# Panasonic ideas for life

#### **HD Vandal Resistant Fixed Dome Network Camera**

### **WV-SF346**

**Vandal Resistant Fixed Dome Network Camera** 

**WV-SF342** 



## HD / 1,280 x 960 H.264 Vandal Resistant Fixed Dome Network Camera with ABF (MV-SF346) SVGA / 800 x 600 H.264 Vandal Resistant Fixed Dome Network Camera (MV-SF342)

#### **Key Features**

- 720p HD images up to 30 fps (WV-SF346)
- Newly developed 1.3 Megapixel high sensitivity MOS Sensor (WV-SF346)
- Super high resolution at SVGA/800 x 600 created by newly developed
   1.3 Megapixel high sensitivity MOS Sensor (WV-SF342)
- 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 (WV-SF346)
- Full frame (Up to 30 fps) transmission at SVGA/800 x 600 image size (WV-SF342)
- Wide Dynamic Range and ABS (Adaptive Black Stretch) technologies deliver wider dynamic range compared with conventional cameras.
- Face Wide Dynamic Range technology ensures clear face image.
- 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)
   High sensitivity with Simple Day/Night function (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 ensures easy installation. (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
- Selectable light control modes: Outdoor / Indoor / Fixed electronic shutter
   Outdoor / Indoor: Electronic shutter and ALC lens iris control are
   automatically controlled depending on the mode and luminance level.
   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 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-NV200 / WJ-ND400 playback VMD function.
- Privacy Zone can mask up to 2 private areas, such as house windows and entrances/exits.
- 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.
- 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.
- SDHC/SD 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.
- Alarm log, Manual REC log, FTP error log saved in the SDHC/SD 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
- 2.8 mm ~ 10 mm, 3.6x Varifocal Auto Iris lens
- ONVIF compliant model

#### **Standard Accessories**

#### **Optional Accessories**

Ceiling Mount Bracket WV-Q105 (PAL only)



