

TEVO-UV620A Ultra

4K@60fps AI Auto Tracking PTZ Camera



4K
60FPS

20x

AI
Auto Tracking

NDI | HX3

POE

MULTIPLE
INTERFACES

Tenveo UV620A Ultra is a professional 4K@60fps PTZ camera featuring a 1/1.8 inch 8.29MP CMOS sensor that captures ultra-sharp UHD video with vibrant colors, enhanced low-light capability, and wide dynamic range (WDR). Its 20x optical zoom with 16x digital extension provides seamless framing flexibility, while the 66.6° wide field of view accommodates large spaces. With AI-powered humanoid tracking, PoE support and NDI|HX3 compatibility, UV620A Ultra enables high-quality, low-latency IP video transmission over networks—perfect for professional live production, broadcasting, video production and AV applications.

4K Ultra HD @60fps

Tenveo UV620A Ultra delivers stunning 4K UHD resolution (3840×2160) at 60fps, ensuring exceptional clarity, fluid motion, and professional-grade color accuracy. With WDR, HDR (High Dynamic Range) support, low-latency streaming, and future-proof performance, it meets the demands of high-end video applications.



36x Hybrid Zoom System [20x Optical + 16x Digital]

UV620A Ultra combines a 20x optical zoom delivering lossless close-ups with precise focus control and a 16x digital zoom featuring 4K-optimized processing. This hybrid system maintains optical clarity while extending zoom range, enabling smooth transitions from wide shots to tight framing with consistent image quality.

**20X Optical
+16X Digital**



Multi-Interface Support [USB+HDMI+SDI+LAN] with Full NDI® and PoE - Ultimate Connectivity Flexibility

Tenveo UV620A Ultra delivers professional-grade connectivity through its comprehensive interface options, featuring simultaneous USB 3.0, 3G-SDI, HDMI 2.0, and LAN ports with Power over Ethernet (PoE). The built-in Full NDI® support enables high-quality, low-latency IP video transmission.

Multi-interface
USB+HDMI+SDI+LAN



NDI|HX3 supports 4K@60fps Video Streaming

NDI|HX3 is the latest version of the NDI (Network Device Interface) protocol, a technology that allows for the transmission of high-quality, low-latency video, audio, and data over standard IP networks. It represents a significant advancement in the NDI ecosystem, offering a balance of performance and network efficiency. In essence, NDI|HX3 bridges the gap between the high-bandwidth, but network-intensive, full NDI and the more compressed, but higher-latency, NDI|HX. It provides a flexible solution that delivers professional-grade video and performance over standard network infrastructure, making it an excellent choice for a wide range of applications, including broadcast, live events, corporate AV, education, and houses of worship.

	NDI HX2	NDI HX3
Quality	Good	Great
Bandwidth	Low(~18 Mbps)	Medium(~80 Mbps)
Latency	Medium	Very Low
Requires FPGA	NO	NO
GOP	60	1 or 2

AI Auto Framing and Tracking – Intelligent Subject Detection

Tenveo UV620A Ultra employs advanced deep learning algorithms with humanoid detection to deliver professional-grade tracking performance. Its AI processor enables precision framing through automatic composition adjustment based on subject position and quantity, while adaptive tracking ensures smooth pursuit of moving subjects with intelligent speed prediction. Featuring scene awareness for automatic obstruction avoidance, this intelligent tracking solution maintains consistent focus and optimal framing even in dynamic, multi-subject environments.



Universal Compatibility and Software Support

Engineered for seamless plug-and-play integration, UV620A Ultra delivers native compatibility with all major platforms including OBS, vMix, Zoom, and Teams, while supporting industry protocols like VISCA over IP, ONVIF, and RTSP. Its driver-free USB 2.0 connectivity ensures instant recognition across Windows, macOS, and Linux systems, making it ideal for hybrid workflows in live production, unified communications, and AV control environments.

Model No.	UV 620A Ultra		
Sensor	1/1.8"		
Effective Pixels	8.42MP		
Video Signals	HDMI: 4KP60, 4KP59.94, 4KP50, 4KP30, 4KP25, 4KP29.97, 1080P60, 1080P50, 1080I60, 1080I50, 1080P30, 1080P59.94, 1080I59.94, 1080P29.97, 720P60, 720P59.94; 3G-SDI: 1080P60, 1080P50, 1080P30, 1080P29.97, 1080P59.94, 1080P25; 1080I60, 1080I50, 1080I59.94; 720P60, 720P59.94;		
Optical Zoom	20X		
Digital Zoom	16X		
Lens	f=6.25mm ~ 125mm		
Aperture	F1.58 ~ F3.95		
Horizontal Angle	59.6° ~ 3.5°		
Vertical Angle	35.7° ~ 2.0°		
Diagonal Angle	66.6° ~ 4.0°		
Video Output	USB 2.0, HDMI, RJ45, SDI		
Signal Standard	NTSC/PAL		
Control Interface	RS232, RS485, USB, NET		
Shutter	1/30s ~ 1/10000s		
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR		
Backlight Compensation	Support		
Digital Noise Reduction	3D Digital Noise Reduction		
Baud Rate	2400/4800/9600/19200/38400/57600/115200		
Control Protocol	VISCA, Pelco-D, Pelco-P		
USB Protocol	UVC 1.1~1.5		
Minimal Illumination	0.5 Lux @ (F1.8, AGC ON)		
SNR	≥55dB		
Horizontal Rotation	350° (±175°) 0.1°/s ~ 100°/s		
Vertical Rotation	180° (±90°) 0.1°/s ~ 80°/s		
H & V Flip	Support		
Image Freeze	Support		
PoE	Support		
Number of Preset	255		
Preset Accuracy	0.1°		
Generic Specification			
Power Supply	DC 12V/2A		
Power Consumption	18W		
Work Temperature	0°C ~ 40°C		
Work Humidity	20% ~ 80% RH		
Product Size	158.9*156.5*179.4mm/285*217*197mm(before / after packing)		
Product Weight	1.51kg/2.59kg(net / gross weight)		
IPC Features		Input/Output Interface	
Video Encoding Format	H.264/H.265/MJPEG	HD Output	1xHDMI 1x3G-SDI: BNC type, 800mVp-p, 75Ω, Along to SMPTE 424M standard
Video Stream	Main Stream, Sub Stream	LAN	1xRJ45:10M/100M/1000M Ethernet Interface
Main Stream Resolution	3840x2160,1920x1080,1280x720,etc.	Audio Interface	1-ch: 3.5mm Audio Interface, Line In 1-ch: 3.5mm Audio Interface, Line Out
Sub Stream Resolution	720x480,320x240,etc.	USB	1xUSB2.0: Type A
Video Bit Rate	32Kbps ~ 20480Kbps	Communication Interface	1xRS232 In: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA/Pelco-D/Pelco-P
Bit Rate Type	Variable Rate, Fixed Rate		1xRS232 Out: 8pin Min DIN, Max Distance:30m, Protocol: VISCA network use only
Frame Rate	50Hz:1fps ~ 50fps 60Hz:1fps ~ 60fps		1xRS485: 2pin Phoenix Port, Max Distance:1200m, Protocol: VISCA/Pelco-D/Pelco-P
Audio Compression	AAC,G711A		JEITA type (DC IN 12V)
Audio Bit Rate	96Kbps, 128Kbps		
Network Protocol	NDI HX3,SRT,TCP/IP, HTTP, RTSP, RTMP(S), Onvif, DHCP, GB/T28181,Multicas	Power Jack	

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