



## Feature:

1. 4K ultra-high-definition image: using 8.29 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 70° 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, SDI, USB3.0, wired LAN interface; support POE power supply, USB3.0 supports dual stream
6. Multiple audio and 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
7. Audio input interface: support AAC, MP3, G.711A audio encoding, AAC, MP3 encoding support 16000, 32000, 44100, 48000 sampling frequencies
8. Built-in gravity sensor: built-in gravity sensor, support pan-tilt automatic flip function, convenient 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: RS422 is compatible with RS485, RS232-IN, RS232-OUT, and the RS232 interface supports cascading
11. Multiple control protocols: support VISCA, PELCO-D, PELCO-P protocols, and support automatic identification protocols
12. Super silent PTZ: adopts high-precision stepper motors and precision motor drive controllers to ensure that the PTZ runs smoothly at low speed and without noise
13. Low-power sleep function: supports low-power sleep/wake-up, and the 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. Multiple remote controls: Users can choose infrared remote controls or wireless remote controls according to the environmental conditions used. 2.4G wireless remote controls are not affected by angle, distance, or infrared interference. Supports remote control signal transparent transmission function, which is convenient for back-end devices to use
16. 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, and can switch tracking objects by clicking on the character object box on the web page
17. Many application places: distance education, teaching recording and broadcasting, conference system, remote training, telemedicine, trial system, emergency command system, etc

### Specification:

Image sensor	1/2.8-inch high-quality CMOS sensor
Effective pixels	2.07 million, 16:9
Video signal	HDMI/SDI/Interface video format: 1080P60/50/30/25/59.94/29.97; 1080I60/50/59.94; 720P60/50/59.94
U2 interface video format	320x240/352x288/640x360/640x480/704x576/704x480/720x576/800x448/800x600 /960x540/1024x576/ 1024x768/1280x720/1920x1080P30/25/20/15/10/5
Lens optical zoom	12x optical zoom
f=3.9~46.8mm	12x optical zoom
f=4.1~49.2mm	20x optical zoom
f= 5.05~101mm	
Viewing angle	6.6° (narrow angle) 70.4° (wide angle); 6.57° (narrow angle) 70.28° (wide angle); 3.4 5° (narrow angle) 60.04° (wide angle)
Aperture coefficient	F1.8 – F2.4: F1.8 – F2.68: F1.8 – F2.9
Digital zoom	X10
Minimum illumination	0.5Lux (F1.8, AGC ON)
Digital noise reduction	2D & 3D digital noise reduction
White balance	Auto/Manual/One-touch white balance/ 3000K/3500K/4000K/4500K/5000K/5500K /6000K/6500K/7000K
Focus	Auto/Manual/One-touch focus
Aperture	Auto/Manual
Electronic shutter	Auto/Manual
Backlight compensation	On/Off
Dynamic range	Off/Dynamic level adjustment
Video adjustment	Brightness, contrast, sharpness, horizontal flip, vertical flip (displayed when auto flip is off), black and white mode, gamma curve, electronic zoom, DCI, lens distortion correction
Signal-to-noise ratio	> 55dB
Table	2-3 Interface function performance parameter table
Interface	function performance
Product interface	HDMI, SDI, LAN (support POE), USB2.0, A-IN, RS232-IN,
RS232-OUT,	RS 485, rotary dial, DC12V power supply
Video output interface	HDMI, SDI, LAN, USB2.0
Video compression format	LAN interface supports: H.264, H.265

USB 2.0 interface supports	MJPEG, H264, H.265, YUY2, NV12
Audio input interface	dual-channel 3.5mm linear input
Audio output interface	HDMI, LAN, USB2.0
Audio compression format	AAC, MP3, G.711A
Network interface	100M network port, POE power supply optional, support audio and video output
Network protocol	RTSP, RTMP, ONVIF, GB/T28181; support network VISCA control protocol
Support	remote upgrade , remote restart, remote reset
Control interface	RS232-IN, RS232-OUT, RS485
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/1.5A
Input voltage	DC12V±10%
Input current	<1A
Power consumption of the whole machine	<12W
Table 2-4 PTZ parameter table	
PTZ parameters	
Horizontal rotation	-170° ~ +170°
Pitch rotation	-30° ~ +90°
Horizontal control speed	0.1°/s ~ 100°/s
Pitch control speed	0.1°/s ~ 30°/s
Preset speed	horizontal: 60°/s, pitch: 30°/s
Number of preset positions	Users can set up to 255 preset positions (10 for remote control)
Table 2-5 Other parameter table	
Other parameters	
Storage temperature	-10°C ~ +60°C
Storage humidity	20% ~ 95%
Operating temperature	-10°C ~ +50°C
Operating humidity	20% ~ 80%
Dimensions	258 (length) mm×172 mm (width)×169 mm (height)
Weight (approx.)	about 1.54 kg
Usage environment	indoor