

HD8008

HD Video Conference Camera



Description

The information communication high-definition camera series features comprehensive functions, excellent performance, and abundant interfaces. Advanced ISP processing technology and algorithms ensure vivid and realistic image quality, uniform brightness, strong light and color gradation, high clarity, and accurate color reproduction. It supports H.265/H.264 encoding, providing smoother and clearer images even at low bandwidths.

Features

- Full HD image: Equipped with a 1/2.8-inch, 2.07 megapixel high-quality image sensor, with a maximum resolution of up to 1920x1080 and an output frame rate of up to 60 frames per second.
- Various optical zoom lenses: Available with 12X and 20X optical zoom lens options.
- Advanced autofocus technology: Cutting-edge autofocus algorithms enable the lens to achieve fast, accurate, and stable autofocus.
- Low noise and high signal-to-noise ratio: The low-noise CMOS sensor ensures an exceptionally high signal-to-noise ratio for the video. It employs advanced 2D and 3D noise reduction technologies to further minimize noise while maintaining image clarity.
- Multiple video output interfaces: Support HDMI, USB 3.0, USB 2.0, and wired LAN (optional POE functionality).
- Multiple audio and video compression standards: Support H.265/H.264 video compression, AAC, MP3, and G.711A audio compression, with support for compression at up to 1920x1080 resolution and 60 frames per second.
- Audio input interfaces: Support AAC, MP3, and G.711A audio encoding. AAC and MP3 encodings support sampling rates of 16000, 32000, 44100, and 48000 Hz, while G.711A encoding supports only an 8000 Hz sampling rate.
- Multiple network protocols: Support ONVIF, GB/T28181, RTSP, and RTMP protocols. RTMP push mode is supported for easy connection to streaming media servers (e.g., Wowza, FMS). RTP multicast mode is supported, and the network full command VISCA control protocol is also supported.
- Control interfaces: RS485 and RS232. RS232 supports cascading for convenient installation and use.
- Various control protocols: Support VISCA, PELCO-D, and PELCO-P protocols with automatic protocol

- recognition.
- Super silent PTZ: Use high-precision stepper motors and precise motor drive controllers to ensure smooth and noiseless operation at low speeds.
- Low power sleep function: Support low power sleep/wake mode, with power consumption below 400mW during sleep.
- Multiple preset positions: Support up to 255 preset positions (10 preset positions can be set through the remote controller).
- Various remote controllers: Users can choose between infrared or wireless remote controllers based on their environment. The 2.4G wireless remote controller is unaffected by angles, distance, or infrared interference. It also supports remote controller signal pass-through for easy use with background devices.
- Applications: Suitable for remote education, teaching recording and broadcasting, conference systems, remote training, telemedicine, court systems, emergency command systems, and more.

Specifications

Model	HD8008	
Parameter	12x	20x
Device and Lens Parameters		
Image Sensor	1/2.8-inch high-quality CMOS sensor	
Effective Pixels	2.07 megapixels, 16:9	
Video Signal	HDMI port video format: 1080P60/50/30/25/59.94/29.97; 1080I60/50/59.94; 720P60/50/59.94 U3 interface video format: 1) U3: 1920X1080P60/50/30/25; 1280X720P60/50/30/25; 960X540P30; 640X360P30; 640X480P30; 352X288P30; 800*600P30 2) U3 compatible with U2: 960X540P30; 640X360P30; 1280X720P10/15; 720X576P50; 720X480P60; 640X480P30; 352X288P30; 800*600P30 U2 interface video format: 320x240/352x288/640x480/704x576/720x480/720x576/640x360/800x448/800 x600/960x540/1024x576/1024x768/1280x720/1920x1080P30/25/20/15/10/5	
Lens Optical Zoom	12x optical zoom f=3.9~46.8mm	20x optical zoom f=5.5∼110mm
Field of View	6.6° (narrow angle) 70.4° (wide angle)	3.3° (narrow angle) 54.7° (wide angle)
Aperture Factor	F1.8 - F2.4	F1.6 - F3.5
Digital Zoom	None	
Minimum Illumination	0.5Lux (F1.8, AGC ON)	
Digital Noise Reduction	2D&3D digital noise reduction	
White Balance	Auto/Manual/One-Key White Balance/3000K/3500K/4000K/4500K/5000K/5500K/6000K/6500K/70000K	
FOCUS	Auto/ Manual/ One-Key Focus	
Iris	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 turned off), Black and White Mode, Gamma Curve, Electronic Zoom, DCI, Lens Distortion Correction	
S/N Ratio	>55dB	

