



## H264, True Day/Night HD Camera featuring Super Dynamic

### Key Features

- 1,080p HD images up to 15 fps / 720p HD images up to 30 fps
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording by "UniPhier<sup>®</sup>", Panasonic's proprietary System LSI platform.
- Full frame (Up to 30 fps) transmission at 1,280 x 960 image size (1.3 Megapixel mode)
- **Super Dynamic** and ABS (Adaptive Black Stretch) technologies deliver 128x wider dynamic range compared with conventional cameras.
- **Face Super Dynamic** technology ensures clear face image.
- Up to 3 Megapixel (2,048 x 1,536) JPEG stream (3 Megapixel mode, JPEG only)
- H.264 and MPEG-4 are selectable for system migration.
- High sensitivity with Day/Night function: 1.0 lx (Color), 0.08 lx (B/W) at F1.4 (1.3 Megapixel mode)
- ABF (Auto Back Focus) 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 (RGB) color filter
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF
- Selectable light control modes: Outdoor / Indoor / ELC / Fixed electronic shutter  
Outdoor / Indoor: Electronic shutter and ALC lens iris control are automatically controlled depending on the mode and luminance level.  
ELC: Up to 1/10,000 Electronic shutter is automatically applied for a fix iris lens.  
Fixed electronic shutter: Up to 1/10,000 fixed electronic shutter can be selectable.
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection detect the position of human face, 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 8 private areas, such as house windows and entrances/exits.
- 2x, 4x digital zoom controlled by browser
- Camera title display: Up to 20 alphanumeric characters on the browser, Up to 16 alphanumeric characters with three selectable character sizes embedded in the image

- Alarm sources including 3 terminal input, VMD and Panasonic alarm command can trigger actions such as SD/SDHC 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.
- JPEG Image compression ratio can be changed by alarm so that higher quality image can be provided.
- Prioritized stream control: One of the video streams can be prioritized when multiple recorders or client PCs are accessing the camera so that the recorder or the client PC can maintain the frame rate.
- SD/SDHC Memory card slot for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup upon network failure (JPEG)
- H.264/MPEG-4 max. bit rate/client and Total bit rate control allows flexible network traffic management. Frame rate priority mode controls bit rate and compression ratio to provide the specified frame rate.
- Internet mode: H.264/MPEG-4 images can be transmitted over HTTP protocol.
- Multi-language GUI and setup menu: English, French, Italian, Spanish, German, Russian (PAL) / English, French (NTSC)  
\* Installation required except for English
- IPv4/IPv6 protocol supported
- Analog Monitor output for easier installation

### Standard Accessories

- |                            |       |  |        |
|----------------------------|-------|--|--------|
| • CD-ROM*1 .....           | 1 pc. | • Safety Wire Lug for Wall .....             | 1 pc.  |
| • Installation Guide ..... | 1 pc. | • Screws for Mounting Bracket (M2.5 x 8) ... | 2 pcs. |
| • Code Label**2 .....      | 1 pc. |  |        |

The followings are for installation.

- |                                       |       |
|---------------------------------------|-------|
| • Power Cord Plug .....               | 1 pc. |
| • Safety Wire Plate for Ceiling ..... | 1 pc. |

- \*1 The CD-ROM contains Panasonic IP Setup Software, viewer software "Network Camera View 4", and Operation Instructions (PDF).  
\*2 This label may be required for network management. The network administrator shall retain the code label.

### Optional Accessory

1/3 type High Resolution 2x Varifocal Lens  
**WV-LZA62/2**  
(2.8 - 6 mm)  
F1.4 (Wide)  
F2.1 (Tele)



