



## Feature:

1. 4K ultra-high definition: using SONY high-quality CMOS image sensor, the highest resolution supports 4K@60fps, and the output frame rate is up to 60 frames per second; presenting clear and realistic ultra-high-definition video, vividly showing the expressions and movements of the characters, and providing superb clarity and resolution image quality
2. Dual stream: USB can support the simultaneous output of the main stream and sub-stream, which can meet the needs of both near and far ends
3. Optical zoom lens: using 12X optical zoom 80.4° wide-angle lens
4. Rich and complete interfaces: support HDMI2.0, SDI, USB 2.0, LAN (POE, NDI optional., HDMI, USB, LAN can output 4K audio and video at the same time
5. Autofocus technology: Advanced autofocus algorithm enables the lens to complete autofocus quickly, accurately and stably
6. Low noise and high signal-to-noise ratio: Low noise CMOS effectively guarantees the ultra-high signal-to-noise ratio of the picture. The use of advanced 3D noise reduction technology further reduces noise while ensuring image clarity
7. Multiple audio and video compression standards: LAN interface supports H.265/H.264 video compression; USB2.0 interface supports MJPG, H.264, YUY2, NV12, H.265; A-IN interface supports AAC audio compression encoding
8. Audio input interface: supports 48000 sampling frequency and AAC audio encoding
9. Multiple network protocols: support ONVIF, GB/T28181, RTSP, RTMP, SRT, NDI (optional., Dante AV-H (optional. protocols; support RTMP push mode, easily connect to streaming media servers (Wowza, FMS.; support RTP multicast mode, support network full command VISCA control protocol
10. Control interface: RS422 (compatible with RS485. output, RS232 input\output; RS232 supports cascading, which is convenient for engineering installation and use
11. Multiple control protocols: support VISCA, PELCO-D, PELCO-P protocols, and support automatic identification protocols
12. Multiple preset positions: support up to 255 preset positions (remote control setting call is 10.
13. AI humanoid tracking, built-in high-speed processor and exclusive advanced image processing and analysis algorithms, users can choose real-time tracking and regional tracking according to the use environment
14. Multiple application places: conference, education, medical, government affairs, cloud video, collaborative office, multimedia integration, emergency command, broadcasting, justice, public security, military and other system applications

### Specification:

Optical zoom	12x optical zoom
Focal range	f=3.85 mm ~ 46.2 mm ±5%
Field of view	Horizontal: 7.59° (narrow angle) ~ 80.4° (wide angle) Vertical: 4.6° (narrow angle) ~ 50.0° (wide angle)
Aperture coefficient	F1.8 ~ F3.56±5%
Image sensor	1/2.5 inch SONY CMOS image sensor
Effective pixels	8.29M effective pixels 16:9
Video signal	HDMI output Supported video formats: 3840*2160P60/50/25/59.94/29.97; 1080P60/50/30/25/59.94/29.97; 1080I60/50/59.94; 720P60/50/59.94
SDI output supports video formats	1080P60/50/30/25/59.94/29.97; 1080I60/50/59.94; 720P60/50/59.94
USB2.0 output supports video formats	
MJPEG	3840*2160/1920*1080/1280*720 /1024*768 /1024*576/800*600/720*576/720*480/704*576/640*480 /640*360 /352*288/320*240P30; H.264: 3840*2160/1920*1080/1280*720 /1024*768 /1024*576/800*600/720*576/720*480/704*576/640*480 /640*360 /352*288/320*240P30; H.265: 1920*1080/1280*720 /1024*768 /1024*576/800*600/720*576/720*480/704*576/640*480 /640*360 /352*288/320*240P30
YUY2	800*448 /720*480P25; 640*360 /432*240P30
NV12	800*448P25; 640*480 /640*360 /432*240P30
Minimum illumination	0.05Lux (F1.8, AGC ON)
Digital noise reduction	3D digital noise reduction
White balance mode	automatic/manual/one-button white balance/specified color temperature
Focus mode	automatic/manual/one-button focus
Exposure mode	automatic, manual, shutter priority, aperture priority, brightness priority
Aperture parameter	F1.8 ~ F11, CLOSE
Shutter speed	1/25 ~ 1/10000
Backlight compensation	on/off
Dynamic range	off/dynamic level adjustment
Video adjustment	brightness, chroma, saturation, contrast, sharpness, black and white mode
Signal-to-noise ratio	≥50dB
AI function performance parameters	
Real-time tracking	The maximum tracking distance can reach 6 to 7 meters, and the speaker can walk at a speed of 5 to 6 miles per hour
Regional tracking	Supports setting 4 tracking areas, supports horizontal -110° ~ +110°, vertical -30° ~ +30° setting area
Interface function performance	
Product interface	HDMI, SDI, LAN (support POE+), USB2.0, A-IN, RS232-IN,RS232-OUT, RS422 (compatible with RS485), rotary dial, DC12V power supply, HDI   HX3 (optional), Dante (optional), power switch
Video compression format	LAN interface supports: H.264, H.265
USB 2.0 interface supports	MJPEG, H.264, H.265, YUY2, NV12

Audio input interface	dual-channel 3.5mm linear input
Audio output interface	HDMI, LAN, USB2.0, SDI
Audio compression format	AAC
Network interface	10M/100M/1000M adaptive Ethernet port, supports POE+ ((802.3at) power supply, supports audio and video output
Network protocol	RTSP, RTMP, ONVIF, GB/T28181, SRT, NDI (optional), Dante AV-H (optional); supports network VISCA control protocol
Control interface	RS232-IN, RS232-OUT, RS422 compatible with RS485
Serial communication protocol	VISCA/Pelco-D/Pelco-P; supports baud rate 115200/38400/9600/4800/2400
USB communication protocol	UVC (video communication protocol), UAC (audio communication protocol)
Power interface	HEC3800 power socket (DC12V)
Power adapter	input AC110V~AC220V; output DC12V/2.5A
Input voltage	DC12V±10%
Input current	<1A
Total power consumption	<12W
Dante AV-H	
Codec	H.264 codec by SoC
Video format	1920*1080/1280*720P60/50/30/25
Video stream	unicast or multicast
Delay	≤120ms at 1080p60
Bandwidth	4-8Mbps at 1080p60
PTZ parameters	
Horizontal rotation	-110° ~ +110°
Tilt rotation	-30° ~ +30° :-27° ~ +27°
Horizontal control speed	0.1°/s ~ 100°/s
Tilt control speed	0.1°/s ~ 70°/s
Preset speed	horizontal: 78.8°/s, pitch: 31.7°/s
Number of presets	Users can set up to 255 presets (10 for remote control)
Other parameters	
Storage temperature	-10°C ~ +60°C
Storage humidity	20% ~ 95%
Working temperature	-10°C ~ +50°C
Working humidity	20% ~ 80%
Dimensions	220 (length) mm×144 mm (width)×159 mm (height)
Weight (approx.)	about 1.7 kg