UV470A0&A1&A2

This is a brand new UHD 4K PTZ camera. It has perfect functions, superior performance and rich video output interfaces; Featuring with advanced ISP processing algorithms, offering vivid and high resolution video with a strong sense of depth and fantastic color rendition. It supports H.264/H.265 encoding which makes motion video more fluent and clear under low bandwidth conditions.

- **4K UHD Image:** 1/1.8-inch 8.42 megapixel high-quality image sensor, maximum resolution up to 3840x2160 with output frame rate up to 60 fps.
- **Multiple Optical Zoom Lens:** Support 12X, 20X and 31X optical zoom lens.
- **Leading Auto Focus Technology:** Advanced auto focus algorithm makes the lens auto focus quickly, accurately and stably.
- **Low Noise and High Signal-to-Noise Ratio:** Low noise CMOS effectively ensures ultra-high signal-to-noise ratio of the camera video. The use of advanced 3D noise reduction technology further reduces noise while ensuring image clarity.
- **Multiple Video Output Interfaces:** Support HDMI, 3G-SDI, 12G-SDI, USB, wired LAN (POE+); SDI supports transmission of over 100 meters at 1080P60 format.
- **Multiple Audio and Video Compression Standards:** Support H.265/H.264 video compression; support AAC audio compression; support up to 3840x2160 resolution and 60 fps compression.
- **Audio Input Interface:** Support AAC audio encoding; support 16000, 32000, 44100, 48000 sampling frequency.
- **Multiple Network Protocols:** Support ONVIF, GB/T28181, RTSP, RTMP, SRT, FreeD, NDI|HX (optional), Dante AV (optional) protocols; support RTMP push mode for easy link to streaming media server (Wowza, FMS); support RTP multicast mode and network full command VISCA control protocol.
- **AI Dynamic Tracking:** With top automatic tracking and framing technology, integrated face and human shape recognition algorithms, it provides tracking function for scenarios such as conference rooms, classrooms and churches.
- **Face-assisted focusing:** The algorithm provides face information to assist with focusing, enabling fast and accurate focusing.
- Micro-SD Card Recording: Supports insertion of up to 2GB SD cards for real-time recording

of captured footage in MP4 or TS format.

- **Tally Indicator Light:** Green and red lights provide real-time status indicators for standby and playback modes, enabling efficient multi-camera collaboration.

- **Control Interface:** RS485, RS232; RS232 supports cascading, convenient for engineering installation and use.

- **Multiple Control Protocols:** Supports VISCA, PELCO-D, PELCO-P protocols, and automatic identification protocols.

- **Super Silent PTZ:** Adopts high precision stepping motor and precision motor drive controller to ensure the PTZ running smoothly at low speed and no noise.

- **Low Power Consumption Hibernation Function:** Support low power consumption hibernation/wake up, power consumption is less than 400mW when hibernating.

- **Multiple presets:** Support up to 255 presets (10 for remote control setting recall).

- **Multi-directional Infrared Control:** Equipped with three built-in infrared receivers for comprehensive, dead-zone-free reception and precise signal control.

- **Many Applications:** Online-education, Lecture Capture, Webcasting, Video conferencing, Tele-medicine, Unified Communication, Emergency Command and Control Systems, etc.

Technical Specification：

Parameter/Model	12X	20X	31X
Camera Parameters			
Image Sensor	1/1.8 inch high quality CMOS sensor		
Effective Pixels	8.42M, 16:9		
Video Format	**HDMI, 12G-SDI[①]:** 3840*2160P60/59.94/50/30/29.97/25fps 1920*1080P60/59.94/50/30/29.97/25fps 1920*1080I60/59.94/50fps 1280*720P60/59.94/50fps **3G-SDI:** 1920*1080P60/59.94/50/30/29.97/25fps 1920*1080I60/59.94/50fps 1280*720P60/59.94/50fps **USB3.0[②]:** **YUY2:** 1920*1080P60fps,1280*720/960*540/ 800*600/640*480P30fps **USB 2.0:** **YUY2:** 640*360/432*240P30; 720*480/800*448P25 fps **NV12:** 640*480/432*240/640*360P30; 800*448P25 fps **H264:** 3840*2160/1920*1080/640*480/320*240/352*288/640*360/ 704*576/720*480/720*576/800*600/1024*576/1024*768/1280*720/ 60/50/40/30/25/20/15/10/5 fps **H265:** 1920*1080/640*480/320*240/352*288/640*360/704*576/ 720*480/720*576/800*600/1024*576/1024*768/1280*720/60/50/		

