

### WV-U65300-ZY

2MP (1080p) 3.1x Outdoor PTZ Network Camera

### **U series PTZ camera**

U-Series launch gives customers PTZ's that meet top security certifications (FIPS 140-2 level 3) while also providing a unique blend of imaging performance, reliability and affordability.



- 2MP (1080p) 1920x1080
- 3.1x optical zoom
- Intelligent Auto
- Super Dynamic 144dB
- Color night vision (0.001 to 0.01 lx)
- Durable Pan/Tilt gear mechanism
- IP66, IK10 certified
- Built-in FIPS 140-2 Level 3 Certified Secure Element (EdgeLock® SE050F NXP® Semiconductors)
- NDAA Compliant













# **SPECIFICATIONS**

Camera	
Image Sensor	Approx. 1/2.8 type CMOS image sensor
Minimum Illumination	Color: 0.01 lx(50IRE, F1.3, 1/30s) Color: 0.001 lx(50IRE, F1.3, 16/30s) BW: 0.004 lx (50IRE, F1.3, 1/30s) BW: 0.0003 lx (50IRE, F1.3, 16/30s)
White Balance	ATW1 / ATW2 / AWC
Shutter Speed	[60 fps Mode] 1/60 Fix to 1/10000 Fix, [30 fps/15 fps mode] 1/30 Fix to 1/10000 Fix [50 fps Mode] 1/50 Fix to 1/10000 Fix, [25 fps/12.5 fps mode] 1/25 Fix to 1/10000 Fix
Intelligent Auto	On / Off
Super Dynamic	On / Off, The level can be set in the range of 0 to 31.
Dynamic Range	Max.144 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	BLC (Back light compensation) / HLC (High light compensation) / Off The level can be set in the range of 0 to 31 (only when Super dynamic / Intelligent Auto : Off)
Fog compensation	On / Off, The level can be set in the range of 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 / Auto1 / Auto2 / Auto3 (SCC)
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 areas available
Audio Detection	On / Off
Al Sound Classification	-
Al Analytics	-
Privacy Zone	On / Off, Up to 32 zones available
VIQS	On / Off, Up to 8 zones available
Camera Title (OSD)	On / Off, Up to 40 characters (alphanumeric characters, marks)
Focus Adjustment	Auto focus
Lens	
Optical zoom	3.1x (Motorized zoom / Motorized Focus)
Extra zoom	Max. 4x (3.1 to 4x : When resolution is 1280 x 720)
Focal Length	2.9 - 9 mm {1/8 inches - 11/32 inches}
Angular Field of View	[16 : 9 mode] Horizontal : 36° (TELE) – 113° (WIDE), Vertical : 20° (TELE) – 60° (WIDE) [4 : 3 mode] Horizontal : 26° (TELE) – 82° (WIDE), Vertical : 20° (TELE) – 60° (WIDE)

Maximum Aperture Ratio	1:1.3 (WIDE) -1:2.5 (TELE)
Focus Range	0.3 m {11-13/16 inches} - ∞
DORI	
Detect (25ppm / 8ppf)	Wide: 25.4m / 83.4 ft, Tele: 118.2 m / 387.7 ft
Observe (62.5ppm / 19ppf)	Wide: 10.2 m / 33.4 ft, Tele: 47.3 m / 155.1 ft
Recognize (125ppm / 38ppf)	Wide: 5.1 m / 16.7 ft, Tele: 23.6 m / 77.5 ft
Identify (250ppm / 76ppf)	Wide: 2.5m / 8.3 ft, Tele: 11.8 m / 38.8 ft
System on Chip (SoC)	
System on Chip (SoC)	Ambarella CV25M
Adjusting Angle	
Adjusting Angle	Horizontal : 0 to +350°, Vertical : 0 to +90°, Yaw : 0°
Pan/tilt	
Panning Range	0 - +350°
Panning Speed	Manual: Approx. 0.065°/s – 150°/s , Preset: Up to approx. 150°/s
Tilting Range	Operational 0 – +90°
Tilting Speed	Manual: Approx. 0.065°/s -150°/s Preset: Up to approx. 150°/s
Preset Positions	256 positions
Auto Mode	Auto pan/ Preset sequence/ Patrol
Self Return	10 s/ 20 s/ 30 s/ 1 min/ 2 min/ 3 min/ 5 min/ 10 min/ 20 min/ 30 min/ 60 min
Browser GUI	
Camera Control	Brightness, AUX On / Off
Audio	Mic (Line) Input : On / Off Volume adjustment : Low / Middle / High Audio Output : On / Off Volume adjustment : Low / Middle / High
GUI / Setup Menu Language	English, Italian, French, German, Spanish, Portuguese, Russian, Chinese, Japanese
Browser	Microsoft Edge, Firefox, Google Chrome
Network	
Network IF	10 Base-T / 100 Base-TX, 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 [4:3 mode (30 fps mode)], [4:3 mode (25 fps mode)] 1280x960, VGA, QVGA [4:3 mode (15 fps mode)], [4:3 mode (12.5 fps mode)] 2048x1536, 1280x960, VGA, QVGA
н.265/н.264	[Transmission Mode] Constant bit rate / VBR / Frame rate / Best effort [Transmission Type] Unicast port (AUTO) / Unicast port (MANUAL) / Multicast
JPEG	[Image Quality] 10 steps
Smart Coding	GOP (Group of pictures) control: 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)
	*Advanced and Frame rate control are only available with H.265. Smart Coding: Auto VIQS: On/Off

