable IR (D & N) | Yes | Yes | Yes | Yes | Yes | No |
| Focus | Auto Back Focus | Auto Back Focus | Auto Back Focus | N/A | N/A | N/A |
| Minimum Illumination <small>(w/clear dome when applicable)</small> | | | | | | |
| Color | 0.65lux | 0.09lux@f1.4 | 0.1lux@f1.4 | 0.8lux@f1.4 | 0.08lux@f1.4 | 0.08lux@f1.4 |
| Color w/enhancement | 0.065lux(w/10x sens up) | 0.003lux@f1.4 (w/32x sens up) | 0.003lux@f1.4 (w/32x sens up) | N/A | 0.0025lux (32x sens up) 0.00016lux (512x sens up) | 0.0025lux (32x sens up) 0.00016lux (512x sens up) |
| B/W | 0.09lux | 0.008lux@f1.4 | 0.01lux@f1.4 | 0.05lux@f1.4 | 0.008lux@f1.4 | 0.05lux@f1.4 |
| B/W w/enhancement | 0.009lux (w/10x sens up) | 0.0003lux@f1.4 (w/32x sens up) | 0.0003lux@f1.4 (w/32x sens up) | N/A | 0.00025lux (32x sens up) 0.00002lux (512x sens up) | 0.0016lux (32x sens up) 0.00010lux (512x sens up) |
| Key Features | Built-in fan, heater and shield | Ultra high sensitivity Adaptive digital noise reduction | Intelligent VMD (object abandonment/removal, loitering, direction) | Adaptive Black Stretch | Adaptive Black Stretch Lens Distortion Compensation | Adaptive Black Stretch Lens Distortion Compensation |
| Horiz. Resolution | 540 lines | 540 lines | 650 lines | 540 lines | 650 lines | 650 lines |
| Focal Length | 5mm-40mm vari-focal CS lens mount | Lens optional CS lens mount | Lens optional CS lens mount | Lens optional CS lens mount | Lens optional CS lens mount | Lens optional CS lens mount |
| Zoom | 2x digital | N/A | 2x digital | N/A | 2x digital | 2x digital |
| Motion Detection | Yes | Yes | i-VMD (Intelligent VMD) | No | Yes | Yes |
| On Screen Display | Yes | Yes | Yes | No | Yes | Yes |
| Image Stabilization | Yes | Yes | Yes | No | Yes | Yes |
| Light Control | ALC | ALC/ALC+/ELC | ALC/ALC+/ELC | ALC/ELC | ALC/ALC+/ELC | ALC/ALC+/ELC |
| IP66 | Yes | No | No | No | No | No |
| Power | Camera 24VAC/12VDC Heater 24VAC | 24VAC/12VDC | WV-CP500:120VAC WV-CP504: 24VAC/12VDC | WV-CP290: 120VAC WV-CP294: 24VAC/12VDC | WV-CP310:120VAC WV-CP314: 24VAC/12VDC | WV-CP300:120VAC WV-CP304: 24VAC/12VDC |
| Power Consumption | AC 18 W DC 540mA | WV-CL930: AC 4.6 W WV-CL934: AC 4.0 W DC 350mA | WV-CP500: AC 3.2 W WV-CP504: AC 3.6 W DC 310mA | WV-CP290: AC 2.5 W WV-CP294: AC 2.9 W DC 240mA | WV-CP310: AC 2.3 W WV-CP314: AC 2.1 W DC 180mA | WV-CP300: AC 2.3 W WV-CP304: AC 2.1 W DC 180mA |
| Operating Temp. | -22°F – 122°F (Heater On) | 14°F – 122°F | 14°F – 122°F | 14°F – 122°F | 14°F – 122°F | 14°F – 122°F |

Recorders

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) | 4TB (internal, 2TB 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 100/1000Base-T, 1x 10Base-T | 2x 100/1000Base-T, 1x 10Base-T | 1x 100/1000Base-T |
| Supported Camera Brands | Panasonic (i-PRO & BB)*1, Axis (JPEG, MPEG4)*2 | Panasonic (i-PRO & BB)*1, Axis (JPEG)*2 | 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 (From IP cameras) | No | No | No |
| RTP over HTTP (For client monitoring) | Yes | 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 (3U) | Yes (2U) | Optional (1U) |
| Remote Monitoring | Yes (Microsoft Internet Explorer), WV-ASM100/200, WV-ASM970) | Yes (Microsoft Internet Explorer), WV-ASM100/200, WV-ASM970) | Yes (Microsoft Internet Explorer), WV-ASM100/200, WV-ASM970) |

*1 Regarding BB cameras, only specific models and video formats are supported. Contact Panasonic for BB cameras.

