# Panasonic
## ideas for life

**IDEHAL** Gostar

Lens: optional

i-pro MEGA *SuperDynamic*

MEGA Pixel · H.264/MPEG-4 JPEG · Face Detection · Auto Back Focus · day/night IR removable

# Megapixel H.264 Network Camera featuring *Super Dynamic*

## Key Features

- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording by "UniPhier®" 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 to conventional cameras.
- 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 lux (Color), 0.08 lux (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, alarm recording and backup upon network failure.
- 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.
- Alarm log, Manual REC log, FTP error log saved in the SD/SDHC memory card is displayed on the browser GUI and can be downloaded to the client PC. Playback or Image data download through the log is also available.
- 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. | [*1] The CD-ROM contains Panasonic IP Setup Software,viewer software "Network Camera View 4", and Operation Instructions (PDF). |
| The followings are for installation. | [*2] This label may be required for network management. The network administrator shall retain the code label. |
| • Power Cord Plug ........................... 1 pc. | |
| • Safety Wire Plate for Ceiling ......... 1 pc. | |

## Optional Accessory

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

# Specifications

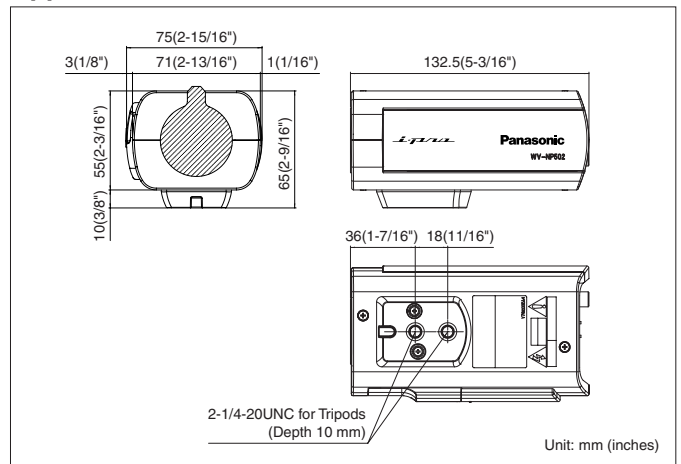| TV System | | NTSC | PAL |
|---|---|---|---|
| Camera | Image Sensor | 1/3 inch interline transfer CCD | |
| | Effective Pixels | 1,296 (H) x 976 (V) x2 | |
| | Scanning Mode | Progressive scan | |
| | Scanning Area | 4.86 mm (H) x 3.65 mm (V) | |
| | Minimum Illumination | 1. 3 Megapixel mode:<br>Color: 1.0 lux, B/W: 0.08 lux at F1.4 (Shutter: 1/30 s, AGC: High, SD: OFF),<br>Color: 0.06 lux, B/W: 0.005 lux at F1.4 (Shutter: 16/30 s, AGC: High, SD: OFF)<br>3 Megapixel mode:<br>Color: 2.0 lux, B/W: 0.16 lux at F1.4 (Shutter: 1/30 s, AGC: High),<br>Color: 0.12 lux, B/W: 0.01 lux 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<br>Indoor: Automatic integration of ALC and ELC (up to 1/100 sec.)<br>ELC: (up to 1/10,000 sec.) (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,<br>1/4,000, 1/10,000 (Only at Super Dynamic: OFF) | |
| | Super Dynamic | ON / OFF (1.3 Megapixel mode only) | |
| | 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 | |
| Browser GUI | 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<br>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 | Images recorded in the SD memory card can be downloaded. | |
| | GUI/Setup<br>Menu Language | English, French<br>(Installation required for French) | English, French, Italian,<br>Spanish, German, Russian<br>(Installation required except for English) |
| | System Log | Up to 100 (Internal), Up to 4,000 (SD memory) error logs | |
| | Supported OS | Microsoft® Windows Vista® Business SP1 32 bit,<br>Microsoft® Windows® XP Home Edition/Professional SP3<br>The language of the OS must be same as selected GUI language. | |
| | Supported Browser | Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business SP1 32 bit),<br>Microsoft® Internet Explorer® 6.0 SP3<br>(Microsoft® Windows® XP Home Edition/Professional SP3) | |
| Network | Network IF | 10Base-T / 100Base-TX, RJ-45 connector | |
| | Image Resolution*1 | 1.3 Megapixel mode:<br>H.264: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps<br>MPEG-4: VGA (640 x 480) / QVGA (320 x 240), up to 30 fps<br>JPEG: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps<br>3 Megapixel mode:<br>H.264: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 15 fps<br>MPEG-4: VGA (640 x 480) / QVGA (320 x 240), up to 15 fps<br>JPEG: 2,048 x 1,536 / 1,280 x 960 / VGA (640 x 480), up to 15 fps | |
| | H.264 / MPEG-4 *1 — Transmission Priority | Constant bit rate / Frame rate | |
| | H.264 / MPEG-4 *1 — Max. Frame Rate | 1 / 3 / 5 / 7.5 / 10 / 15 / 20* / 30* fps  * 1.3 Megapixel mode only | |
| | H.264 / MPEG-4 *1 — Max. Bit Rate/Client | 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 /<br>4,096 / 8,192* kbps / Unlimited  * H.264 mode only | |
| | H.264 / MPEG-4 *1 — Image Quality | LOW / NORMAL / FINE | |
| | H.264 / MPEG-4 *1 — Refresh Interval | 0.1 fps ~ 30 fps | |
| | H.264 / MPEG-4 *1 — Transmission Type | UNICAST / MULTICAST | |
| | JPEG — Image Quality | 10 steps | |
| | JPEG — 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, RTP/RTCP, FTP,<br>SMTP, DHCP, DNS, DDNS, NTP, SNMP<br>IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP | |
| | FTP Client | Alarm image transfer, Periodic image transfer, Active/Passive<br>selectable (When the FTP periodic transmission is failed,<br>backup on an optional SDHC/SD memory card is available.) | |