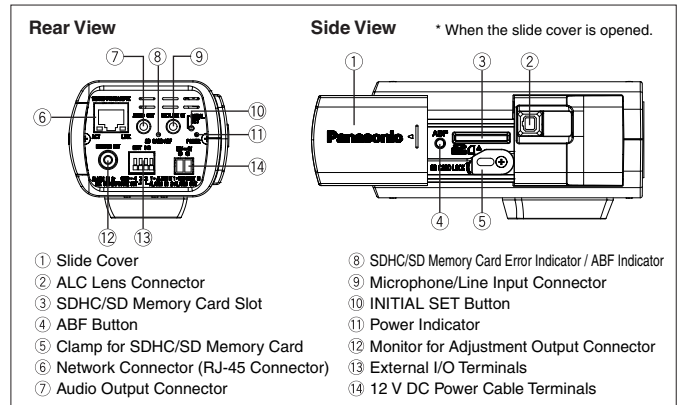
# Specifications

TV System	NTSC	PAL
<b>Camera</b>	Image Sensor: 1/3 type interline transfer CCD Effective Pixels: 1,296 (H) x 976 (V) x2 Scanning Mode: Progressive scan Scanning Area: 4.86 mm (H) x 3.65 mm (V) Minimum Illumination: 1.3 Megapixel mode: Color: 1.0 lx, B/W: 0.08 lx at F1.4 (Shutter: 1/30 s, AGC: High, SD: OFF), Color: 0.06 lx, B/W: 0.005 lx at F1.4 (Shutter: 16/30 s, AGC: High, SD: OFF) 3 Megapixel mode: Color: 2.0 lx, B/W: 0.16 lx at F1.4 (Shutter: 1/30 s, AGC: High), Color: 0.12 lx, B/W: 0.01 lx at F1.4 (Shutter: 16/30 s, AGC: High) White Balance: AWC (2,000 - 10,000 K), ATW1 (2,700 - 6,000 K), ATW2 (2,000 - 6,000 K) Light Control Mode: Outdoor: Automatic integration of ALC and ELC Indoor: Automatic integration of ALC and ELC (up to 1/100 s) ELC: (up to 3/10,000 s) (ELC: only at Super Dynamic: OFF) Shutter Speed: Fix shutter: 3/100, 2/100, 1/100, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 (Only at Super Dynamic: OFF) Super Dynamic: ON / OFF (1.3 Megapixel mode only) Face Super Dynamic: ON / OFF (Only at Super Dynamic: ON) Dynamic Range: 52 dB typical (Super Dynamic: ON, Light Control mode: Indoor) Adaptive Black Stretch: ON / OFF (Only at Super Dynamic: OFF) AGC: ON (LOW, MID, HIGH) / OFF Electronic Sensitivity UP: OFF / AUTO (Max. 2x (2/30 s), 4x (4/30 s), 6x (6/30 s), 10x (10/30 s), 16x (16/30 s)) Black and White Mode: Mode: AUTO1 / AUTO2 / AUTO3 / ON / OFF, Level: High / Low, with external control Digital Noise Reduction: High / Low Video Motion Detection: 4 areas, Sensitivity: 15 steps, Detection size: 10 steps Privacy Zone: Up to 8 zones, Gray / Mosaic Up Side Down: ON / OFF Auto Image Stabilizer: ON / OFF Camera Title (OSD): Up to 16 alphanumeric characters (3 selectable character sizes) Back Focus Adjustment: ABF / MANUAL, ABF mode upon CL/BW switching: AUTO / PRESET / FIX	
<b>Browser GUI</b>	Camera Control: Brightness, AUX ON / OFF, Zoom (1x, 2x, 4x) Display Mode: Spot, Quad: Image from 16 cameras can be displayed in 4 different Quad screens or 16 split screen (JPEG only), 20 characters camera title available. Digital Zoom: 1x, 2x, 4x controlled by browser GUI Camera Title: Up to 20 alphanumeric characters Clock Display: Time: 12H / 24H, Date: 5 formats on the browser, Summer time (Manual) Alarm Control: Reset One Shot Capture: A still picture will be displayed on a newly opened window. Audio: Mic (Line) Input: ON / OFF, Audio Output: ON / OFF SD Memory Data Download: Still or Motion Images recorded in the SD/SDHC memory card can be downloaded. GUI/Setup Menu Language: English, French (Installation required for French) / English, French, Italian, Spanish, German, Russian (Installation required except for English) System Log: Up to 100 (Internal), Up to 4,000 (SD/SDHC memory when the recording format is set to JPEG.) error logs Supported OS: Microsoft® Windows® 7 Professional 64 bit/32 bit, Microsoft® Windows Vista® Business SP1 32 bit, Microsoft® Windows® XP Home Edition/Professional SP3 The language of the OS must be same as selected GUI language. Supported Browser: Windows® Internet Explorer® 8.0 32 bit (Microsoft® Windows® 7 64 bit/32 bit), Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business SP1 32 bit), Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Windows® XP Home Edition/Professional SP3)	
<b>Network</b>	Network IF: 10Base-T / 100Base-TX, RJ-45 connector Image Resolution*1: 1.3 Megapixel mode (Aspect ratio [4:3]): H.264: 1,280 x 960 / SVGA (800 x 600) / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps MPEG-4: VGA (640 x 480) / QVGA (320 x 240), up to 30 fps JPEG: 1,280 x 960 / SVGA (800 x 600) / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps 1.3 Megapixel mode (Aspect ratio [16:9]): H.264: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps MPEG-4: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps JPEG: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps 3 Megapixel mode (Aspect ratio [4:3]): H.264: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 15 fps MPEG-4: VGA (640 x 480) / QVGA (320 x 240), up to 15 fps JPEG: 2,048 x 1,536 / 1,280 x 960 / VGA (640 x 480), up to 15 fps 3 Megapixel mode (Aspect ratio [16:9]): H.264: 1,920 x 1,080 / 640 x 360 / 320 x 240, up to 15 fps MPEG-4: 1,920 x 1,080 / 640 x 360 / 320 x 240, up to 15 fps JPEG: 1,920 x 1,080 / 640 x 360 / 320 x 240, up to 15 fps H.264 / MPEG-4 *1: Transmission Priority: Constant bit rate / Frame rate Frame Rate: 1 / 3 / 5 / 7.5 / 10 / 15 / 20* / 30* fps 1 / 3 / 5 / 7.5 / 10 / 12 (PAL model only) / 15 / 20* / 30* fps * 1.3 Megapixel mode only * 1.3 Megapixel mode only Bit Rate/Client: 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 / 8,192* kbps / Unlimited * H.264 mode only Image Quality: LOW / NORMAL / FINE Refresh Interval: 0.2 s / 0.33 s / 0.5 s / 1 s / 2 s / 3 s / 4 s Transmission Type: UNICAST / MULTICAST	

