UV420BSCD-AI

The UV420 Ultra HD 4K camera offers perfect functions, superior performance and rich interfaces. The features include advanced ISP processing algorithms to provide vivid images with a strong sense of depth, high resolution, and fantastic color rendition. It supports for H.265/H.264 coding, making the image smooth and clear even in low-bandwidth.

- **4K Ultra HD:** 1/2.8 inch high quality 4K SONY CMOS sensor; 8.50 megapixel, resolution is up to 4K (3840x2160) at 30 FPS.

- **Optical Zoom**: 12X optical zoom with 70°viewing angle.

- **Advanced Auto Focus Technology:** Advanced auto focus technology allows the camera to move fast, accurately, and stably.

- **Low Noise and High SNR:** Low noise CMOS provides the high SNR. The use of leading 2D 3D noise reduction technology further reduce the noise while not comprising the clarity of image.

- **Multiple Connections:** It supports for HDMI, SDI, USB3.0, wired LAN and PoE. USB3.0 supports dual stream

- **Multiple Audio Compression Formats:** It supports for YUY2, MJPEG, H.264, H.265, NV12 video coding formats. And the resolution of 3840X2160 at 30FPS is available under MJPEG, H.264, H.265 formats. Audio compression formats: AAC, MP3, G.711A

- **Audio Input Jack:** It supports audio coding in AAC, MP3, G.711A. And the sampling rate of 16000, 32000, 44100, 48000 are available under AAC, MPS formats.

- **Built-**in Gravity Sensor: It is built in gravity sensor, supports for PTZ auto flip, easier for engineer to set up.

- **Multiple Network Protocols:** It supports for protocols of ONVIF, GB/T28181, RTSP, RTMP, VISCA OVER IP, IP VISCA, RTMPS, SRT, RTMP Push Mode, RTP multi-brodcasting mode, making it easy to link with stream media server(Wowza, FMS)

- **Control Jack:** RS422 compatible with RS485, RS232-IN, RS232-OUT, RS232 jack is capable of cascading.

- **Multiple Control Protocols:** It supports for control protocols of VISCA, PELCO-D, PELCO-P, and able to automatically identify the protocols.

- **Super Quiet PTZ Movement:** Adopting step driving motor mechanism and motor drive controller with high precision is to ensure PTZ works smoothly with low speed and without noise.

- **Low-power Sleep Mode:** It supports for low-power sleep/wake up. The power consumption in sleep mode is less than 400mW.

- **Multiple Presets:** It supports for 255 presets(10 presets called via remote control)

- **IR & Wireless Remote Control:** IR and Wireless Remote Control are available for options.

- **AI Human Detection:** Boasting high speed processor and advanced image processing and analytic algorithm, the camera supports for real-time tracking and zone-tracking.

- **Wide Application:** Applied in remote teaching, conference system, online training, and tele-medicine.

Technical Specification

Camera Lens Parameter

Parameter/Model	12X
Camera Lens	
Image Sensor	1/2.8 inch high quality HD CMOS sensor
Effective Pixel	16:9, 8.51 megapixel
Video Signal	**HDMI**： 4KP30、4KP25、1080P60、1080P50、1080P30、1080P25、720P60、720P50、1080P59.94、1080P29.97、720P59.94 **SDI:** 1080P60、1080P50、1080P30、1080P25、720P60、720P50、1080P59.94、1080P29.97、720P59.94 **USB3.0:** Main Stream：YUY2/NV12: 1920×1080@10/5fps;1280×720@25/20/15/10/5fps; 1024×576/800×600/800×448/640×360/480×270/320×180@30/25/20/15/10/5fps; MJPG/H264: 3840*2160/2560×1440/1920×1080/1600×896/1280×720/1024×576/960×540/800×600/800×448/720×576/720×480/640×360/640×480/480×270/352×288/320×240@30/25/20/15/10/5fps; Sub Stream：YUY2/NV12: 1280×720/1024×576/800×600/800×448/640×360/640×480/480×270/320×180@30/25/20/15/10/5fps; MJPG/H264: 1920×1080/1600×896/1280×720/1024×576/960×540/800×600/800×448/720×576/720×480/640×360/640×480/480×270/352×288/320×240@30/25/20/15/10/5fps;HDMI： 4KP30、4KP25、1080P30、1080P25、1080P29.97；

Optical Zoom	12X
Viewing Angle	H：6.5°（N）～70.9°（W）
Focal Length	3.9～46.8 mm ±5%
Iris	F1.6 ～ F2.8±5%
Digital Zoom	15X
Minimum Illumination	0.5Lux(F1.8, AGC ON)
DNR	2D & 3D
White Balance	Auto/Manual/One-push/Specified Color Temperature
Focus	Auto/Manual/One-push
Exposure Mode	Auto, Manual, Shutter Priority, Iris Priority, Brightness Priority
Iris Mode	F1.8 ～ F11, CLOSE
Shutter Speed	1/25～1/20000
BLC	On/off
Dynamic Range	Off, 1 ～ 8
Video Adjustment	Brightness, Chromaticity, Saturation, Contrast, Sharpness, Black And White Mode, Gamma Curve
SNR	>50dB

Interface Parameter

Interface Parameter	
Interfaces	HDMI, SDI, LAN(POE), USB3.0, A-IN, RS232-IN, RS232-OUT, RS422(Compatible with RS485), DC12V Power Supply, Dial Switch, Power Switch
Video Output	HDMI, SDI, LAN, USB3.0
Video Compression Format	LAN：H.264, H.265 USB 3.0：MJPG, H264, YUY2, NV12

Audio Input Interface	Double track 3.5mm linear input;
Audio Output Interface	HDMI, SDI, LAN, USB3.0
Audio Compression Format	AAC, MP3, G.711A
LAN Interface	10M/100M/1000M adaptive Ethernet port, support POE power supply, support audio and video output.
Network Protocol	RTSP, RTMP, ONVIF, GB/T28181, VISCA OVER IP, IP VISCA, RTMPS, SRT, support remote upgrade, remote reboot, remote reset
Control Interface	RS232-IN, RS232-OUT, RS422 compatible with RS485
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 Power Socket(DC12V)
Power Adapter	Input: AC110V~AC220V ; Output: DC12V/2.5A
Input Voltage	DC12V±10%
Input	<1A
Consumption	<12W

PTZ Parameter

PTZ Parameter	
Pan Move	-170°～+170°

Tilt Move	-30°～+30° °
Pan Speed	0.1°/s～60°/s
Tilt Speed	0.1°/s～45°/s
Preset Speed	Pan：60°/s, Tilt：45°/s
Preset Quantity	Up to 255 preset (10 via remote control)

Other Parameter

Other Parameter	
Storage Temperature	-10℃～+70℃
Storage Humidity	20%～95%
Working Temperature	-10℃～+50℃
Working Humidity	20%～80%
Dimension	181（L）mm×115mm（W）×149mm（D）
Weight	1.2kg
Environment	Indoors

Accessory Parameter

Accessory	
Supplied Accessory	Power Adapter, RS232 Control Cable, USB3.0 Connection Cable, Remote Control, User Manual.
Optional Accessory	Mounting Bracket

AI Function Parameter

AI Function	

Real-time Tracking	The longest tracking distance of up to 6 to 7 meters, can support the speaker to walk at 3 to 4 mph
Zone Tracking	Support setting 4 tracking areas, and the areas is set within -170°～+170° in horizontal and -30°～+90° in vertical.
Select Tracking Target	Select and frame tracking target through clicks and dragging with mouse on webpage

Dimension: (unit: mm)