# WV-S2136GA

2MP (1080p) Indoor Dome Network Camera with AI Engine

## S-series 2MP Network camera with AI engine

- 2MP Indoor dome camera
- Up to 2 Edge AI analytic apps
- Built-in FIPS 140-2 Level 3 Compliant SecureElement(EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant

# SPECIFICATIONS

| Camera | |
|---|---|
| Image Sensor | Approx. 1/2.8 type CMOS image sensor |
| Scanning Area | 5.57 mm (H) × 3.13 mm (V)<br>{7/32 inches (H) × 1/8 inches (V)} |
| Minimum Illumination | Color :<br>0.018 lx (30IRE, F1.3, 1/30s, AGC:11)*<br>0.025 lx (50IRE, F1.3, 1/30s, AGC:11)<br>0.0016 lx (50IRE, F1.3, 16/30s, AGC:11)*<br><br>BW :<br>0.017 lx (50IRE, F1.3, 1/30s, AGC:11)<br>0.0011 lx (50IRE, F1.3, 16/30s, AGC:11)*<br>*Converted value |
| White Balance | ATW1 / ATW2 / AWC |
| Shutter Speed | [60 fps Mode] 1/60 Fix to 1/10000 Fix<br>[30fps/15fps mode] 1/30 Fix to 1/10000 Fix<br>[50 fps Mode] 1/50 Fix to 1/10000 Fix<br>[25fps/12.5fps mode] 1/25 Fix to 1/10000 Fix |
| Maximum Shutter | [60 fps mode] Max. 1/4000 s to Max. 16/30 s<br>[50 fps mode] Max. 1/4000 s to Max. 16/25 s<br>[30 fps mode] Max. 1/4000 s to Max. 16/30 s<br>[25 fps mode] Max. 1/4000 s to Max. 16/25 s<br>[15 fps mode] Max. 1/4000 s to Max. 16/30 s<br>[12.5 fps mode] Max. 1/4000 s to Max. 16/25 s |
| i-PRO Intelligent Auto | On / Off |
| i-PRO Super Dynamic*3 | On / Off, The level can be set in the range of 0 to 31. |
| Dynamic Range | Max.144 dB<br>(Super Dynamic : On, Level 31) |
| Adaptive Black Stretch | The level can be set in the range of 0 to 255. |
| Back light compensation / High light compensation | BLC (Back light compensation) / HLC (High light compensation) /Off (only when Super dynamic / Intelligent Auto : Off) |
| Fog Compensation | On / Off<br>(only when Intelligent auto / auto contrast adjust : Off) |
| Maximum Gain (AGC) | The level can be set in the range of 0 to 11. |
| Color/BW (ICR) | Off / On / Auto1 (Normal) / Auto2 (IR Light) / Auto3 (SCC) |
| Digital Noise Reduction (DNR) | The level can be set in the range of 0 to 255. |
| Video Motion Detection (VMD) | On / Off, 4 areas available |
| Scene Change Detection | On / Off, 1 areas available |
| Audio Detection | On / Off |
| AI Sound classification | Gunshot, Yell, Vehicle horn, Glass break |
| AI Analytics | AI Video Motion Detection, AI Privacy Guard, AI Face Detection, AI People Detection,<br>AI Vehicle Detection, AI Non mask Detection (prior to V2.70), AI Occupancy Detection, AI Scene Change Detection<br><br>For details :<br>https://i-pro.com/products_and_solutions/en/surveillance/products/analytics-software<br>3rd party applications are also available.<br>https://i-pro.com/products_and_solutions/en/surveillance/solutions/edge-ai-platform/application-list |

| | |
|---|---|
| Privacy Zone | On / Off, Up to 8 zones available |
| VIQS | On / Off, Up to 8 zones available |
| Image rotation*4 | 0 ° / 90 ° / 180 ° / 270 ° |
| Camera Title (OSD) | On / Off, Up to 40 characters<br>(alphanumeric characters, marks) |
| Focus Adjustment | Auto focus / Manual |

| **Lens** | |
|---|---|
| Optical Zoom | 3.1 x (Motorized zoom / Motorized Focus) |
| Extra zoom | 3.1x - 9.3x (when resolution is 640 x 360) |
| Focal Length | 2.9 - 9 mm {1/8 inches - 13/32 inches} |
| Angular Field of View | Horizontal : 36° (TELE) 115° (WIDE), Vertical : 20° (TELE) 61° (WIDE) |
| Maximum Aperture Ratio | 1 : 1.3 (WIDE) 1 : 2.5 (TELE) |
| Focusing Range | 0.3 m {11-13/16 inches} – ∞ |

| **DORI** | |
|---|---|
| Detect (25ppm / 8ppt) | Wide: 24.5 m / 80.3 ft, Tele: 118.2 m / 387.7 ft |
| Observe (62.5ppm / 19ppt) | Wide: 9.8 m / 32.1 ft, Tele: 47.3 m / 155.1 ft |
| Recognize (125ppm / 38ppt) | Wide: 4.9 m / 16.1 ft, Tele: 23.6 m / 77.5 ft |
| Identify (250ppm / 76ppt) | Wide: 2.4 m / 8.0 ft, Tele: 11.8 m / 38.8 ft |