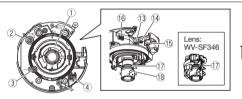
#### **Specifications**

| TV Systen<br>Camera |   |                           | NTSC PAL   |  |  |
|---------------------|---|---------------------------|--|--|--|
| oamera              | Image Sensor<br>Effective Pixels                                  |                           | 1/3 type MOS Sensor<br>Approx. 1.3 megapixel   |  |  |
|                     | Scanning Mode   |                           | Progressive scan   |  |  |
|                     | Scanning Mode Scanning Area                                       |                           | 4.8 mm (H) x 3.6 mm (V)  |  |  |
|                     | Minimum Illumination  |                           | WV-SF346: Color: 0.3 lx, B/W: 0.2 lx at F1.3 (Shutter: 1/30 s, AGC: High),   |  |  |
|                     | William illumination  |                           | Color: 0.019 lx, B/W: 0.013 lx at F1.3 (Shutter: 16/30 s, AGC: High) WV-SF342: Color: 0.2 lx, B/W: 0.13 lx at F1.3 (Shutter: 1/30 s, AGC: High)  |  |  |
|                     |   |                           | Color: 0.013 lx, B/W: 0.009 lx at F1.3 (Shutter: 16/30 s, AGC: High)   |  |  |
|                     | White Balance Light Control Mode Shutter Speed Wide Dynamic Range |                           | AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 6,000 K), ATW2 (2,000 ~ 6,000 K)  Outdoor: Automatic integration of ALC and ELC  |  |  |
|                     |   |                           | Indoor [50 Hz]: Automatic integration of ALC and ELC (up to 1/100 s)   |  |  |
|                     |   |                           | Indoor [60 H2]: Automatic integration of ALC and ELC (up to 1/120 s)<br>Fix shutter: OFF (1/30), 3/100, 3/120, 2/100, 2/120, 1/100,<br>1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000<br>ON / OFF                      |  |  |
|                     |   |                           |  |  |  |
|                     | Adaptive Black Stretch AGC  |                           | ON / OFF (Only at Wide Dynami<br>ON (LOW, MID, HIGH) / OFF   | c Range: 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))              |  |
|                     | Simple Day/Night Mode   |                           |  |  |  |
|                     | Digital Noise Reduction Video Motion Detection                    |                           | - v  |  |  |
|                     | Privacy Zone  |                           | Up to 2 zones, Gray  |  |  |
|                     | Camera Title (OSD)  |                           | Up to 16 alphanumeric characters   |  |  |
|                     | Focus Adjustment  |                           | WV-SF346: ABF/MANUAL WV-SF342: Focus Assist  |  |  |
| Lens                | Vari Focal Length   |                           | 2.8 mm ~ 10 mm, 3.6x varifocal   |  |  |
|                     | Angular Field of View   |                           | H: 27.7° (Tele) ~ 100.3° (Wide), V: 20.8° (Tele) ~ 73.5° (Wide)  |  |  |
|                     | Maximum Aperture Ratio  |                           |  |  |  |
|                     | Focusing Range  |                           | 0.3 m ~ ∞  |  |  |
| Adjusting           | Angle   |                           | Horizontal: 180° (clockwise), 170° (counter clockwise)   |  |  |
| Browser             | Comora Control  |                           | Vertical: ±75°, Imaging tilt adjustment range: ±100°   |  |  |
| Browser<br>GUI      | Camera Control  |                           | Brightness, AUX ON / OFF  Snot Quad: Image from 16 cameras can be displayed in 4 different Quad  |  |  |
|                     | 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   |  |  |
|                     | Camera Title Clock Display  |                           | Time: 12H/24H, Date: 5 formats on  |  |  |
|                     | Alarm Control   |                           | Reset  |  |  |
|                     |   | t Capture                 | A still picture will be displayed on a newly opened window.  |  |  |
|                     | Audio   |                           | Mic (Line) Input: ON / OFF Volume adjustment: Low / Middle / High,   |  |  |
|                     | SD Memory Data Download   |                           | Audio Output: ON / OFF Volume adjustment: Low / Middle / High  |  |  |
|                     | ·   |                           | card can be downloaded.  |  |  |
|                     | GUI/Setup 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  |  |  |
|                     | Supported OS  |                           | recording format is set to JPEG.) error logs Microsoft® Windows® 7 Professional 64 bit/32 bit,   |  |  |
|                     |   |                           | Microsoft® Windows Vista® Business SP1 32 bit,   |  |  |
|                     |   |                           | Microsoft® Windows® XP Professional SP3  |  |  |
|                     | Supported Browser   |                           | The language of the OS must be same as selected GUI language<br>Windows® Internet Explorer® 8.0 32 bit (Microsoft® Windows® 7 64 bit/32 bit),<br>Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business SP1 32 bit) |  |  |
|                     |   |                           | Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Windows® XP Professional SP3)  |  |  |
| Network             | Network   |                           | 10Base-T / 100Base-TX, RJ-45 connector   |  |  |
|                     | Image<br>Resolution   | Aspect ratio:<br>[4:3]    | WV-SF346:<br>H.264: 1,280 $\times$ 960 / VGA (640 $\times$ 480) / QVGA (320 $\times$ 240), up to 30 fps  |  |  |
|                     | *1 *2   |                           | MPEG-4: VGA $(640 \times 480)$ / QVGA $(320 \times 240)$ , up to 30 fps<br>JPEG: 1,280 $\times$ 960 / VGA $(640 \times 480)$ / QVGA $(320 \times 240)$ , up to 30 fps  |  |  |
|                     |   |                           | WV-SF342:  | -, , (020 240), up to 00 ipa   |  |
|                     |   |                           | H.264: $800 \times 600$ / VGA ( $640 \times 480$ ) / QVGA ( $320 \times 240$ ), up to 30 fps MPEG-4: VGA ( $640 \times 480$ ) / QVGA ( $320 \times 240$ ), up to 30 fps  |  |  |
|                     |   |                           | MPEG-4: VGA (640 × 480) / QVGA (<br>JPEG: 800 × 600 / VGA (640 × 480)  |  |  |
|                     |   | Aspect ratio:             | WV-SF346:  | (020 x 270), up to 00 1ps  |  |
|                     |   | [16 : 9]                  | H.264: 1,280 × 720 / 640 × 360<br>JPEG: 1,280 × 720 / 640 × 360  |  |  |
|                     |   |                           | WV-SF342:<br>H.264: 640 × 360 / 320 × 180, up to 30 fps  |  |  |
|                     | LLOGA/ Transmission of the  |                           | JPEG: 640 × 360 / 320 × 180, up to 30 fps  |  |  |
|                     | H.264/ Transmission priority MPEG-4 Frame Rate                    |                           |  |  |  |
|                     | *1  | Bit Rate/                 | 1/3/5/7.5/10/15/20/30 fps  |  |  |
|                     |   | Client                    | 4,096 / 8,192* kbps / Unlimited * H.264 mode only  |  |  |
|                     |   | Image Quality             | LOW / NORMAL / FINE  |  |  |
|                     |   |                           | 0.2 s / 0.33 s / 0.5 s / 1 s / 2 s / 3 s / 4 s / 5 s   |  |  |
|                     |   |                           | UNICAST / MULTICAST  |  |  |
|                     | JPEG Image Quality  |                           | 10 steps   |  |  |
|                     | Transmission Type   |                           | PULL / PUSH  |  |  |
|                     | Audio Compression   |                           | G.726 (ADPCM) 32 kbps / 16 kbps  |  |  |
|                     |   |                           |  |  |  |
|                     | Audio M   | ode                       | OFF / Mic (Line) input / Audio output / Inters<br>Level 1 only / Level 2 higher / Al   | active (Half duplex) / Interactive (Full duplex  |  |

