Panasonic
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Super Dynamic HD Dome Network Camera

# WV-SC385

## HD/1,280 x 960 H.264 Dome Network Camera featuring *Super Dynamic*

### Key Features

- 720p HD images up to 30 fps
- Newly developed 1.3 Megapixel double speed MOS Sensor
- 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
- 18x optical zoom with 12x digital zoom enabling 216x zoom.
  36x extra optical zoom under VGA resolution with 12x digital zoom enabling 432x zoom.
- ***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.
- H.264 and MPEG-4 are selectable for system migration.
- High sensitivity with Day/Night function : 0.5 lx (Color), 0.06 lx (B/W) at F1.6 (Wide)
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise and motion blur in various conditions.
- 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.
- Panning with auto flip function can be performed 0 to 360 degrees.
- Auto tracking: The camera automatically pans and tilts to follow a moving subject and keep it in the center of the image.
- PTZ control can be taken on the user friendly GUI with 16 speeds pan/tilt and new "Drag and Zoom" operation enabling finer control. 256 speeds available for system with WV-CU950 system controller.
- Up to 64 preset positions
- 360 map shot: 8 thumbnail images at 45 deg. intervals make it simple to direct the camera easily by clicking on a thumbnail.
- Industrial grade Pan/Tilt/Zoom mechanism for high reliability
- 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-ND400 playback VMD function.
- Privacy Zone can mask up to 8 private areas, such as house windows and entrances/exits.
- 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.
- 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
- Supports SSL, DDNS (viewnetcam, RFC2136)
- Still images (JPEG) can be viewed on mobile phones via Internet.
- ONVIF compliant model

### Standard Accessories

- CD-ROM*1 .....1 pc.
- Installation Guide.....1 pc.

The followings are for installation.

- Camera Mount Bracket (w/safety wire) .....1 pc.
- Camera Fixing Screw ..... 2 pcs. (incl. 1 spare)
- Decorative Cover.....1 pc.
- Power Cord Plug .....1 pc.
- Code Label*2 .....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

Inner Dome Cover
**WV-Q157**

Indoor Dome Covers
**WV-Q156C** (Clear)
**WV-Q156S** (Smoke)
(Smoke Type)

Embedded Ceiling Mount Brackets
**WV-Q155C** (Clear)
**WV-Q155S** (Smoke)
(Smoke Type)

Wall Mount Brackets
**WV-Q154C** (Clear)
**WV-Q154S** (Smoke)
(Smoke Type)

