

PANASONIC WV-S2231L FIXED DOME NETWORK CAMERA

TECHNICAL SPECIFICATIONS

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

28 20 00 ELECTRONIC SURVEILLANCE

28 23 00 VIDEO SURVEILLANCE

28 23 29 VIDEO SURVEILLANCE REMOTE DEVICES AND SENSORS

This specification is intended for use by the design/construction professional and any user of Panasonic Security products to assist in developing project specifications for security and video surveillance systems.

Specifier Notes: This guide specification incorporates CSI MasterFormat™ 2014 Edition Numbers and Titles.

Notes in Italics, such as this one, are explanatory and intended to guide the design professional/specifier and user in the proper selection and use of materials. This specification should be modified where necessary to accommodate individual project conditions.

PART 1 GENERAL

1.01 SUMMARY

1.02 WARRANTY

- A. Provide manufacturer's standard warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Panasonic System Networks Company
- B. Provide Video Surveillance Camera from single source manufacturer

2.2 PANASONIC WV-S2231L FIXED DOME NETWORK CAMERA

A. GENERAL CHARACTERISTICS

1. The Fixed Dome Camera shall deliver H.265 stream and H.264 stream.
2. The Fixed Dome Camera shall produce a resolution of 1,920 x 1,080 pixels (Full HD 1080p) at up to 60 fps with a 16:9 aspect ratio.
3. The Fixed Dome Camera shall produce a resolution of 2,048 x 1,536 pixels at 30fps with a 4:3 aspect ratio.
4. The Fixed Dome Camera shall utilize an approximate 1/3 type high sensitivity MOS image sensor.
5. The Fixed Dome Camera shall feature a 144dB wide dynamic range based on Enhanced Super Dynamic and Adaptive Black Stretch technology (ABS).
6. The Fixed Dome Camera shall produce a color image with a minimum illumination of 0.012 lux and a monochrome image with 0.006 lux at F1.6, maximum shutter of 1/30s and High gain mode.
7. The Fixed Dome Camera shall offer a built-in IR illumination to produce a clear monochrome image in zero lux conditions with 30m (98feet) irradiation distance.
8. The Fixed Dome Camera shall generate multiple simultaneous video streams of up to four (4) H.265 (Main profile) or H.264 (High profile) streams and JPEG streams.
9. The Fixed Dome Camera shall be equipped with intelligent auto mode, the technology for shooting license plate and person's face more clearly.
10. The Fixed Dome Camera shall be equipped with GOP control and Smart Facial coding which control an image quality of a stationary area, a moving area and a face, as bitrate reducing technology.
11. The Fixed Dome Camera shall produce encrypted stream.
12. The Fixed Dome Camera shall realize SSL / TLS communication with CA certificate.
13. A user shall be able to view video on a PC using a browser.
14. A user shall be able to view video on a smartphone and tablet using viewer software for iPhone and Android.
15. The Fixed Dome Camera shall offer Video Motion Detection (VMD) with four (4) programmable detection areas, 15 steps sensitivity level and 10 steps detection size.

16. The Fixed Dome Camera shall have Fog compensation function.
17. The Fixed Dome Camera shall have High light compensation (HLC) function.
18. The Fixed Dome Camera shall have Super Chroma Compensation (SCC) which realizes a better color reproducibility in the low illumination.
19. The Fixed Dome Camera shall provide up to eight (8) areas of electronic privacy masking.
20. The Fixed Dome Camera shall offer the prioritized stream control which transmits a video stream to a specified client PC or recorder preferentially.
21. The Fixed Dome Camera shall have a SD memory card slot that supports SD, SDHC and SDXC memory card for local storage.
22. The Fixed Dome Camera shall offer full-duplex bi-directional audio communication capability between the camera and monitoring site.
23. The Fixed Dome Camera shall have four (4) alarm sources of terminal input, VMD, command alarm and audio detection alarm that activate the processes such as SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification, Indication on browser, FTP image transfer and Panasonic alarm protocol output.
24. The Fixed Dome Camera shall conform to the ONVIF standard.

B. CAMERA

- | | |
|-----------------------------|---|
| 1. Image Sensor | 1/3 type MOS image sensor |
| 2. Scanning Mode | Progressive |
| 3. Minimum Illumination | |
| a. Color | 0.012 lux (F1.6, Maximum shutter: Max. 1/30s, Gain: On(High)) |
| b. B/W | 0.0 lux (with IR LED on) |
| | 0.006 lux (F1.6, Maximum shutter: Max. 1/30s, Gain: On(High)) |
| 4. Day & Night | IR Cut filter Removal |
| 5. Dynamic Range | 144 dB typ. (Super Dynamic: On) |
| 6. Built-in IR illumination | |
| a. Irradiation distance | Approx. 30m (98feet) |

