

PANASONIC WV-SUD638 / WV-SUD638-H / WV-SUD638-T PTZ 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™ 2004 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-SUD638 / WV-SUD638-H / WV-SUD638-T ANTI-SEVERE WEATHER PTZ NETWORK CAMERA

A. GENERAL CHARACTERISTICS

1. The PTZ Camera shall have an optional infrared (IR) LED unit to capture clear images up to 150 meters away in low light or complete dark conditions.
2. The PTZ Camera shall be rated to IP66 and NEMA 4X standard not just IP67 against water and dust ingress.
3. The PTZ Camera shall be rated to IK10 vandal resistance.
4. The PTZ Camera shall be rated to ISO14993 and be equipped with a body which can be operated in heavy-salt damage place.
5. The PTZ Camera shall be equipped with a body which can be operated under against a strong wind speed (60m/s, 135mph) and withstand against a strong wind speed (80m/s, 180mph).
6. The PTZ Camera shall be equipped with electric image stabilization and Pan/Tilt image stabilization for reducing vibration.
7. The PTZ Camera shall be equipped with the wiper for removing snow, rain and dirt to capture clear images.
8. The PTZ Camera shall be equipped with GOP control as bitrate reducing technology.
9. The PTZ Camera shall utilize 3D-Multi process Noise Reduction (3D-MNR) to remove visual noises in low light conditions.
10. The PTZ Dome Network Camera shall offer 30x optical zoom at 1,920 x 1,080 resolution, 45x extra optical zoom at 1,280 x 720 resolution.
11. The PTZ 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.
12. The PTZ Camera shall produce a resolution of 1,280 x 960 pixels at 30fps with a 4:3 aspect ratio.
13. The PTZ Camera shall utilize an approximate 1/3-inch high sensitivity MOS image sensor.
14. The PTZ Camera shall feature a 105 dB wide dynamic range based on Super Dynamic and Adaptive Black Stretch technology (ABS).

15. The PTZ Camera shall produce a color image with a minimum illumination of 0.06 lux and a monochrome image with 0 lux at F1.6 with the optional IR LED on, maximum shutter of 1/30s and High gain mode.
16. The PTZ Camera shall generate multiple simultaneous video streams of JPEG streams and up to four (4) high profile H.264 streams.
17. A user shall be able to view video on a PC using a browser.
18. A user shall be able to view video on a smartphone and tablet using Panasonic Security Viewer software for iPhone and Android.
19. The PTZ Camera shall offer Video Motion Detection (VMD) with four (4) programmable detection areas, 15 steps sensitivity level and 10 steps detection size.
20. The PTZ Camera shall provide Variable Image Quality on Specified Area (VIQS) which sets different image qualities to up to eight (8) areas in the full view to reduce bandwidth and storage capacity requirements.
21. The PTZ Camera shall have Face Super Dynamic which ensures clear face image.
22. The PTZ Camera shall have Fog compensation function.
23. The PTZ Camera shall have Super Chroma Compensation (SCC) which realizes a better color reproducibility in the low illumination.
24. The PTZ Camera shall provide up to thirty-two (32) areas of electronic privacy masking.
25. The PTZ Camera shall offer the prioritized stream control which transmits a video stream to the specified client PC or recorder preferentially.
26. The PTZ Camera shall have five (5) alarm sources of advanced auto tracking alarm, terminal input, VMD, Panasonic alarm command and audio detection alarm that activate the processes such as E-mail notification, HTTP alarm notification, Indication on browser, FTP image transfer and Panasonic alarm protocol output.
27. The PTZ Camera shall offer full-duplex bi-directional audio communication between the camera and monitoring site.
28. The PTZ Camera shall have a dehumidification unit to keep the camera dry inside.
29. The PTZ Camera shall conform to the ONVIF standard.

B. CAMERA

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|-------------------------|--|
| 1. Image Sensor | 1/3 type MOS image sensor |
| 2. Scanning Mode | Progressive |
| 3. Scanning Area | 5.346 mm (H) x 3.336 mm (V) {3/16 inches (H) x 1/8 inches (V)} |
| 4. Minimum Illumination | |
| a. Color | 0.06 lux (F1.6, Maximum shutter: Max. 1/30s, Gain: On(High)) |
| b. B/W | 0 lux (when the optional IR LED on) |
| 5. Dynamic Range | 105 dB typ. (Super Dynamic : ON, Light Control Mode : indoor) |
| 6. IR LED | |
| a. Irradiation distance | 150m (500feet) |

C. Lens

1. Vari-Focal Length 4.3 ~129.0 mm, x {23/64 inches - 7/8 inches}
2. Max. Aperture Ratio 1 : 1.6 (WIDE) ~ 1 : 4.7 (TELE)
3. Angular Field of View
 - a. 16:9 aspect ratio H: 2.3° (TELE) – 64.0° (WIDE)
V: 1.3° (TELE) – 38.0° (WIDE)
 - b. 4:3 aspect ratio H: 1.8° (TELE) – 50.0° (WIDE)
V: 1.3° (TELE) – 38.0° (WIDE)
 - c. Focus adjustment Auto Focus