Ceiling Mount Bracket
**WV-Q105**

* Not compatible with optional accessories of conventional cameras

## Specifications

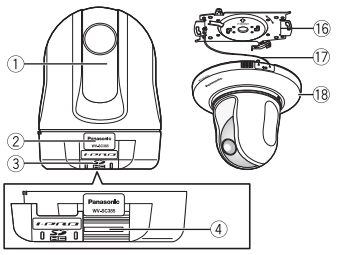
| TV System | | | NTSC | PAL |
|---|---|---|---|---|
| **Camera** | Image Sensor | | 1/3 type MOS Sensor | |
| | Effective Pixels | | Approx. 1.3 megapixel | |
| | Scanning Mode | | Progressive scan | |
| | Scanning Area | | 4.8 mm (H) x 3.6 mm (V) | |
| | Minimum Illumination | | Color: 0.5 lx, B/W: 0.06 lx at F1.6 (Shutter: 1/30 s, AGC: High),<br>Color: 0.031 lx, B/W: 0.004 lx at F1.6 (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<br>Indoor [60 Hz]: Automatic integration of ALC and ELC | |
| | Shutter Speed | | 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 | |
| | Super Dynamic | | ON / OFF | |
| | 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 | |
| | AGC | | ON (LOW, MID, HIGH ) / OFF | |
| | Electronic Sensitivity UP | | OFF, max. 2/30 s, max. 4/30 s, max. 6/30 s, max. 10/30 s, max. 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 (desktop) / OFF (ceiling) | |
| | Auto Image Stabilizer | | ON / OFF | |
| | Camera Title (OSD) | | Up to 20 alphanumeric characters (3 selectable character sizes) | |
| **Lens** | Focal Length | | 4.7 mm ~ 84.6 mm | |
| | Zoom Ratio | | 18x / 36x with extra optical zoom (under VGA) | |
| | Digital (Electronic) Zoom | | 12x (Max. 432x combined with extra optical zoom under VGA) | |
| | Angular Field of View | | H: 3.2° (Tele) ~ 55.2° (Wide), V: 2.4° (Tele) ~ 42.1° (Wide) | |
| | Maximum Aperture Ratio | | 1 : 1.6 (Wide) ~ 2.8 (Tele) | |
| | Focusing Range | | 1.5 m ~ ∞ | |
| | Aperture Range | | F1.6 ~ 22, Close | |
| **Pan and Tilt** | Panning Range | | 0° ~ 350° | |
| | Panning Speed | | Manual: approx. 0.5°/s ~ 100°/s, Up to 256 steps (depending on the controller)<br>Preset: up to approx. 300°/s | |
| | Tilting Range | | –30° ~ 90° (upward-level-downward)<br>Tilting angle limit: 10° / 5° / 3° / 0° / –3° / –5° / –10° / –15° / –20° / –25° / –30° | |
| | Tilting Speed | | Manual: approx.0.5°/s ~ 100°/s, Up to 256 steps (depending on the controller)<br>Preset: up to approx. 100°/s | |
| | Proportional Pan/Tilt Control | | Yes | |
| | Number of Preset Positions | | 64 | |
| | Auto Mode | | OFF / preset sequence / auto pan / auto track | |
| | Image Hold | | ON / OFF | |
| | PTZ Position Display | | ON / OFF | |
| | Self Return | | 10 s / 20 s / 30 s / 1 min. / 2 min. / 3 min. / 5 min. / 10 min. / 20 min. /<br>30 min. / 60 min. | |
| | 360 Pan-Flip | | ON / OFF | |
| | Map Shot | | 360° map shot / preset map shot | |
| **Browser GUI** | Camera Control | | Pan/Tilt (16 steps), Zoom, Focus, Click centering, Drag zoom, Iris,<br>Preset position call and program, Auto mode | |
| | 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. | |
| | Camera Title | | Up to 20 alphanumeric characters | |
| | Clock Display | | Time: 12H / 24H, Date: 5 formats on the browser, Summer time (Manual/AUTO) | |
| | 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,<br>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<br>be downloaded. | |
| | GUI/Setup Menu Language | | English, French<br>(Installation required for French) | English, French, Italian, Spanish,<br>German, Russian (Installation<br>required except for English) |
| | System Log | | Up to 100 (Internal), Up to 4,000 (SDHC/SD memory when the<br>recording format is set to JPEG.) error logs | |
| | Supported OS | | Microsoft® Windows® 7 Professional 64 bit/32 bit,<br>Microsoft® Windows Vista® Business SP1 32 bit,<br>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 (Microsoft® Windows® 7 Professional 64 bit/32 bit),<br>Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business SP1 32 bit),<br>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] | H.264: 1,280 × 960 / 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 (M-JPEG): 1,280 × 960 / 800 × 600 / VGA (640 × 480) /<br>QVGA (320 × 240), up to 30 fps | |
| | | Aspect ratio: [16 : 9] | H.264: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps<br>JPEG (M-JPEG): 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps | |
| | H.264/ MPEG-4 *1 | Transmission Mode | Constant bitrate / Framerate priority / Best effort | |
| | | 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 /<br>4,096 / 8,192* kbps / Unlimited * H.264 mode only | |
| | | Image Quality | LOW / NORMAL / FINE | |
| | | Refresh Interval | 0.1 fps ~ 30 fps | |
| | | Transmission Type | UNICAST / MULTICAST | |
| | JPEG (M-JPEG) | Image Quality | 10 steps | |
| | | Transmission Type | PULL / PUSH | |
| | Audio Compression | | G.726 (ADPCM) 32 kbps / 16 kbps, G.711 64 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 | | IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6<br>IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP,<br>FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP | |

