



Feature:

1. 4K ultra-high-definition image: Adopting 8.5 million pixel high-quality SONY CMOS image sensor, the maximum resolution can reach 4K (3840×2160), and the 4K output frame rate can reach up to 30 frames/second. Presenting clear and realistic ultra-high-definition video, vividly showing the expressions and movements of people, and providing superb clarity and resolution image quality
2. Optical zoom lens: 12x 80.5° optical zoom lens
3. Leading autofocus technology: Advanced autofocus algorithm enables the lens to complete autofocus quickly, accurately and stably
4. Low noise and high signal-to-noise ratio: Low noise CMOS effectively guarantees the ultra-high signal-to-noise ratio of the camera video. The use of advanced 2D and 3D noise reduction technology further reduces noise while ensuring image clarity
5. Multiple video output interfaces: support HDMI, USB3.0, and wired LAN interfaces; support POE power supply, and USB3.0 supports dual streams
6. Multiple audio and video compression standards: support YUY2, MJPEG, H.264, H.265, and NV12 video encoding formats, MJPEG, H.264, and H.265 support up to 3840×2160 resolution 30 frames/second compression; support AAC, MP3, and G.711A audio compression
7. Audio input interface: support AAC, MP3, and G.711A audio encoding, and AAC and MP3 encoding support 16000, 32000, 44100, and 48000 sampling frequencies
8. Built-in gravity sensor: built-in gravity sensor, support pan-tilt automatic flip function, convenient for engineering installation
9. Multiple network protocols: support ONVIF, GB/T28181, RTSP, RTMP, VISCA OVER IP, IP VISCA, RTMPS, SRT protocols; support RTMP push mode, easily connect to streaming media servers (Wowza, FMS.); support RTP multicast mode
10. Control interface: RS232-IN
11. Multiple control protocols: support VISCA, PELCO-D, PELCO-P protocols, support automatic identification protocols
12. Super silent PTZ: adopts high-precision stepper motor and precision motor drive controller to ensure that the PTZ runs smoothly at low speed and without noise
13. Low power sleep function: support low power sleep/wake-up, power consumption is less than 400mW when in sleep
14. Multiple preset positions: support up to 255 preset positions (the remote control is set to call 10).
15. Intelligent framing: built-in high-speed processor and built-in face detection algorithm, automatically detect participants and provide ideal framing
16. Intelligent voice positioning and tracking: built-in 6 omnidirectional microphone array, intelligent sound source positioning algorithm, can locate the speaker in real time, voice tracking can be set on/off
17. Many application places: distance education, teaching recording, conference system, remote training, telemedicine, trial system, emergency command system, etc

► Specification:

Image sensor	1/2.8 inch high-quality CMOS sensor
Effective pixels	8.29 million, 16:9
Video signal	HDMI:4KP30,4KP25, 1080P30, 1080P25, 1080P29.97
USB3.0 output supports video formats including Main stream	
YUY2/NV12:	1920×1080/1280×720/1024×576/800×600/800×448/640×480/640×360/480×270/320×180@ 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
Sub-stream	
YUY2/NV12	1920×1080/1280×720/1024×576/800×600/800×448/640×360/640×480/480×270/320×180@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
Close-up camera parameters	12x optical zoom
Viewing angle	Horizontal: 7.6° (narrow angle) ~ 80.5° (wide angle)
Aperture factor	F1.8 ~ F3.6
Digital zoom	X15
Minimum illumination	0.5Lux (F1.8, AGC ON)
Digital noise reduction	2D & 3D digital noise reduction
White balance	automatic/manual/one-key white balance/specified color temperature
Focus mode	automatic/manual/one-key focus
Exposure mode	automatic, manual, shutter priority, aperture priority, brightness priority
Aperture	F1.8 ~ F11, CLOSE
Shutter speed	1/25 ~ 1/20000
Backlight compensation	on/off
Dynamic range	off, 1 ~ 8
Video adjustment	brightness, chroma, saturation, contrast, sharpness, black and white mode, gamma curve
Signal-to-noise ratio	> 50dB
Panoramic lens	fixed focus lens
Viewing angle	110.2°\101.8°\69.5° (D\H\V)
Aperture	F2.0±5%
Focal length	F=1.89mm
Interface function performance	
Product interface	HDMI, LAN (support POE), USB3.0, LINE-IN, RS232-IN, DC12V power supply, power switch
Video output interface	HDMI, LAN, USB3.0
Video compression format	LAN interface supports: H.264, H.265

USB 3.0 interface supports	MJPEG, H264, YUY2, NV12
Audio input interface	dual-channel 3.5mm linear input
Audio output interface	LAN
Audio compression format	AAC, MP3, G.711A
Network interface	10M/100M adaptive Ethernet port, supports POE power supply, supports audio and video output
Network protocol	RTSP, RTMP, ONVIF, GB/T28181, VISCA OVER IP, IP VISCA, RTMPS, SRT, support remote upgrade, remote restart, remote reset
Control interface	RS232-IN
Serial communication protocol	VISCA/Pelco-D/Pelco-P; support 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
PTZ parameters	
Horizontal rotation	-110° ~ +110°
Pitch rotation	-30° ~ +30°
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 the remote control)
Table	1-4 Other parameter table
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×136mm (width)×159mm (height)
Weight (approx.)	about 1.7kg
Usage environment	indoor
AI function	
Intelligent framing	built-in high-speed processor and built-in face detection algorithm, automatically detect participants and provide ideal framing, the farthest framing distance can reach 6~7 meters
Intelligent voice positioning tracking	built-in 6 omnidirectional microphone array, intelligent sound source positioning algorithm, can locate the speaker's position in real time, voice tracking can be set on/off, the farthest pickup distance can reach 6~7 meters