*2 Only specific Axis cameras and encoders are supported. Contact Panasonic for Axis cameras.

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 10/100Base-TX | 2x 10/100Base-TX |
| HDMI Cascade | Up to 5 main units | Up to 5 main 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 (3U) | Yes (3U) |
| Remote Monitoring | Yes (Microsoft Internet Explorer), WV-ASM100/200, WV-ASM970) | Yes (Microsoft Internet Explorer), WV-ASM100/200, WV-ASM970) |

Encoders/Decoders



| | |
|-----------------------------|---|
| Model | WJ-GXE500 |
| Product Type | 4CH Video Encoder |
| Supported Video Compression | H.264 / MPEG-4 / M-JPEG |
| Video Inputs/Outputs | 4 (input) |
| Audio Inputs/Outputs | 1 (input) |
| Supported Video Resolution | D1 (720x480), VGA (640x480), QVGA (320x240) |
| Display Pattern | - |
| Max. fps | 30fps/ch at H.264 in all resolutions |
| Coax PTZ Control | 4 (for Panasonic cameras) |
| RS485 Camera Interface | 1x RS485, 2/4 wire, half duplex (for 1-4 CH) |
| Network I/F | 1x 10/100Base-TX |
| SD Memory Card Slot | Yes (SDHC) |
| SD Card Recording | 1fps (JPEG) |
| Functions | Face Detection (CH1 only), Dual Stream, RTP over HTTP |
| Power | PoE, 12VAC |
| Power Consumption | 6W |
| Rack Mountable | Optional (3 units for 1U) (WV-Q204/2S) |

| | |
|-----------------------------|--|
| Model | WJ-GXD400 |
| Product Type | 6CH HD1080i Video Decoder |
| Supported Video Compression | H.264 / MPEG-4 / M-JPEG |
| Video Inputs/Outputs | HDMI x1 (Output) NTSC Composite (BNC) x1 (Output) |
| Audio Inputs/Outputs | HDMIx1 (Output) RCA x1 (Output) |
| Supported Video Resolution | 1.3MP (1280x960), VGA (640x480), QVGA (320x240) |
| 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 |
| Coax PTZ Control | - |
| RS485 Camera Interface | - |
| Network I/F | 1x 100/1000Base-T |
| SD Memory Card Slot | - |
| SD Card Recording | - |
| Functions | HD1080i HDMI Output |
| Power | 12VDC |
| Power Consumption | 12VDC, 1.4A |
| Rack Mountable | Optional (2 units for 1U) (WV-Q204/1S, WV-Q204/2S) |

Converters





| | | |
|-----------------------------|---|---|
| Model | BY-HPE11KTA (including 1x center adaptor and 1x camera adaptor) | |
| Product Type | Coaxial-LAN Converter with PoE Function | |
| | Center Adaptor | Camera Adaptor |
| Transmission Speed (UDP) *1 | 45Mbps or higher (when using an RG-59/U coaxial cable of less than 3,937 ft. [1.2km]) | |
| Transmission Speed (TCP) *1 | 35Mbps or higher (when using an RG-59/U coaxial cable of less than 3,937 ft. [1.2km]) | |
| Max. Transmission Distance | Without PoE function: Max. 6,561 ft. [2km] (w/ RG-6/U) / Max. 3,937 ft. [1.2km] (w/ RG-59/U) With PoE Function: Max. 1,640 ft. [500m] (w/ RG-6/U) / Max. 656 ft. [200m] (w/ RG-59/U) | |
| Coaxial I/F | 1x BNC | 1x BNC |
| Network I/F | 1x 10/100 Base-TX | 1x 10/100 Base-TX, PoE *2 |
| Functions | PoE capability for IP cameras Plug & Play (No Setup Required) | |
| Operating Temperature | 32F to 122F (Center adaptor) | 14F to 122F (Camera adaptor) |
| Power | 100-240VAC | Power supplied through the coax cable from the center adaptor |
| Power Consumption | Max. 28W (including the power consumption of the camera adaptor) | Max. 15.4W (PoE capability) |
| Rack Mountable | Optional (4 center adaptors for 1U) (BY-HCA10A) | - |

*1 This value is for transmission between the center adaptor and the camera adaptor

*2 PoE function is available for Panasonic IP cameras only

Management Software



| 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 Video Aspect Ratio | | | 4:3 | 4:3 |
| 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, Click centering, Wheel zoom) |
| 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 |
| RTP over HTTP (from Recorders) | | | Yes | Yes |
| RTP over HTTP (from IP Cameras) ³ | | | No | No |
| Video Download from Camera SD/SDHC Card | | | No | No |
| File Conversion (Recorded data file) | | | No | No |