C. Lens

- | | |
|--------------------------|---|
| 1. Vari-Focal Length | 2.8 ~ 10mm (1/8 ~ 13/32 inches) |
| 2. Max. Aperture Ratio | 1 : 1.6 (WIDE) ~ 1 : 3.4 (TELE) |
| 3. Angular Field of View | |
| a. 16:9 aspect ratio | H: 30° (TELE) - 109° (WIDE)
V: 17° (TELE) - 58° (WIDE) |
| b. 4:3 aspect ratio | H: 25° (TELE) - 90° (WIDE)
V: 19° (TELE) - 65° (WIDE) |
| 4. Focus adjustment | Auto Back Focus (ABF) / Manual |

D. VIDEO

- | | |
|--|---|
| 1. Compression Format | H.265, H.264, JPEG |
| 2. Image Resolution | |
| a. 16:9 aspect ratio (2 mega pixel mode) | 1,920 x 1,080 / 1,280 x 720 / 640 x 360 / 320 x 180 (30/60fps) |
| b. 4:3 aspect ratio (3 mega pixel mode) | 2,048 x 1,536 / 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 (30fps) |

3. H.265 / H.264
 - a. Transmission Mode Constant bitrate, VBR, Frame rate priority, Best effort
 - b. Frame Rate 1 / 3 / 5 / 7.5 / 10 / 12 / 15 / 20 / 30 / 60 fps
 - c. Bit Rate/Client 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 / 6,144 / 8,192 / 10,240 / 12,288 / 14,336 / 16,384 / 20,480 / 24,576 / 30,720 / 40,960 kbps
 - d. Image Quality
 - i. Constant bit rate Motion priority / Normal / Quality priority
 - ii. Best effort Motion priority / Normal / Quality priority
 - iii. VBR 10 steps
 - e. Transmission type Unicast, Multicast
4. JPEG
 - a. Image quality 10 steps
 - b. Transmission type Pull, Push

E. Audio

- a. Audio Compression G.726 (ADPCM) 32kbps / 16kbps, G.711 64kbps, AAC-LC
- b. Audio Mode OFF / Mic input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)

F. OPERATION

1. Super Dynamic On / Off
The level can be set in the range of 0 to 31.
2. Intelligent Auto On / Off
3. Adaptive Black Stretch The level can be set in the range of 0 to 255.
4. Fog compensation On / Off (Only when Intelligent Auto/auto contrast adjust is off.)
5. Black light compensation
High light compensation BLC (Black light compensation) / HLC (High light compensation) / Off
(Only when Super dynamic and Intelligent Auto is off)
6. AGC The level can be set in the range of 0 to 11.
7. Maximum shutter Off(1/30) to 1/10000
*1/30 Fix to 2/100 Fix is available during 30 fps mode only.
8. Day & Night On / Off / Auto1 (Normal) / Auto2 (IR Light) / Auto3 (SCC)
9. Digital Noise Reduction The level can be set in the range of 0 to 255.
10. Video Motion Detection On / Off, 4 areas, Sensitivity:15 steps, Detection size:10 steps
11. Privacy Zone On / Off, Up to 8 zones
12. Camera Title (OSD) Up to 20 characters
13. Digital Zoom 3.6x

G. NETWORK

1. Network Interface 10Base-T / 100Base-TX, RJ-45 connector
2. IP IPv6, IPv4
3. Supported Protocols
 - a. IPv6 TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, MLD, ICMP, ARP, DiffServ
 - b. IPv4 TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP, DiffServ
4. Max. User access Up to 14 users
5. Mobile Terminal Compatibility iPad, iPhone, Android™ mobile terminals

H. INTERFACE

1. Monitor Output VBS : 1.0 V [p-p] / 75 ohm, NTSC / PAL composite, Pin jack

- 2. Microphone input / Line input ø3.5 mm stereo mini jack
- 3. Audio Output ø3.5 mm stereo mini jack (monaural output)
- 4. External I/O Terminals ALARM IN 1 (DAY/NIGHT IN), ALARM IN 2 (ALARM OUT),
ALARM IN 3 (AUX OUT)
- 5. SD memory card slot 1 slot, SD/SDHC/SDXC

I. ELECTRICAL

- 1. Power Source DC 12V/560mA, PoE (DC48V, Class 0)
- 2. Power Consumption Approx. 6.8W (DC 12V), Approx. 7.2W (PoE)

J. SAFETY / EMC

- 1. Safety UL (UL60950-1), C-UL (CAN/CSA C22.2 No.60950-1), CE,
IEC60950-1
- 2. EMC FCC (Part15 Class A), ICES003 Class A, EN55032 Class B,
EN55024

K. MECHANICAL

- 1. Dimensions(D x H) ø129.5 mm x 102.5 mm (ø5-3/32 inches x 4-1/32 inches)
- 2. Weight Approx. 780 g (1.72 lbs)
- 3. Construction material
 - a. Main body Aluminum die cast
 - b. Front cover Clear polycarbonate resin
- 4. Finish
 - a. Main body Sail white
 - b. Front cover Clear

L. ENVIRONMENTAL

- 1. Vandal Resistance Compliant with IEC 62262 IK10
- 2. Operating Temperature -10 °C ~ +50 °C (14 °F ~ 122 °F)
- 3. Operating Humidity 10 % ~ 90 % (without condensation)