	40/30/25/20/15/10/5 fps **MJPEG:** 3840*2160/640*480/30/25/20/15/10/5; 1920*1080/ 320*240/352*288/640*360/704*576/720*480/720*576/800*600/ 1024*576/1024*768/1280*720/60/50/40/30/25/20/15/10/5 fps **LAN:** **Main stream:** H264/H265: 3840*2160/1920*1080/1280*720, maximum 60fps **Sub-stream:** 720*480/640*360/640*480/320*240, maximum 60fps

Focal Length	f=4.81~57.8mm	f=7.06~122mm	f=6.91~214.64mm
Viewing Angle	7.5°(N) 82.1°(W)	5.6°(N) 59.4°(W)	1.98°(N) 60°(W)
Iris Value	F1.8– F3.6	F1.64 – F4.2	F1.35 – F4.6
Digital Zoom	8X		
Minimum Illumination	0.5Lux(F1.35, AGC ON)		
DNR	3D DNR		
White Balance	Auto/Manual/One Push/Specified Temperature(2400K-7100K, 100K adjustable)		
Focus	Auto/Manual/One Push Focus		
Exposure Mode	Auto/Manual/Shutter priority/Aperture priority/Brightness priority		
Aperture	Auto/Manual		
Shutter Speed	Auto/Manual		
BLC	ON/OFF		
WDR	OFF/ Dynamic level adjustment		
Video Adjustment	Parameters such as brightness, clarity, saturation, contrast, white balance, anti-flicker, and low brightness compensation can be adjusted.		
SNR	>50dB		

Interface Parameter	
Video Interfaces	HDMI, SDI(12G/3G-SDI), LAN(Support POE+), USB-C(U3/U2 Optional), LINE-IN, MIC-IN, RS232-IN&OUT, RS-422/485, Micro-SD Card, DC12V Power Supply, Power Switch
Video Output	HDMI, SDI(12G/3G-SDI), LAN(Support POE+), USB-C
Video Compression Format	LAN: H.264, H.265 USB 3.0: YUY2 USB 2.0: MJPG, H264, H.265, YUY2, NV12
Video Bit Rate	64-40960
Bit rate control	Fixed bit rate, variable bit rate
Frequency	50Hz: 1fps ~ 50fps 60Hz: 1fps ~ 60fps
Audio Input	Dual-channel 3.5mm linear input; Dual-channel 3.5mm microphone input
Audio Output	HDMI, LAN, USB-C, SDI (12G/3G)
Audio Bitrate	32 Kbps, 48 Kbps, 64 Kbps, 96 Kbps, 128 Kbps
Audio Compression	AAC

Format	
LAN	1000M adaptive Ethernet port, support POE+ power supply, support audio and video output
Network Protocols	RTSP, RTMP, ONVIF, GB/T28181, SRT, FreeD, NDI|HX3 (optional), Dante AVH (optional); supports network VISCA control protocol; supports remote upgrade, remote restart, and remote reset
Control Interface	RS-232-IN, RS-232-OUT, RS-422/485
Serial Port Communication Protocols	VISCA/Pelco-D/Pelco-P; Support Baudrate: 115200/38400/9600/4800/2400
USB Communication Protocol	UVC (Video Communication Protocol) UAC (Audio Communication Protocol)
Power Supply	HEC3800 Outlet (DC12V)
Power Adapter	Input AC110V~AC220V; Output DC12V/2A
Input Voltage	DC12V±10%
Input	≤1.5A
Consumption	≤18W
Dante AV-H	
Encoding/Decoding	H.264
Video Format	1920*1080/1280*720P60/50/30/25
Video Stream	Unicast or multicast
Latency	≤120ms@1080p60
Bandwidth	4-8Mbps@1080p60

PTZ Parameter	
Pan Move	-170°～+170°
Tilt Move	-90°～+120°
Pan Speed	0.1°/s～120°/s
Tilt Speed	0.1°/s～60°/s
Preset Speed	Pan: 120°/s, Tilt: 60°/s
Preset Quantity	Up to 255 preset (10 via remote control)

Monocular Tracking	
Tracking Mode	Off, Real-time Tracking, Stage Tracking, Zone Tracking and Intelligent Framing
Tracking Distance	Maximum tracking distance: up to 18 meters

Other Parameters	
Storage Temperature	-10°C ～ +70°C
Storage Humidity	20% ～ 95%
Working Temperature	-10°C ～ +50°C
Working Humidity	20% ～ 80%
Dimension	188（L）mm×164mm（W）×236mm（H）
Weight (Approx.)	2kg
Working Environment	Indoors

Notes:

a) 12G-SDI is an optional interface;

b) USB 3.0 is an optional interface; USB 3.0 supports up to 1080P60 on Windows OS and up to 1080P30 on Mac OS. Users can switch between these settings via the web interface under Operating System Options;

c) USB 3.0 does not support UAC or audio output. To enable audio output, select USB 2.0 in the web interface under Video Output > USB Output Format. Changes take effect after restarting.

Dimension：