D. VIDEO

1. Compression Format H.264, JPEG
2. Image Resolution
 - a. 16:9 aspect ratio (2-megapixel mode)
1,920 x 1,080 / 1,280 x 720 / 640 x 360 / 320 x 180 / 160 x 90
(30/60fps)
 - b. 4:3 aspect ratio (1.3-megapixel mode)
1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 / 160
x 120 (30fps)
3. H.264
 - a. Transmission Mode Constant bitrate / Variable bit rate / Frame rate priority /
Best effort / Advanced VBR
 - 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 Low / Normal / Fine
 - 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 64 / 96 / 128 kbps
- b. Audio Mode Off / Microphone (Line) input / Audio output / Interactive (Half
duplex) / Interactive (Full duplex)

F. OPERATION

1. Super Dynamic On / Off
2. Face Super Dynamic On / Off (Only when Super Dynamic is On)
3. Adaptive Black Stretch On / Off (Only when Super Dynamic is Off)
4. Fog compensation On / Off (Only when Super Dynamic and Adaptive black stretch
are Off)
5. AGC On (Low) / On (Mid) / On (High) / Off
6. Maximum Shutter
 - a. 16:9 aspect ratio (2-megapixel, 60 fps mode)
Off(1/60) to max. 1/10000 s
 - b. Other mode Off(1/30) to max. 1/10000 s
7. Day & Night Day and Night functionality with a built-in IR-cut filter
Off / On / Auto1 (Normal) / Auto2 (IR light) / Auto3 (SCC)
8. IR LED Off / Auto (High / Mid / Low) (with the optional IR LED)
9. Digital Noise Reduction High / Low
10. Video Motion Detection On/ Off, 4 areas, Sensitivity:15 steps, Detection size:10 steps
11. Privacy Zone On / Off, Up to 32 zones
12. VIQS On / Off, Up to 8 zones

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|------------------------|-------------------------------|
| 13. Camera Title (OSD) | On / Off, Up to 20 characters |
| 14. Panning Range | 360-degrees endless |
| 15. Panning Speed | |
| a. Manual | Approx. 0.065°/s to 100°/s |
| b. Preset | Up to approx.. 200°/s |
| 16. Tilting Range | |
| a. Upright | -45° to +90° |
| b. Forward tilt | -90° to +90° |
| c. Hanging | -90° to +30° |
| 17. Tilting Speed | |
| a. Manual | Approx. 0.065°/s to 100°/s |
| b. Preset | Up to approx.. 200°/s |

G. NETWORK

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|--------------------------------|---|
| 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, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, RTP, 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. Web Viewer | |
| a. Supported OS | Microsoft Windows 10, 8.1, 8, 7 |
| b. Supported Browser | Microsoft Internet Explorer 11.0, 10.0, 9.0, 8.0 |
| c. GUI Language | English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese |
| 6. Central Management Software | WV-ASM200 i-PRO Management Software
System 970 (WV-ASC970 IP Matrix Server Software and WV-ASM970 IP Matrix Client Software) |

H. INTERFACE

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|---------------------------|---|
| 1. Microphone/Line input | ø3.5 mm monaural mini jack |
| 2. Audio Output | ø3.5 mm stereo mini jack (monaural output) |
| 3. External I/O Terminals | ALARM IN 1 (DAY NIGHT IN / TIME ADJUSTMENT IN),
ALARM IN 2 (ALARM OUT), ALARM IN 3 (AUX OUT) |

I. ELECTRICAL

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|----------------------|--|
| 1. Power Source | AC100 to 240 V, 60W PoE |
| 2. Power Consumption | Approx. 61W (AC100 to 240 V), Approx. 51W (60W PoE)
Approx. 71W (AC100 to 240 V), Approx. 51W (60W PoE)
with the optional IR LED |

J. SAFETY / EMC

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|-----------|--|
| 1. Safety | UL (UL60950-1), C-UL (CAN/CSA C22.1 No.60950-1),
CE, IEC60950-22 |
| 2. EMC | FCC (Part15 Class A), ICES-003 Class A, EN55022 Class A
EN55024, IEC60945 |

K. MECHANICAL

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|---------------------------|---|
| 1. Dimensions (W x H x D) | 220 mm x 450 mm x 266 mm
(8-21/32 x 1ft 5-23/32 x 10-15/32 inches) |
| 2. Weight | Approx. 8.0 kg (17.64 lbs.) |
| 3. Construction material | |
| a. Main body | High-strength resin of salt damage resistance |

- b. Front cover clear part
Glass
- 4. Finish
 - a. Main body
 - WV-SUD638 Natural Silver
 - WV-SUD638-H Gray
 - WV-SUD638-T Brown
 - b. Front cover clear part
Clear

L. ENVIRONMENTAL

- 1. Vandal Resistance IEC 62262 IK10
- 2. Ingress Resistance IP67, IP66, IEC60529 measuring standard compatible, Type 4X (UL50), NEMA 4X compliant
- 3. Operating Temperature
 - a. WV-SUD638
 - 50 °C ~ +60 °C (-58 °F ~ 140 °F) when using AC100 to 240V
 - 30 °C ~ +60 °C (-22 °F ~ 140 °F) when using 60W PoE injector
 - 20 °C ~ +60 °C (-4 °F ~ 140 °F) when using IR-LED together with 60W PoE injector
 - b. WV-SUD638-H / WV-SUD638-T
 - 50 °C ~ +55 °C (-58 °F ~ 133 °F) when using AC100 to 240V
 - 30 °C ~ +55 °C (-22 °F ~ 133 °F) when using 60W PoE injector
 - 20 °C ~ +55 °C (-4 °F ~ 133 °F) when using IR-LED together with 60W PoE injector
- 4. Operating Humidity 10 % ~ 100 %