

WV-U22750-F3L

4K AI Indoor Vandal IR Dome Camera

U-series dome camera with edge AI image analytics



- 4K Indoor vandal dome camera
 - AI-based image analytics using AI-VMD app
 - Audio recording
 - Built-in IR LED (28m/92ft)
 - IP42, IK10 certified
 - Built-in FIPS 140-3 Level 3 Certified SecureElement (EdgeLock® SE052F 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) {7/32 inches (H) × 1/8 inches (V)} |
| Minimum Illumination | Color : 0.31 lx (30IRE, F2.0, 1/30 s, AGC: 11)* 0.44 lx (50IRE, F2.0, 1/30 s, AGC: 11) 0.028 lx (50IRE, F2.0, 16/30 s, AGC: 11)* BW : 0 lx (50IRE, F2.0, 1/30 s, AGC: 11, IR LED: On) 0.18 lx (50IRE, F2.0, 1/30 s, AGC: 11) 0.011 lx (50IRE, F2.0, 16/30 s, AGC: 11)* * Converted value |
| White Balance | ATW1/ ATW2/ AWC |
| Maximum Shutter | [15 fps mode] Max. 1/10000 s to Max. 16/30 s [12.5 fps mode] Max. 1/10000 s to Max. 16/25 s |
| Intelligent Auto | On/Off |
| Super Dynamic | On/Off (Range : 0 to 31) |
| Dynamic Range | Max. 120 dB (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 | Back light compensation (BLC) / High light compensation (HLC) / Off (Range : 0 to 31) *only when Super Dynamic/ Intelligent Auto: Off |
| Fog Compensation | On/Off (Range : 0 to 8) *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(IR Light Off) / On(IR Light On) / Auto1(IR Light Off) / Auto2(IR Light On) / Auto3(SCC) |
| IR LED Light | Maximum irradiation distance: 28 m {Approx. 92 ft} (30IRE)* 20 m {Approx. 66 ft} (50IRE) * Converted value |
| Digital Noise Reduction | The level can be set in the range of 0 to 255. |
| Video Motion Detection (VMD) | On/ Off (4 areas available) |
| Scene Change Detection (SCD) | On/ Off (1 area available) |
| Audio Detection | On/ Off |
| AI Sound Classification | Selectable from Gunshot, Yell, Vehicle horn, Glass break |
| Analytics | AI Video Motion Detection |
| Maximum No. of Applications | 1 (Non AI app) |
| Privacy Zone | On/Off (Up to 8 zones available) |
| VIQS | On/Off (Up to 8 zones available) |
| Image Rotation | 0° (Off) / 90° / 180° (Upside-down) / 270° |
| Camera Title (OSD) | On/Off Up to 40 characters, Up to 2 lines (alphanumeric characters, marks) |

| | |
|---------------------------|--|
| Optical Zoom | - |
| Digital (electronic) Zoom | max 6.0x |
| Focal Length | 3.2 mm {1/8 inches} |
| Angular Field of View | [16:9 mode] Horizontal: 105° Vertical: 57° [4:3 mode] - |
| Adjusting Angle | Horizontal(PAN) angle: -175 ° to +175 ° Vertical(TILT) angle: -30 ° to +80 ° Azimuth(YAW) angle: -100 ° to +100 °- |
| Maximum Aperture Ratio | 1:2.0 |
| Focus Range | 1.5m {59-1/16 inches} – ∞ |
| Aperture Range | F2.0 |

| DORI | |
|----------------------------|-----------------|
| Detect (25ppm / 8ppf) | 58.9m {193.3ft} |
| Observe (62.5ppm / 19ppf) | 23.6m {77.3ft} |
| Recognize (125ppm / 38ppf) | 11.8m {38.7ft} |
| Identify (250ppm / 76ppf) | 5.9m {19.3ft} |

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

| Browser GUI | |
|---------------------------|---|
| GUI / Setup Menu Language | English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese |
| Browser *1 | Microsoft Edge, Firefox, Google Chrome |