¹ Except model WV-NM100

² Specific models only. Camera control is not supported. Supported video format is limited

³ Except Model WV-NM100, WV-NP472, WV-NS320 and WV-NW474

Management Software


| Functions | | | WV-ASM200 Management Software - Light | WV-ASM200 + WV-ASE201 Management Software |
|--|----------------|--------------|---|---|
| | | |  |  |
| 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 Video Aspect Ratio | | | 4:3, 16:9 | 4:3, 16:9 |
| Supported Devices | Camera | Direct | i-PRO series ¹ | i-PRO series ¹ |
| | | Via Recorder | i-PRO series ¹ , BB series ² , Axis ² | i-PRO series ¹ , BB series ² , Axis ² |
| | Recorder | NVR | WJ-ND400, WJ-ND300/300A, WJ-ND200, WJ-NV200 | WJ-ND400, WJ-ND300/300A, WJ-ND200, WJ-NV200 |
| | | DVR | WJ-HD716/616, WJ-HD309A/316A | WJ-HD716/616, WJ-HD309A/316A |
| | Encoder | | WJ-GXE500, WJ-NT304 | WJ-GXE500, WJ-NT304, WJ-NT314 |
| | Controller | | No | WV-CU950 |
| 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 | | No | 1 |
| | Camera Control | | | Yes (PTZ, Preset, Auto mode, Click centering, Wheel zoom) |
| 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) | | | No | Yes |
| Multiple Monitors Supported | | | No | Yes (Up to 3 monitors: Operation/Live/Map) |
| Map Function | | | No | Yes |
| 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 | | | No | Yes (with WJ-ND400 series) |
| Image Download | | | Yes | Yes |
| RTP over HTTP (from Recorders) | | | Yes | Yes |
| RTP over HTTP (from IP Cameras) | | | Future Support | Future Support |
| Video Download from Camera SD/SDHC Card | | | Yes | Yes |
| File Conversion (Recorded data file) | | | Yes | Yes |

¹ Except model WV-NM100

² Specific models only. Camera control is not supported. Supported video format is limited

³ Except Model WV-NM100, WV-NP472, WV-NS320 and WV-NW474

Management Software

| Functions | | WV-ASM970 (Ver. 4.0) PMPU1000 Management Software | |
|--|------------|--|--|
| | |  | |
| Main Functions/Description | | Live / Playback / Control | |
| Supported Video Formats | | H.264 / MPEG-4 / M-JPEG | |
| Supported Video Aspect Ratio | | 4:3, 16:9 | |
| Supported Devices | Camera | Direct | i-PRO series ¹ |
| | | Via Recorder | i-PRO series ¹ , BB series ² , Axis ² |
| | Recorder | NVR | WJ-ND400, WJ-ND300/300A, WJ-ND200, WJ-NV200 |
| | | DVR | WJ-HD716/616, WJ-HD309A/316A, WJ-RT416 series |
| | Encoder | | WJ-GXE500, WJ-NT304, WJ-NT314, WJ-HD616/716 ⁴ |
| Controller | | WV-CU950 | |
| Max. Devices | Camera | Direct | Depends on PMPU1000 Specification |
| | | Via Recorder | |
| | | Via Encoder | |
| | Recorder | | |
| | Encoder | | |
| | Controller | | |
| Camera Control | | Yes (PTZ, Preset, Auto mode, Click centering, ABF etc.) | |
| Recorder Control | | Yes (Playback, REC etc.) | |
| Multi-screen Pattern | | 1 / 4 / 7 / 9 / 10 / 13 / 16 | |
| Display Performance | | 30 ips x 16 screens @ MPEG4 2 Mbps/H.264 1.5 Mbps | |
| AVMD Display (Frame and Tracking Line) | | Yes | |
| Multiple Monitors Supported | | Yes (3 monitors: Operation & Map / Video) | |
| Map Function | | Yes | |
| Audio ³ | | Yes (Live: 2-way, Playback: 1-way) | |
| Supported Alarm | | Panasonic Alarm Protocol | |
| Event Search (T&D, Event type etc.) | | Yes | |
| VMD Search | | Yes (with WJ-ND400 series) | |
| Image Download | | Yes | |
| RTP over HTTP (from Recorders) | | Yes | |
| RTP over HTTP (from IP Cameras) | | Future Support | |
| Video Download from Camera SD/SDHC Card | | No | |
| File Conversion (Recorded data file) | | Yes | |

¹ Except model WV-NM100

² Specific models only. Camera control is not supported. Supported video format is limited

³ Except Model WV-NM100, WV-NP472, WV-NS320 and WV-NW474

⁴ WV-ASM970/PMPU1000 system can use WJ-HD616/716 DVR as 16ch encoder



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