| **System on Chip (SoC)** | |
|---|---|
| System on Chip (SoC) | Ambarella CV25M |

| **Adjusting Angle** | |
|---|---|
| Adjusting Angle | Horizontal : -240 to +120°,<br>Vertical : -30 to +85°,<br>Yaw : ±100° |

| **Browser GUI** | |
|---|---|
| Camera Control | Brightness, AUX On / Off |
| Audio | Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High<br>Audio Output : On / Off Volume adjustment : Low / Middle / High |
| GUI / Setup Menu Language | English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese |

| **Network** | |
|---|---|
| Network IF | 10Base-T / 100Base-TX,<br>RJ45 connector |
| Resolution H.265/ H.264/ JPEG (MJPEG) | [16:9 mode (60 fps mode)], [16:9 mode (30 fps mode)],[16:9 mode (50 fps mode)] , [16:9 mode (25 fps mode)] : 1920x1080, 1280x720, 640x360, 320x180<br>[4:3 mode (30 fps mode)], [4:3 mode (25 fps mode)] : 1280x960, VGA, QVGA<br>[4:3 mode (15 fps mode)], [4:3 mode (12.5 fps mode)] : 2048x1536, 1280x960, VGA, QVGA |
| JPEG - Image Quality | 10 steps |
| i-PRO Smart Coding | GOP (Group of pictures control):<br>Off/ Low (Variable GOP 1s-8s)/ Mid (Variable GOP 4s-16s)/ Advanced(Fixed GOP 60s w/1s key-frame)/ Frame rate control (Variable GOP 4s-16s with frame rate control)<br>*Advanced and Frame rate control are only available with H.265.<br>Smart VIQS: On(High)/On(Low)/Off, Smart P-picture control: On/Off |
| Audio Compression | G.726 (ADPCM) : 16 kbps / 32 kbps ,<br>G.711 : 64 kbps ,<br>AAC-LC : 64 kbps / 96 kbps / 128 kbps |
| Audio Transmission Mode | Off / Mic (Line) input / Audio output /<br>Interactive (Half duplex) /Interactive (Full duplex) |

| | |
|---|---|
| Supported Protocol | IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, SMTP, DNS, NTP, SNMPv1/v2/v3, DHCPv6,RTP, MLD, ICMP, ARP, IEEE 802.1X,DiffServ, FTP, SFTP, MQTT, LLDP<br>IPv4 : TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, FTP, SFTP, MQTT, LLDP |
| No. of Simultaneous Users | Up to 14 users (Depends on network conditions) |
| Secure | FIPS 140-2 level 3 (NXP® EdgeLock® SE050F), Device Certificate GlobalSign® pre-installed, HTTPS, User authentication, Digest authentication, Host authentication, IEEE802.1X, System log, Image transmission log, Brute-force protection, Alteration detection, Signed Firmware |
| SDXC/SDHC/SD Memory Card (Option) | H.265 / H.264 recording :<br>Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure<br>JPEG recording : Manual REC / Alarm REC (Pre/Post) / Backup upon network failure<br><br>Available SDXC/SDHC/SD Memory Card :<br>microSDXC memory card: 64 GB, 128 GB, 256 GB, 512 GB<br>microSDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB<br>microSD memory card: 2 GB |
| Mobile Terminal Compatibility | iPad, iPhone, AndroidTM terminals |
| ONVIF® Profile | G / M / S / T |

| **Alarm** | |
|---|---|
| Alarm Source | 3 terminals input, VMD alarm, Command alarm, Audio detection alarm |
| Alarm Actions | SDXC/SDHC/SD memory recording, E-mail notification,HTTP alarm notification Indication on browser,Panasonic alarm protocol output |

| **Input/Output** | |
|---|---|
| Audio Input | 3.5 mm stereo mini jack |
| Audio Output | 3.5 mm stereo mini jack (monaural output)<br>Output impedance : Approx. 600 Ω (unbalanced) , Output level : 20 dBV |
| External I/O Terminals (Cable) | ALARM IN 1 (Black & white input, Auto time adjustment input) (x1),<br>ALARM IN 2 (ALARM OUT) (x1), ALARM IN 3 (AUX OUT) (x1) |
| Monitor Output | Yes (for adjustment)<br>Pin jack, NTSC or PAL signal can be output from camera |

| **General** | |
|---|---|
| General | UL (UL62368-1), c-UL (CSA C22.2 No.62368-1),<br>CE, IEC62368-1 |
| EMC | FCC (Part15 ClassA), ICES-003 ClassA, EN55032 ClassB, EN55035 |
| Power Source and Power Consumption | DC power supply : DC12 V 410 mA, Approx. 4.9 W<br>PoE (IEEE802.3af compliant) Device : DC48 V 110 mA, Approx. 5.3 W (Class 2 device) |
| Ambient Operating Temperature (AV-HS450C1N/E) | -10 °C to +50 °C (14 °F to 122 °F) |
| Ambient Operating Humidity | 10 to 90 % (no condensation) |
| Dimensions | 129.5 mm x 101 mm (H) { 5-3/32 inches x 3-31/32 inches (H)}<br>Dome radius 40 mm {1-9/16 inches} |
| Mass (Approx.) | Approx. 470 g {1.04 lbs.} |
| Finish | Main body : ABS resin, i-PRO white / Dome section : Acrylic resin, Clear |

# NOTES

Important
– Safety Precautions : Carefully read the Basic Information,Installation Guide and Operating Instructions before using this product.
– i-PRO Co., Ltd. cannot be held responsible for the performance of the network and/or other manufacturers' products used on the network.