| TV System | | NTSC | PAL |
|---|---|---|---|
| Network | No. of Simultaneous Users | Up to 14 users (Depends on network conditions) | |
| | SDHC/SD Memory Card (Option) | Manual REC / Alarm REC / Backup upon network failure<br>Compatible SD (SDHC) card: Panasonic 64 MB, 128 MB, 256 MB,<br>512 MB, 1 GB, 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB* model  * SDHC card | |
| Alarm | Alarm Source | 3 terminal inputs, VMD, Command alarm | |
| | Alarm Actions | SDHC/SD memory recording, E-mail notification, Alarm terminal output,<br>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 | |
| Input / Output | Monitor Output | 1.0 V [P-P] / 75 Ω, NTSC<br>composite, RCA Jack | 1.0 V [P-P] / 75 Ω, PAL<br>composite, RCA Jack |
| | Microphone/Line Input | MIC IN and Line IN are selectable.<br>ø3.5 mm stereo mini jack (monaural input)<br>(Applicable microphone: Plug-in power type)<br>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,<br>ALARM IN 3 / AUX OUT / EXPOSURE OUT | |
| General | Safety/EMC Standard | UL (UL60065), FCC (Part15 ClassA),<br>C-UL (CAN/CSA C22.2 No.60065),<br>DOC (ICES003 ClassA) | CE (EN55022 ClassB, EN55024) |
| | Power Source and Power Consumption | 12 V DC: 630 mA, PoE (IEEE 802.3af): 7.6 W | |
| | Ambient Operating Temperature/Humidity | −10 °C ~ +50 °C (14 °F ~ 122 °F),<br>90 % or less (without condensation) | |
| | Dimensions | 75 mm (W) x 65 mm (H) x 132.5 mm (D)<br>(2-15/16" (W) x 2-9/16" (H) x 5-3/16" (D)) | |
| | Weight (approx.) | 430 g (0.95 lbs.) | |

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

## Part Names and Functions
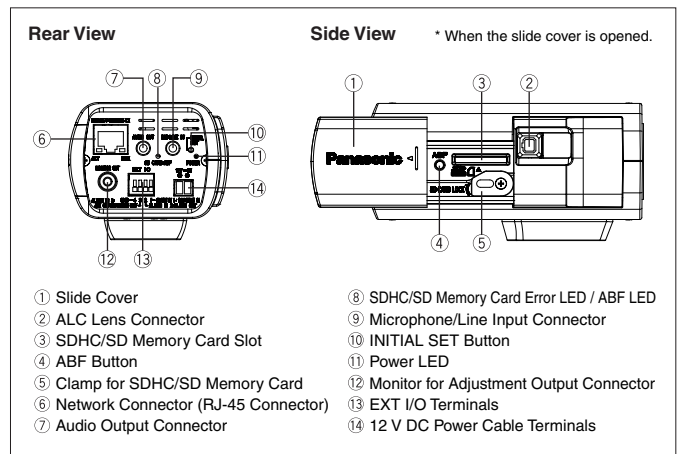
**Rear View**      **Side View**   * When the slide cover is opened.



① Slide Cover
② ALC Lens Connector
③ SDHC/SD Memory Card Slot
④ ABF Button
⑤ Clamp for SDHC/SD Memory Card
⑥ Network Connector (RJ-45 Connector)
⑦ Audio Output Connector
⑧ SDHC/SD Memory Card Error LED / ABF LED
⑨ Microphone/Line Input Connector
⑩ INITIAL SET Button
⑪ Power LED
⑫ Monitor for Adjustment Output Connector
⑬ EXT I/O Terminals
⑭ 12 V DC Power Cable Terminals

## Appearance



75(2-15/16")
3(1/8")  71(2-13/16")  1(1/16")   132.5(5-3/16")
55(2-3/16")
65(2-9/16")
10(3/8")

36(1-7/16")  18(11/16")

2-1/4-20UNC for Tripods
(Depth 10 mm)

Unit: mm (inches)

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