Audio Compression	G.726 (ADPCM) : 16 kbps / 32 kbps G.711 : 64 kbps AAC-LC*6 : 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, SFTP, MQTT, LLDP IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDNS, NTP, NMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, SFTP, MQTT, LLDP, NTCIP
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 (V2.50 or later)
SDXC/SDHC/SD Memory Card (Option)	H.265 / H.264 recording:  Manual REC / Alarm REC (Pre/Post) / Schedule REC / Backup upon network failure  JPEG recording:  Manual REC / Alarm REC (Pre/Post) / Backup upon network failure  Compatible SDXC/SDHC/SD Memory Card:  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/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, 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 k $\Omega$ (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 (monaural output) Output impedance : Approx. 600 $\Omega$ (unbalanced) Output level : –20 dBV
External I/O Terminals	Output impedance : Approx. 600 $\Omega$ (unbalanced)
External I/O Terminals  Monitor Output	Output impedance : Approx. 600 $\Omega$ (unbalanced) Output level : -20 dBV  ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1)
·	Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV  ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)  Yes (for adjustment) Φ3.5mm stereo mini jack, NTSC or PAL signal can be output from camera
Monitor Output	Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV  ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)  Yes (for adjustment) Φ3.5mm stereo mini jack, NTSC or PAL signal can be output from camera
Monitor Output  General	Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV  ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)  Yes (for adjustment) Φ3.5mm stereo mini jack, NTSC or PAL signal can be output from camera *WV-QCA501A is required
Monitor Output  General Safety	Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV  ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)  Yes (for adjustment) Φ3.5mm stereo mini jack, NTSC or PAL signal can be output from camera *WV-QCA501A is required  UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1
Monitor Output  General Safety EMC	Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV  ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)  Yes (for adjustment) Φ3.5mm stereo mini jack, NTSC or PAL signal can be output from camera *WV-QCA501A is required  UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1  FCC (Part15 ClassA), ICES-003 Issue 7 ClassA, EN55032 ClassA, EN55035  DC12 V, PoE (IEEE802.3af) DC12 V: 890 mA / Approx. 10.7 W
General Safety EMC Power Source and Power Consumption	Output impedance: Approx. 600 Ω (unbalanced) Output level: -20 dBV  ALARM IN 1 (Alarm input 1/ Black & white input/ Auto time adjustment input) (x1) ALARM IN 2 (Alarm input 2/ ALARM OUT) (x1), ALARM IN 3 (Alarm input 3/ AUX OUT) (x1)  Yes (for adjustment) Φ3.5mm stereo mini jack, NTSC or PAL signal can be output from camera *WV-QCA501A is required  UL (UL62368-1), c-UL (CSA C22.2 No.62368-1), CE, IEC62368-1  FCC (Part15 ClassA), ICES-003 Issue 7 ClassA, EN55032 ClassA, EN55035  DC12 V, PoE (IEEE802.3af) DC12 V: 890 mA / Approx. 10.7 W PoE DC 48 V: 250 mA / Approx.12.0 W (Class 0 device)  -30 °C to +55 °C (-22 °F to +131 °F) (Power On range: -20 °C to +55 °C {-4 °F to +131 °F})

Water and Dust Resistance	IP66, IEC60529 measuring standard compatible, Type 4X(UL50E), NEMA 4X compliant
Shock Resistance	IK10 (IEC 62262)
Wind Resistance	Up to 40 m/s {approx. 89 mph}
Other standard support	NEMA TS2(2.2.7-2.2.9)
Dimensions	ø155 mm x 134 mm (H) {ø6-3/32 inches x 5-9/32 inches (H)}
Mass (Approx.)	Approx. 1.6 kg {3.53 lbs.}
Finish	Main body: Aluminum die cast and polycarbonate resin, i-PRO white Dome section: Polycarbonate 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-QCL100-W Mount Bracket



WV-QCL101-W Mount Bracket



WV-QCL501-W Mount Bracket



WV-QCN500-W Mount Bracket



WV-QEM502-W Ceiling Mount Bracket



WV-QJB500-W Mount Bracket



WV-QJB501-W Base Bracket



WV-QJB504-W Base Bracket



WV-QPL500-W Mount Bracket



WV-QSR501-W Mount Bracket



WV-QSR501F-W Mount Bracket



WV-QSR501F1-W Mount Bracket



WV-QSR501M-W Mount Bracket



WV-QSR501M1-W Mount Bracket



WV-QWL500-W Mount Bracket



WV-QWL501-W Mount Bracket



PACA4W Corner Mount Adapter Bracket



PAPM4W Pole Mount Bracket



PPRM35AW
Parapet Mount Bracket



PWM25W Gooseneck Wall Mount



PWM40AW Wall Mount Bracket



WV-CW7CN Dome cover



WV-CW7SN Dome cover



WV-QCA500A RJ45 Ethernet Cable







WV-PM500 Compact microphone unit for surveillance cameras



## **APPEARANCE**

