

4Kp30 Ultra HD USB HDMI PTZ Camera

The UVCU3-4K-NDI series 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 H.264/H.265 encoding which makes motion video fluent and clear even under less than ideal bandwidth conditions.



NDI

4K 30fps Auto Framing AI Tracking Gesture Control 12X/20X POE NDI®|HX2
(Only for 12X Zoom) Optical Zoom

Key Features

- **4K UHD**
High-quality 1/1.8-inch UHD CMOS sensor with 8.51 million effective pixels for ultra-high resolution high-quality images up to 4K (3840x2160) and downward compatible with 1080P, 720P and other resolutions.
- **12X/20X Optical Zoom + 16x digital zoom**
UVC12XU3-4K-NDI: 12X Optical Zoom+16x digital zoom + 71° FoV.
UVC20XU3-4K-NDI: 12X Optical Zoom+16x digital zoom + 60° FoV.
- **AI Powered**
Support AI Tracking, Gesture Control, Auto Framing.
- **Low illumination**
The application of 2D and 3D noise reduction algorithm greatly reduces image noise. Even under the condition of ultra-low illumination, it still keeps the picture clean and clear, and the SNR of image is as high as 55dB.
- **POE support**
The wired network supports Poe power supply, and control, power supply, video and audio can be completed with only one network cable.
- **Remote control**
Multiple control modes, using RS232, RS485, network and USB to control the camera.
- **H.264 slice / H.264 SVC coding support**
The output H.264 code stream supports slice and SVC coding modes, and is suitable for high-end USB conference video applications.
- **Dual bitstream**
At the same time, it supports two-way code stream output (any two channels of YUY2, MJPEG and H.264) to reduce the encoding and decoding pressure of the host.
- **Rich and perfect interfaces**
Support 1080P video output via HDMI, USB 3.0 and network interface simultaneously.
- **Three power supply modes**
It also supports USB 5V power supply, 12V power adapter power supply and Poe power supply.
- **Supports NDI®|HX2**
Supports the network video transmission technology NDI®|HX2, featuring plug-and-play, low latency, and easy deployment.
- **Multiple Preset**
Support 255 preset positions (the remote controller is set to 10preset positions).
- **HDMI 1.4b**
Support HDMI 1.4b and can output uncompressed 4K original video.
- **Wide Application**
Tele-education, Lecture Capture, Webcasting, Videoconferencing, Tele-training, Tele-medicine, Interrogation and Emergency command systems.

Technical Specification

Model	UVC12XU3-4K-NDI	UVC20XU3-4K-NDI
Camera Specification		
Sensor	1/2.5 inches, CMOS, Effective Pixels: 8.51MP	1/2.8 inches, CMOS, Effective Pixels: 8.42MP
Lens	12X, f4.4mm~52.8mm, F1.8~F2.6	20X, f3.47mm ~41.65mm, F1.84~F3.72
Horizontal FOV	71° ~ 8.2°	60° ~ 3.5°
Vertical FOV	42.7° ~ 4.5°	35.7° ~ 2.0°
Signal System	4KP30, 4KP25, 1080P30, 1080P25	
Digital Zoom	16X	
POE	Support	
AI Feature	AI Tracking, Gesture Control, Auto Framing	
Scanning Mode	Progressive	
Digital Zoom	16X	
Minimum Illumination	0.5Lux (F1.8, AGC ON)	
Shutter	1/30s ~ 1/10000s	
DNR	2D & 3D DNR	
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR	
Backlight Compensation	Support	
WDR	OFF/ Dynamic level adjustment	
Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve	
SNR	>55dB	
Input/Output Interface		
Interfaces	USB 3.0 (type-C), HDMI, LAN, RS232, RS485; NDI	
Video Output Interfaces	HDMI, LAN, USB3.0	
Network Interface	RJ45: 10M / 100M adaptive Ethernet port	
Audio Input Interface	Line In, 3.5mm audio interface	
Control Interface	1 x RS485 IN(Optional): 2pin phoenix port, Max Distance: 1200m, Protocol: VISCA / Pelco-D / Pelco-P 1 x RS232 IN: 8pin Mini DIN, Max Distance: 30m, Protocol: VISCA / Pelco-D / Pelco-P	
Power Interface	JEITA type (DC IN 12V)	
Network Specification		
Video Compression Format	H.264/MJPEG	
Image Stream	First Stream, Second Stream	
First Stream Resolution	3840x2160, 1920x1080, 1280x720 etc.	
Second Stream Resolution	1920x1080, 1280x720, 1024x576 etc	
Video Bit Rate	32kbps~20480kbps	
Bit Rate Control	VBR, CBR	
Frame Rate	50Hz: 1fps ~ 25fps, 60Hz: 1fps ~ 30fps	
Audio Compression	AAC	
Audio Bit Rate	96Kbps, 128Kbps, 256Kbps	

Protocols TC P / IP, HTTP, RTSP, RTMP / RTMPS, Onvif, DHCP, SRT, GB/T 28181, Multicast, etc.

USB Specification

Support operating system Windows 7, Windows 8, Windows 10, Mac OS X, Linux, Android

Color space / compression YUY2 / MJPEG/ H.264/ H.265

Video format YUY2 (Isochronous mode): maximum 1440P@30fps

MJPEG: maximum 2160P@30fps

H.264 AVC: maximum 2160P@30fps

H.264 SVC: maximum 2160P@30fps

H.265 AVC: maximum 2160P@30fps

USB Video Support

USB video communication protocol UVC 1.1 and 1.5

UVC PTZ control Support

PTZ Specification

Pan/Tilt Rotation $\pm 170^\circ$, $-30^\circ \sim +90^\circ$

Horizontal rotation speed range $2.7^\circ \sim 35.7^\circ /s$

Vertical rotation speed range $2.7^\circ \sim 31.5^\circ /s$

Image Flip Support

Preset Number 255 presets (10 presets by remote controller)

Other Specification

Input Voltage DC 12V / PoE (802.3af)

Input Current 12V 1.0A (Max.)

Operating Temperature $-10^\circ \text{C} \sim 40^\circ \text{C}$

Storage Temperature $-40^\circ \text{C} \sim 60^\circ \text{C}$

Power Consumption 2W (Max.)

Net Weight 1.41kg

Dimension 144mm x 144mm x 166.4mm

Accessory

Package Power supply, USB3.0 cable, Remote controller, User manual

Optional Accessories Ceiling / Wall Mount (Extra Cost)

Interface Picture:

