

# Nexvoo 4K PTZ Camera N450-AI

Nexvoo ultra HD camera N450 has complete functions, excellent performance, and rich interfaces; advanced ISP processing technology and algorithms make the image effect vivid, uniform picture brightness, strong light and color layering, high definition, and color reproduction. It supports H.265/H.264/MJPEG encoding, making the picture smoother and clearer under low bandwidth.



## Product Feature:

- **4K UHD Resolution:** 8.5 million pixel high-quality SONY CMOS image sensor, the maximum resolution can reach 4K (3840×2160) at 30 frames per second. True-to-life Ultra HD video that vividly shows the expressions and movements of characters, delivering image quality with superb clarity and resolution.
- **Optical Zoom Lens:** 12X optical zoom 70° wide-angle lens.
- **Leading Auto Focus Technology:** Fast, accurate and stable auto focusing technology.
- **Low Noise and High SNR:** Super high SNR image is achieved with low noise CMOS. Advanced 2D/3D noise reduction technology further reduces the noise while ensuring high image clarity.
- **Multiple Video Output Methods:** Support HDMI, USB3.0, wired LAN; Support POE

power supply, and USB3.0 support dual streams, SDI support 100 meters transmission at 1080P format.

- **Multiple Audio/Video Compression Standards:** Support YUY2, MJPEG, H.264, H.265, NV12 video encoding formats, MJPEG, H.264, H.265 support up to 3840×2160 resolution 30 frames/second compression; support AAC, MP3, G.711A audio compression.
- **Audio Input Interface:** Support AAC, MP3, G.711A audio encoding. AAC, MP3 support 16000, 32000, 44100, 48000 sampling rate.
- **Built in Gravity Sensor.**
- **Multiple Network Protocol:** Support ONVIF, GB/T28181, RTSP, RTMP, VISCA OVER IP, IP VISCA, RTMPS, SRT protocols; Support RTMP push mode, easy to be connected to streaming server (Wowza, FMS); Support RTP multicast mode.
- **Control Jack:** RS422 input (compatible with RS485), RS232 input/output, RS232(cascading connection).
- **Low Power Sleep Mode:** Support low power sleep/awake mode, and the power consumption is less than 400mW.
- **Multiple Control Protocol:** Support VISCA, PELCO-D, PELCO-P protocols; Support automatic identification protocols.
- **Multiple Presets:** Up to 255 presets (10 presets via remote control).
- **AI Human Detection:** Built in high speed processor and advanced image processing and analysis algorithm, and real-time tracking and zone tracking modes are available.
- **Multiple Application:** Online-education, Lecture Capture, Webcasting, Video conferencing, Tele-medicine, Unified Communication, Emergency command and control systems, etc.

### Technical Specification:

Parameters	
<b>Image Sensor</b>	1/2.8 inch high quality CMOS sensor
<b>Effective Pixel</b>	851M, 16: 9
<b>Video Format</b>	<b>HDMI:</b> 4KP30, 4KP25, 1080P30, 1080P25, 1080P29.97 ; <b>SDI</b> 1080P30, 1080P25, 1080P29.97 ;

	<b>USB3.0</b> <b>Main Stream:</b> YUY2/NV12: 1920×1080/1280×720/1024×576/800×600/800×448/640×360/480×270/320×180 @10/5fps; MJPEG/H264: 3840*2160/1920×1080/1600×896/1280×720/1024×576/960×540/800×600/800×448/720×576/720×480/640×360/640×480/480×270/352×288/320×240@30/25/20/15/10/5fps; <b>Sub Stream:</b> YUY2/NV12: 1280×720/1024×576/800×600/800×448/640×360/640×480/480×270/320×180@30/25/20/15/10/5fps; MJPEG/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;
<b>Optical Zoom</b>	12X Optical
<b>Viewing Angle</b>	H: 6.5° (N) ~ 70.9° (W)
<b>Iris Value</b>	F1.6 ~ F2.8±5%
<b>Digital Zoom</b>	15 X
<b>Minimum Illumination</b>	0.5Lux(F1.8, AGC ON)
<b>DNR</b>	2D & 3D
<b>White Balance</b>	Auto/Manual/One-push/Specified color temperature
<b>Focus Mode</b>	Auto/Manual/One-push
<b>Exposure Mode</b>	Auto, manual, shutter priority, iris priority, brightness priority
<b>Aperture</b>	F1.8 ~ F11, CLOSE
<b>Shutter Speed</b>	1/25~1/20000
<b>BLC</b>	On/Off
<b>Dynamic Range</b>	Off, 1 ~ 8
<b>Video Adjustment</b>	Brightness, Hue, Saturation, Contrast, Sharpness, W&B Mode, Gama Curve
<b>SNR</b>	>50dB