| Network | |
|--|--|
| Network IF | 10BASE-T/100BASE-TX, RJ45 connector |
| Resolution | [16:9mode(15fps mode)] [16:9mode(12.5fps mode)] 3840x2160/2560x1440/1920x1080/1280x720/640x360/320x180 [4:3mode] - |
| H.265/H.264 Transmission Priority/Type | [Transmission priority] Constant bit rate/ VBR/ Frame rate/ Best effort [Transmission type] Unicast port (AUTO)/ Unicast port (MANUAL)/ Multicast |
| No. of Stream | 4 |
| JPEG (MJPEG) Image Quality | 10 steps: 0(SUPER FINE) - 9 (LOW) |
| Smart Coding | [GOP(Group of pictures) control] Off/ Low (Variable GOP 1s-8s)/Mid (Variable GOP 4s-16s)/ Advanced (Fixed GOP 60 seconds with 1 second Key frame)/ Frame rate control (Variable GOP 4s-16s with frame rate control) *Advanced and Frame rate control are only available with H.265. [Smart VIQS] On (High)/ On (Low)/ Off [Smart P-picture control] On/Off |
| Audio Compression Method *2 | G.726 (ADPCM): 16 kbps/ 32 kbps G.711: 64 kbps AAC-LC 64 kbps/ 96 kbps/ 128 kbps |
| Audio Transmission Mode | Off / Mic (Line) input / Audio output / 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, LLDP, MQTT 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, LLDP, MQTT |
| No. of Simultaneous Users | Up to 14 users (Depends on network conditions) |
| Secure | FIPS 140-3 level 3 (NXP® EdgeLock® SE052F), 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) | microSDXC memory card: 64 GB, 128 GB, 256 GB, 512 GB microSDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB microSD memory card: 2 GB |
| Mobile Terminal Compatibility | iPad / iPhone (iOS 8.0 or later), Android™ terminals |
| ONVIF®Profile | G / M / S / T |

| Alarm | |
|---------------|---|
| Alarm Source | VMD alarm, SCD alarm, Command alarm, Audio detection alarm |
| Alarm Actions | SDXC/SDHC/SD memory recording, E-mail notification, HTTP alarm notification Indication on browser, TCP alarm notification output |

| Input/Output | |
|------------------------|---|
| Audio Input | ø3.5 mm stereo mini jack [For microphone input] Recommended applicable microphone: Plug-in power type (Sensitivity of microphone: -51 dB to -38 dB (0 dB=1 V/Pa, 1 kHz)) Input impedance: Approx. 2 kΩ (unbalanced) Supply voltage: 2.5 V ±0.5 V [For line input] Input level: Approx. -10 dBV |
| Audio Output | ø3.5 mm stereo mini jack (Audio output is monaural.) Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV |
| External I/O Terminals | - |
| Monitor Output | - |

| General | |
|----------------------------------|--|
| Safety | UL (UL62368-1 3Ed), c-UL (CAN/CSA C22.2 NO.62368-1-19), IEC62368-1 3Ed. |
| EMC | FCC Part15 Subpart B ClassA, ICES-003 Issue 7 ClassA, EN55032 ClassA, EN55035 |
| Power Source / Power Consumption | [Power Source] PoE (IEEE802.3af Compliant) [Power Consumption] PoE DC 48 V : 200 mA / Approx. 9.6 W (Class 0 device) |
| Ambient Operating Temperature | -10 °C to +50 °C {+14 °F to +122 °F} |
| Ambient Operating Humidity | 10 % to 90 % (no condensation) |
| Water and Dust Resistance | IP42 (IEC 60529) |
| Shock Resistance | IK10(IEC 62262) |
| Dimensions | ø109 mm x 62 mm (H) {ø4-9/32 inches x 2-7/16 inches (H)} Dome radius 30.5 mm {1-3/16 inches} |
| Mass (approx.) | Approx. 250 g {0.55 lbs} |
| Finish | Main body: *** (Aluminum die cast, i-PRO white) Outer fixing screws: *** (Stainless steel (Corrosion-resistant treatment)) Dome cover: *** (PC resin, Clear(with ClearSight coating)) Front panel: *** (PC resin, Clear(with ClearSight coating)) |

NOTES

*1 For information on the operation verification of the web browsers, refer to our support website <Control No.: C0132>.

*2 When recording audio on an SD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity) .

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 \(i-pro.com\)](http://i-pro.com).



WV-QWL500-W
Mount Bracket



WV-QPL500-W
Mount Bracket



WV-QJB502A-W
Mount Bracket



WV-QJB500-W
Mount Bracket



WV-QCN500-W
Mount Bracket



WV-QCL101-W
Mount Bracket



WV-QCL100-W
Mount Bracket



WV-QAT502-W
Gangbox Adapter



WV-Q105A
Mount Bracket



WV-QDC510G
Dome Cover



WV-QDC510C
Dome Cover



WV-QCA504
Audio Cable



WV-PM500
Compact microphone
unit



WV-SDB256G
i-PRO SD Memory Card



WV-SDB128G
i-PRO SD Memory Card



WV-SDB064G
i-PRO SD Memory Card



WV-SDB032G
i-PRO SD Memory Card

APPEARANCE