| TV System |                           | NTSC  | PAL                          |  |
|-----------|---------------------------|---|------------------------------|--|
| Network   | Supported Protocol        | IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP                    |                              |  |
|           |                           | IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP,                         |                              |  |
|           |                           | SMTP, DHCP, DNS, DDNS, 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       | H.264 recording: Manual REC / Alarm REC (Pre/Post)                            |                              |  |
|           | (Option)                  | 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*, 32 GB* model * SDHC card            |                              |  |
|           | Face Detection            | ON / OFF (with XML notification)  |                              |  |
| Alarm     | Alarm Source              | 1 terminal input, 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   |                              |  |
| Input/    | Monitor Output            | 1.0 V [p-p] / 75 Ω,   | 1.0 V [p-p] / 75 Ω,          |  |
| Output    | (for adjustment)          | NTSC composite, RCA Jack  | 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                         |                              |  |
| 1         | External I/O Terminals    | ALARM IN, ALARM OUT, AUX OUT  |                              |  |
| General   | 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          | 12 V DC: 320 mA, PoE (IEEE 802.3af): 4.2 W (Class 2 device)                   |                              |  |
|           | Power Consumption         |   |                              |  |
|           | Ambient Operating         | -10 °C ~ +50 °C (14 °F ~ 122 °F),   |                              |  |
|           | Temperature/Humidity      | 90 % or less (without condensation)   |                              |  |
|           | Impact Protection         | IEC 60068-2-75 test Eh, 20J / IEC 62262 IK10                                  |                              |  |
|           | Dimensions                | ø129.5 mm x 93 mm (H) (ø5-1/8" x 3-5/8" (H))                                  |                              |  |
|           | Mass (approx.)            | WV-SF346: 650 g (1.43 lbs.) / WV-SF342: 610 g (1.35 lbs.)                     |                              |  |

\*1 H.264 and MPEG-4 are alternative. \*2 [4 : 3] and [16 : 9] are alternative.

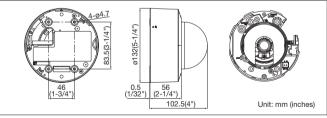
#### **Part Names and Functions**





- ① Azimuth Adjustment Ring
- ② Monitor Out Connector for Adjustment
- 3 Panning Lock Screw
- 4 12 V DC Power Supply Terminal
- ⑤ Focus Assist (F.A.) Button (WV-SF342)
- 6 Auto Focus (AF) Button (WV-SF346) TSDHC/SD Memory Card Error Indicator / F.A. Indicator (WV-SF342)
- ® SDHC/SD Memory Card Error Indicator / AF Indicator (WV-SF346)
- 9 Link Indicator
- 10 Access Indicator
- 1) SDHC/SD Memory Card Slot
- 12 INITIAL SET Button
- (13) Audio Output Connector Microphone / Line Input Connector
- 15 Network Connector
- 16 External I/O Terminals
- 17 Zoom Lock Knob
- 18 Focus Lock Knob (WV-SF342)

#### **Appearance**



#### Trademarks and registered trademarks

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   UniPhier is a registered trademark of Panasonic Corporation.

   "Super Dynamic", "SDII", "SDII", "SD5", "SD5.", "FPD0" and "i-PRO SmartHD" logos are trademarks or registered trademarks of Panasonic Corporation.
- ONVIF and the ONVIF logo are trademarks of ONVIF Inc.

#### 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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