| TV System | | NTSC | PAL |
|---|---|---|---|
| **Network** | FTP Client | Alarm image transfer, Periodic image transfer (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) / Schedule REC<br>JPEG recording: Manual REC / Alarm REC (Post) / Backup upon network failure<br>Compatible SD (SDHC) card: Panasonic 256 MB, 512 MB, 1 GB,<br>2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB* model * SDHC card | |
| | Face Detection | ON / OFF (with XML notification) | |
| | Cellular Phone Compatibility | JPEG image, panning/tilting/zoom control, AUX control (by access level) | |
| **Alarm** | Alarm Source | 3x Terminal inputs, VMD, Command alarm | |
| | Alarm Actions | SD memory recording, E-mail notification, Indication on browser,<br>Camera positioning, Preset position 1 ~ 64, FTP image transfer,<br>Terminal output, Panasonic protocol output, Auto track | |
| | Alarm Log | With SD memory card: 5,000 logs, Without SD memory card: 1,000 logs | |
| | Schedule | Alarm/VMD/Access permission, Preset position call, Position refresh,<br>H.264 recording | |
| **Input / Output** | Monitor Output (for adjustment) | 1.0 V [p-p] / 75 Ω, NTSC composite,<br>ø3.5 mm mini jack | 1.0 V [p-p] / 75 Ω, PAL composite,<br>ø3.5 mm mini jack |
| | Microphone/Line Input | MIC IN and Line IN are selectable. Ø3.5 mm monaural mini jack<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 (x1 each) | |
| **General** | Safety/EMC Standard | UL (UL60065), FCC (Part15 ClassA),<br>C-UL (CAN/CSA C22.2 No.60065),<br>DOC (ICES003 ClassA) | CE (EN60065, EN55022 ClassB,<br>EN55024), GOST (GOST R 51558) |
| | Power Source/ Consumption | 12 V DC: approx. 1,000 mA,<br>PoE: approx.12.0 W (IEEE802.3af compliant, Class 0 device) | |
| | Ambient Operating Temperature/Humidity | –10 °C ~ +50 °C (14 °F ~ 122 °F),<br>90 % or less (without condensation) | |
| | Dimensions | ø115 mm x 155 mm (H) (ø4-17/32" x 6-3/32" (H)) (excluding the 12 V DC power cord plug) | |
| | Mass (approx.) | 900 g (1.99 lbs.) | |

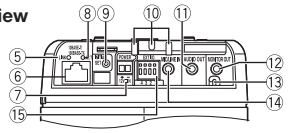
*1 H.264 and MPEG-4 are alternative. *2 [4 : 3] and [16 : 9] are alternative.

## Part Names and Functions

**Front View**

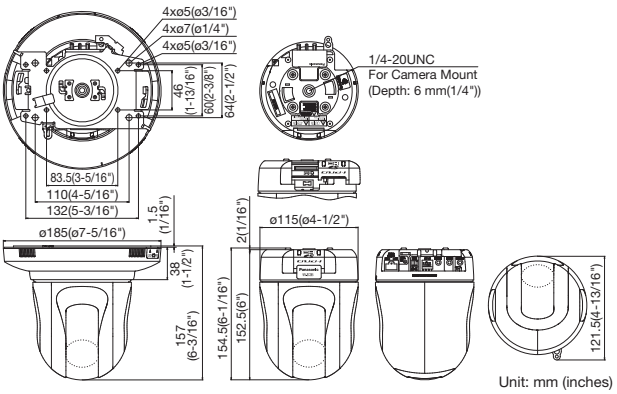


**Rear View**



① Transparent Part
② Panasonic Logo Plate
③ SDHC/SD Memory Card Slot Cover
④ SDHC/SD Memory Card Slot
⑤ Link Indicator
⑥ Network Connector
⑦ 12 V DC Power Supply Terminal
⑧ Access Indicator
⑨ INITIAL SET Button
⑩ Cable Guide
⑪ Audio Output Connector
⑫ Monitor Out Connector for Adjustment
⑬ Safety Wire Holder
⑭ Microphone/Line Input Connector
⑮ External I/O Terminals
⑯ Camera Mount Bracket
⑰ Safety Wire
⑱ Decorative Cover

## Appearance

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– "Super Dynamic", "SDII", "SDIII", "SD5", "SD5Link", "i-PRO" and "i-PRO SmartHD" logos are trademarks or registered trademarks of Panasonic Corporation.
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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.

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