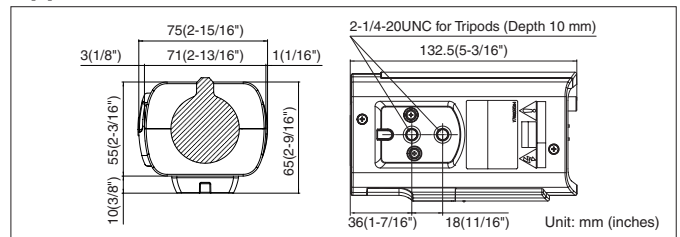
TV System	NTSC	PAL
<b>Network</b>	JPEG Image Quality: 10 steps Transmission Type: PULL / PUSH Audio Compression: G.726 (ADPCM) 32 kbps / 16 kbps Audio Mode: OFF / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex) Authentication for Audio: Level 1 only / Level 2 higher / All users Total Bit Rate: 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimited Supported Protocol: IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTMP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP FTP Client: Alarm image transfer, Periodic image transfer, Active/Passive selectable (When the FTP periodic transmission is failed, backup on an optional SDHC/SD memory card is available.) No. of Simultaneous Users: Up to 14 users (Depends on network conditions) SDHC/SD Memory Card (Option): H.264 recording: Manual REC / Alarm REC (Pre/Post) JPEG recording: Manual REC / Alarm REC (Post) / Backup upon network failure Compatible SD (SDHC) card: Panasonic 256 MB, 512 MB, 1 GB, 2 GB, 4 GB*, 8 GB*, 16 GB* model * SDHC card	
<b>Alarm</b>	Alarm Source: 3 terminal inputs, VMD, Command alarm Alarm Actions: SDHC/SD memory recording, E-mail notification, Alarm terminal output, Indication on browser, FTP image transfer, Panasonic protocol output Alarm Log: With SDHC/SD memory card: 5,000 logs, Without SDHC/SD memory card: 1,000 logs Schedule: Alarm / VMD / Access permission	
<b>Input / Output</b>	Monitor Output (for adjustment): 1.0 V [P-P] / 75 Ω, NTSC composite, RCA Jack / 1.0 V [P-P] / 75 Ω, PAL composite, RCA Jack Microphone/Line Input: MIC IN and Line IN are selectable. ø3.5 mm stereo mini jack (monaural input) (Applicable microphone: Plug-in power type) Supply voltage: 2.5 V ±0.5 V Input impedance: approx. 2 kΩ Audio Output: ø3.5 mm stereo mini jack (monaural output) Line level External I/O Terminals: ALARM IN 1 / DAY/NIGHT IN, ALARM IN 2 / ALARM OUT, ALARM IN 3 / AUX OUT / EXPOSURE OUT	
<b>General</b>	Safety/EMC Standard: UL (UL60065), FCC (Part15 ClassA), CE (EN55022 ClassB, EN55024) C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA) Power Source and Power Consumption: 12 V DC: 630 mA, PoE (IEEE 802.3af): 7.6 W (Class 0 device) Ambient Operating: -10 °C ~ +50 °C (14 °F ~ 122 °F), Temperature/Humidity: 90 % or less (without condensation) Dimensions: 75 mm (W) x 65 mm (H) x 132.5 mm (D) (2-15/16" (W) x 2-9/16" (H) x 5-3/16" (D)) Mass (approx.): 430 g (0.95 lbs.)	

\*1 H.264 and MPEG-4 are alternative.

## Part Names and Functions



## Appearance



### Trademarks and registered trademarks

- Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.
- UniPhier is a registered trademark of Panasonic Corporation.
- "Super Dynamic", "SDII", "SDIII", "SD5", "SD5Link", "i-PRO" and "i-PRO SmartHD" logos are trademarks or registered trademarks of Panasonic Corporation.

### Important

- Safety Precaution: carefully read the operating instructions and installation manual before using this product.
- Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.

- All TV pictures are simulated.
- Masses and dimensions are approximate.
- Specifications are subject to change without notice.
- These products may be subject to export control regulations.
- All product pictures are NTSC models.

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