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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 (Auto Back Focus) (WV-SF346)
## SVGA / 800 x 600 H.264 Vandal Resistant Fixed Dome Network Camera (WV-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

### Standard Accessories

- CD-ROM*1 ..... 1 pc.
- Installation Guide ..... 1 pc.
- Code Label*2 ..... 1 pc.

The followings are for installation.

- Power Cord Plug ..... 1 pc.
- External I/O Terminal Plug..... 1 pc.
- Installation Template Label ..... 1 pc.
- Cable Tie ..... 2 pcs. (incl. 1 spare)
- Bit for Tamperproof Screw ..... 1 pc.
- Focus Adjustment Jig (SF342 only)..... 1 pc.

*1 The CD-ROM contains the operating instructions (PDFs) and different kinds of tool software programs.
*2 This label may be required for network management. The network administrator shall retain the code label.

### Optional Accessories

Ceiling Mount Bracket
**WV-Q105**
(PAL only)

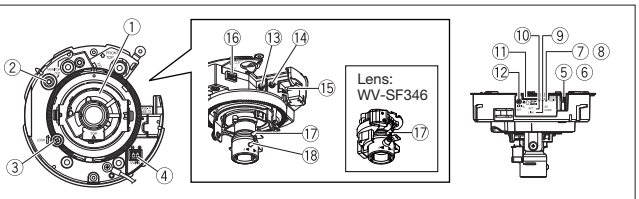
## Specifications

| TV System | | | NTSC | PAL |
|---|---|---|---|---|
| **Camera** | Image Sensor | | 1/3 type MOS Sensor | |
| | Effective Pixels | | Approx. 1.3 megapixel | |
| | Scanning Mode | | Progressive scan | |
| | 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), 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 | | 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 [50 Hz]: Automatic integration of ALC and ELC (up to 1/100 s)<br>Indoor [60 Hz]: Automatic integration of ALC and ELC (up to 1/120 s) | |
| | Shutter Speed | | Fix shutter: OFF (1/30), 3/100, 3/120, 2/100, 2/120, 1/100, 1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 | |
| | Wide Dynamic Range | | ON / OFF | |
| | Face Wide Dynamic Range | | ON / OFF (Only at Wide Dynamic Range: ON) | |
| | Adaptive Black Stretch | | ON / OFF (Only at Wide Dynamic Range: 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)) | |
| | Simple Day/Night Mode | | AUTO / OFF | |
| | Digital Noise Reduction | | High / Low | |
| | Video Motion Detection | | 4 areas, Sensitivity: 15 steps, Detection size: 10 steps | |
| | 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 | | 1 : 1.3 (Wide) ~ 1 : 3.1 (Tele) | |
| | Focusing Range | | 0.3 m ~ ∞ | |
| **Adjusting Angle** | | | Horizontal: 180° (clockwise), 170° (counter clockwise)<br>Vertical: ±75°, Imaging tilt adjustment range: ±100° | |
| **Browser GUI** | Camera Control | | Brightness, AUX ON / OFF | |
| | 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 Volume adjustment: Low / Middle / High, Audio Output: ON / OFF Volume adjustment: Low / Middle / High | |
| | SD Memory Data Download | | Still or motion Images recorded in the SDHC/SD 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 (SDHC/SD 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 Professional SP3<br>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 Professional SP3) | |
| **Network** | Network IF | | 10Base-T / 100Base-TX, RJ-45 connector | |
| | Image Resolution *1 *2 | Aspect ratio: [4 : 3] | WV-SF346:<br>H.264: 1,280 × 960 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps<br>MPEG-4: VGA (640 × 480) / QVGA (320 × 240), up to 30 fps<br>JPEG: 1,280 × 960 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps<br>WV-SF342:<br>H.264: 800 × 600 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps<br>MPEG-4: VGA (640 × 480) / QVGA (320 × 240), up to 30 fps<br>JPEG: 800 × 600 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps | |
| | | Aspect ratio: [16 : 9] | WV-SF346:<br>H.264: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps<br>JPEG: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps<br>WV-SF342:<br>H.264: 640 × 360 / 320 × 180, up to 30 fps<br>JPEG: 640 × 360 / 320 × 180, up to 30 fps | |
| | H.264/ MPEG-4 *1 | Transmission priority | Constant bitrate / Framerate | |
| | | Frame Rate | 1 / 3 / 5 / 7.5 / 10 / 15 / 20 / 30 fps | 1 / 3 / 5 / 7.5 / 10 / 12 / 15 / 20 / 30 fps |
| | | 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 / 5 s | |
| | | Transmission Type | UNICAST / MULTICAST | |
| | 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 | |

| TV System | | NTSC | PAL |
|---|---|---|---|
| **Network** | Supported Protocol | IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP<br>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 (Option) | H.264 recording: Manual REC / Alarm REC (Pre/Post)<br>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/ Output** | 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, ALARM OUT, AUX OUT | |
| **General** | Safety/EMC Standard | UL (UL60065), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA) | CE (EN55022 ClassB, EN55024) |
| | Power Source and Power Consumption | 12 V DC: 320 mA, PoE (IEEE 802.3af): 4.2 W (Class 2 device) | |
| | Ambient Operating Temperature/Humidity | −10 °C ~ +50 °C (14 °F ~ 122 °F), 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.) | |

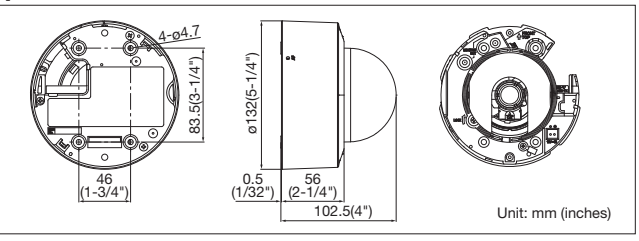
*1 H.264 and MPEG-4 are alternative. *2 [4 : 3] and [16 : 9] are alternative.

## 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)
⑦ SDHC/SD Memory Card Error Indicator / F.A. Indicator (WV-SF342)
⑧ SDHC/SD Memory Card Error Indicator / AF Indicator (WV-SF346)
⑨ Link Indicator
⑩ Access Indicator
⑪ SDHC/SD Memory Card Slot
⑫ INITIAL SET Button
⑬ Audio Output Connector
⑭ Microphone / Line Input Connector
⑮ Network Connector
⑯ External I/O Terminals
⑰ Zoom Lock Knob
⑱ Focus Lock Knob (WV-SF342)

## Appearance

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**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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Printed in Japan (2A-068AL)