Ultra HD 4K PTZ Camera – UV420

UV420 Ultra HD 4K camera is featured with advanced ISP processing technology and algorithm to provide high quality image and smooth motion. It supports H.264/H.265 encoding which makes motion video more fluent and clear under low bandwidth conditions.



Key Features:

4K Ultra HD

1/2.8 & 1/2.5 inch high quality 4K SONY CMOS sensor; 8.51 megapixel, resolution is up to 4K (3840x2160) and compatible with 1080P, 720P and other resolutions. 4K 60FPS

- Optical Zoom Lens
 - 12X and 5X optical zoom lens, with 70° & 80° FOV without distortion.
- Leading Auto Focus Technology
 Advanced and leading algorithm enables the camera auto focus fast and accurately.
- Low Noise and High SNR
 Low poise CMOS ensures

Low noise CMOS ensures super high SNR image. The advanced 2D/3D noise reduction technology reduces the noise while ensuring high image clarity.

- Multiple Video Outputs:
 HDMI, USB3.0 and LAN support audio
 - HDMI, USB3.0 and LAN support audio video output
- Multiple USB Compression Encoding Format:

YUY2,MJPEG,H.264,NV12 video encoding formats

 Multiple Audio Compression Standard Audio-in supports AAC, MP3 and G.711A audio compression; 8000,16000,32000,44100,48000 sampling frequency

Built-in gravity sensor Built-in gravity sensor supports PTZ auto-flip function, easy to install.

- Multiple network protocol
 Supports ONVIF, GB/T28181, RTSP,
 RTMP protocols; RTMP push mode,
 easy to be connected to streaming
 server (Wowza,FMS); RTP multicast
 mode; VISCA control protocol
- Control Interface
 RS422 (compatible with RS485); RS232
 in & out; RS232 cascade connection
- Multiple Control Protocol
 Support VISCA, PELCO-D, PELCO-P protocols; Support automatic identification protocols.
- Multiple preset
 Up to 255 presets
 (10 presets for remote control).
- IR & Wireless Remote Control
 IR remote control (default)
 Wireless remote control (optional):
 2.4G wireless remote control is not affected by the angle, distance or infrared interference. Far-end-control is also available.
- Multiple Applications

Online-education, Lecture Capture, Broadcasting, Video conferencing, Tele-medicine, Unified Communication, Emergency command and control systems, etc.

Order Model No.:

UV420A-12X Optical Zoom

UV420B-5X Optical Zoom

Technical Specifications:

Model	UV420A	UV420B
Optical Zoom	12X	5X
FOV	Horizontal: $6.55^{\circ}(\text{tele}) \sim 69.4^{\circ}(\text{wide})$ vertical: $3.66^{\circ}(\text{tele}) \sim 42.8^{\circ}(\text{wide})$	Horizontal: 26.51° (tele) \sim 79.18° (wide) vertical: 15.29° (tele) \sim 49.22° (wide)
Aperture	F1.6 - F2.8±5%	F2.0 - F2.8±5%
Image Sensor	1/2.8 Inch SONY CMOS Sensor	1/2.5 Inch SONY CMOS Sensor
Effective pixels	8.51M; 16:9	8.51M; 16:9
Video Format	HDMI Video Output Format: 4KP60, 4KP50, 4KP30, 4KP25, 1080P60, 10 1080P30, 1080P25, 720P60, 720P50 USB3.0 Video Output Format: YUY2/NV12: 1920×1080P30, 1280×720P30, 1024×576F 800×448P30, 640×360P30, 640×480P30, 3 MJPEG/H.264: 1920×1080P30, 1280×720P30, 1024×576F 800×448P30, 640×360P30, 640×480P30, 3 USB3.0 downward compatible USB2.0: YUY2/NV12: 640×360P30, 640×480P30, 3 MJPEG/H.264: 3840×2160P30, 1920×1086 960×540P30, 800×448P30, 640×360P30, 6	P30, 960×540P30, B320×176P30 P30, 960×540P30, B320×176P30 P30, 1280×720P30, 1024×576P30,
Minimum Illumination	0.05Lux (F1.8, AGC ON)	
DNR	2D & 3D DNR	
White Balance	Auto / Manual/ One Push/ Specified Color	r Temperature
Focus	Auto / Manual/ One Push	·
exposure mode	Auto/ Manual / Shutter Priority / Aperture	e Priority / Brightness priority
Aperture	F1.8 - F11, CLOSE	
shutter speed	1/25 - 1/10000	
BLC	OFF/ON	
Dynamic range	OFF/ Dynamic Level Adjustment	
Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve	
SNR	≥50dB	

Interface Features		
Interfaces	HDMI, LAN(POE), USB3.0(Type B, compatible with USB2.0), A-IN, RS232-in & out; RS422(Compatible with RS485), Dial switch, DC12V, Power Switch	
Video Compression	LAN: H.264, H.265 USB 3.0: MJPG, H264, YUY2, NV12	
Audio-in Interface	Double track 3.5mm linear Input	
Audio out	HDMI, LAN, USB3.0	
Audio Compression	AAC, MP3, G.711A	
LAN	10M/100M/1000M adaptive Ethernet port, support POE and audio/video output	
Network Protocol	RTSP, RTMP, ONVIF, GB/T28181, VISCA Control Protocols, Remote Upgrade, reboot and reset	
Control Interface	RS232-IN, RS232-OUT, RS422 (RS485)	

Serial Protocol	VISCA/ Pelco-D / Pelco-P; Baud rare: 115200/38400/9600/4800/2400
USB Communication Protocol	UVC (video) , UAC (audio)
Power Interface	HEC3800 (DC12V)
Power Adapter	In: AC110V-AC220V ; Out: DC12V/2.5A
Input Voltage	DC12V±10%
Input Current	<1A
Power Consumption	<12W

PTZ Parameters	
Pan Rotation	-170°∼+170°
Tilt Rotation	-30°∼+90°
Pan Control Speed	0.1%s~120%s
Tilt Control Speed	0.1%s~80%s
Preset Speed	Pan: 120%s, Tilt: 80%s
Preset Number	255 Presets (10 presets by remote control)

Other Parameters	
Storage Temperature	-10°C∼+60°C
Storage Humidity	20%~95%
Working Temp erature	-10°C∼+50°C
Working Humidity	20%~80%
Dimension	181 (L) mm × 115mm (W) × 149mm (H)
Usage	1.15 kg
Storage Temperature	Indoor

Accessories	
Standard	Power supply and adapter,RS232 Cable,USB3.0 Cable, IR remote control, User Manual
Optional	Wall / Ceiling Mount

Dimension: (unit: mm)