– Masses and dimensions are approximate.
– Specifications are subject to change without notice.
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# OPTIONAL ACCESSORIES

Select a compatible accessory
[Accessory Selector (i-pro.com)]

WV-QWL500-W
Mount Bracket

WV-QSR100-W
Sun Shade

WV-QPL500-W
Mount Bracket

WV-QJB500-W
Mount Bracket

WV-QEM100-W
Mount Bracket

WV-QCN500-W
Mount Bracket

WV-QCL101-W
Mount Bracket

WV-QCL100-W
Mount Bracket

WV-Q105A
Mount Bracket

WV-CF5SA
Dome Cover

WV-PM500
Compact microphone unit

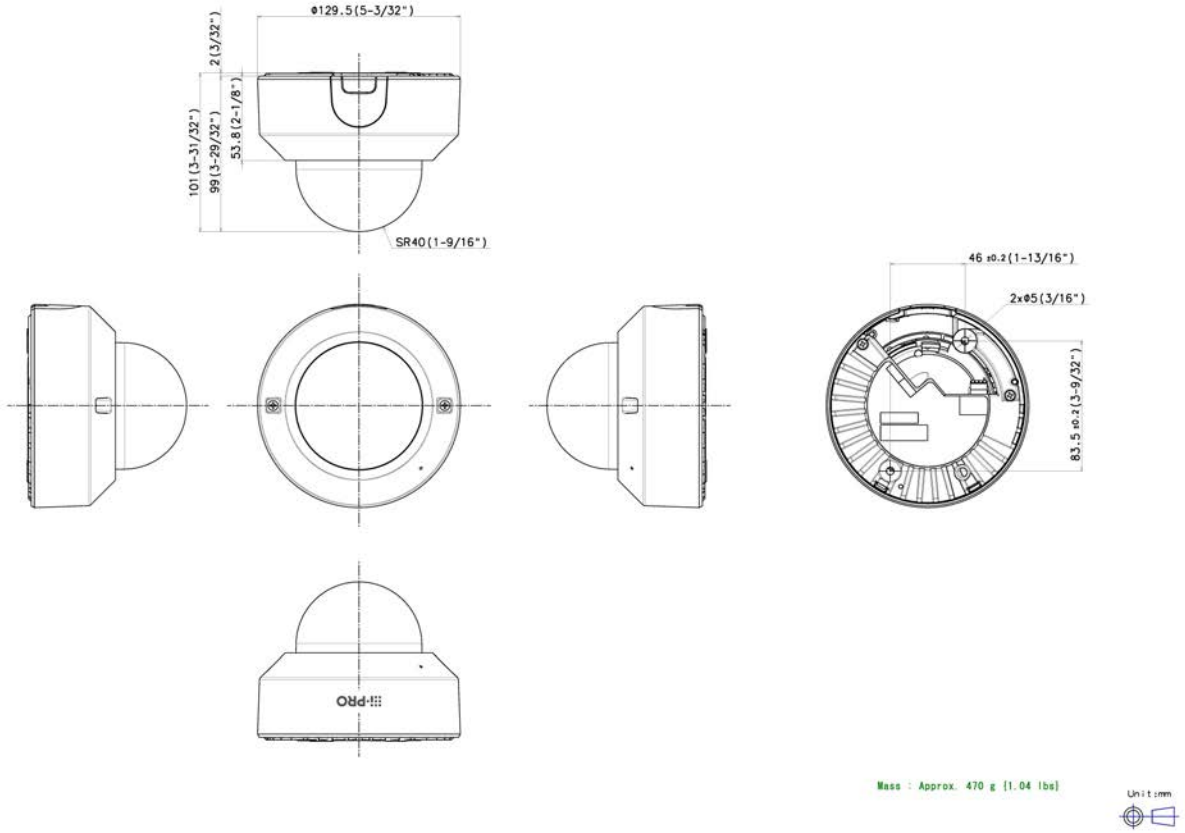
WV-QDC101C
Dome Cover

WV-SDB128G
i-PRO SD Memory Card

WV-SDB064G
i-PRO SD Memory Card

WV-SDB032G
i-PRO SD Memory Card

# APPEARANCE


φ129.5(5-3/32")
2(3/32")
53.8(2-1/8")
101(3-31/32")
99(3-29/32")
SR40(1-9/16")
46 ±0.2(1-13/16")
2xφ5(3/16")
83.5 ±0.2(3-9/32")
Mass : Approx. 470 g (1.04 lbs)
Unit:mm