<b>Back Panel Overview</b>	
<b>Interface</b>	HDMI, SDI, LAN(POE), USB3.0, A-IN, RS232-IN, RS232-OUT, RS422(Compatible with RS485), DC12V Power Supply, Rotary Switch, Power Supply
<b>Video Connection</b>	HDMI, SDI, LAN, USB3.0
<b>Video Compression Formats</b>	LAN: H.264, H.265 USB 3.0: MJPG, H264, H.265, YUY2, NV12
<b>Audio Input Jack</b>	Dual channel 3.5mm linear input

<b>Audio Output Jack</b>	HDMI, SDI, LAN, USB3.0
<b>Audio Compression Formats</b>	AAC, MP3, G.711A
<b>LAN Port</b>	10M/100M/1000M adaptive Ethernet port, support POE power supply, support audio and video output
<b>Network Protocols</b>	RTSP, RTMP, ONVIF, GB/T28181, VISCA OVER IP, IP VISCA, RTMPS, SRT, support remote upgrade, remote restart, remote reset
<b>Control Jack</b>	RS232-IN, RS232-OUT, RS422 compatible with RS485
<b>Serial Port Communication Protocols</b>	VISCA/Pelco-D/Pelco-P; Baud Rate 115200/38400/9600/4800/2400
<b>USB Communication Protocols</b>	UVC (Video Communication Protocols), UAC (Audio Communication Protocols)
<b>Power Supply</b>	HEC3800 Power Socket(DC12V)
<b>Power Adapter</b>	Input: AC110V~AC220V ; Output: DC12V/2.5A
<b>Input Voltage</b>	DC12V±10%
<b>Input Currency</b>	<1A
<b>Power Consumption</b>	<12W

<b>PTZ Parameter</b>	
<b>Pan Move</b>	-170°~+170°
<b>Tilt Move</b>	-30°~+90°
<b>Pan Speed</b>	0.1°/s~35°/s
<b>Tilt Speed</b>	0.1°/s~30°/s
<b>Preset Speed</b>	Pan: 35°/s, Tilt: 30°/s
<b>Preset Quantity</b>	Up to 255 preset (10 via remote control)

<b>Other Parameter</b>	
<b>Storage Temperature</b>	-10℃~+70℃
<b>Storage Humidity</b>	20%~95%
<b>Working Temperature</b>	-10℃~+50℃
<b>Working Humidity</b>	20%~80%
<b>Dimension</b>	143(L)mm*176mm(W)*169mm(H)
<b>Weight</b>	1.3kg
<b>Environment</b>	Indoors

<b>Accessory</b>	
<b>Supplied Accessory</b>	Power Supply, RS232 Control Cable, USB3.0 Cable, IR Remote Control, User Manual, Warranty Card
<b>Optional Accessory</b>	Ceiling / Wall Mount (Extra Cost)

AI Function	
<b>Real-time tracking</b>	The longest tracking distance can reach 6 to 7 meters, which can support the speaker to walk at a speed of 3 to 4 mph
<b>Zone tracking</b>	Support setting 4 tracking areas, support horizontal $-170^{\circ}\sim+170^{\circ}$ , vertical $-30^{\circ}\sim+90^{\circ}$

**Dimension:**