Interface Function

	Interface Function	
Product Interface	HDMI, USB3.0, LAN (supporting POE), USB2.0, A-IN, RS232-IN, RS232-OUT, RS485, Rotary DIP switch, DC12V power supply	
Video Output Interface	HDMI, USB3.0, LAN, USB2.0	
Image Stream	Dual stream output	
Video Compression	LAN interface: H.264, H.265	
Format	USB 2.0 interface: MJPG, 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 reboot, and remote reset	
Control Interface	RS232-IN, RS232-OUT, RS485	
Serial Communication Protocol	VISCA/Pelco-D/Pelco-P; support baud rates of 115200/38400/9600/4800/2400	
USB Communication Protocol	UVC (USB Video Class for video communication), UAC (USB Audio Class for audio communication)	
Power Interface	HEC3800 power socket (DC12V)	
Power Adapter	Input AC110V~AC220V; Output DC12V/1.5A	
Input Voltage	DC12V±10%	
Input Current	<1A	
Total Danier		
Total Power	< 12W	
Consumption	< 12W	
Consumption	PTZ Parameters	
Consumption Pan Rotation	PTZ Parameters -170°~+170°	
Consumption Pan Rotation Tilt Rotation	PTZ Parameters -170°~+170° -30°~+90°	
Consumption Pan Rotation Tilt Rotation Pan Control Speed	PTZ Parameters -170°~+170° -30°~+90° 0.1°/s~100°/s	
Consumption Pan Rotation Tilt Rotation Pan Control Speed Tilt Control Speed	PTZ Parameters -170°~+170° -30°~+90° 0.1°/s~100°/s 0.1°/s~30°/s	
Consumption Pan Rotation Tilt Rotation Pan Control Speed Tilt Control Speed Preset Position Speed	PTZ Parameters -170°~+170° -30°~+90° 0.1°/s~100°/s	
Consumption Pan Rotation Tilt Rotation Pan Control Speed Tilt Control Speed	PTZ Parameters -170°~+170° -30°~+90° 0.1°/s~100°/s 0.1°/s~30°/s Pan: 60°/s, tilt: 30°/s Users can set up to 255 preset positions (10 presets on the remote controller)	
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Pan Rotation Tilt Rotation Pan Control Speed Tilt Control Speed Preset Position Speed Number of Preset	PTZ Parameters -170°~+170° -30°~+90° 0.1°/s~100°/s 0.1°/s~30°/s Pan: 60°/s, tilt: 30°/s Users can set up to 255 preset positions (10 presets on the remote controller)	
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Pan Rotation Tilt Rotation Pan Control Speed Tilt Control Speed Preset Position Speed Number of Preset Positions Storage Temperature Storage Temperature Operating Temperature Operating Humidity Dimensions	PTZ Parameters $-170^{\circ} \sim +170^{\circ}$ $-30^{\circ} \sim +90^{\circ}$ $0.1^{\circ} / s^{\circ} 100^{\circ} / s$ $0.1^{\circ} / s^{\circ} 30^{\circ} / s$ Pan: $60^{\circ} / s$, tilt: $30^{\circ} / s$ Users can set up to 255 preset positions (10 presets on the remote controller)	
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Product Interface

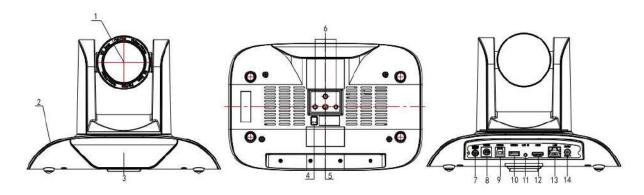


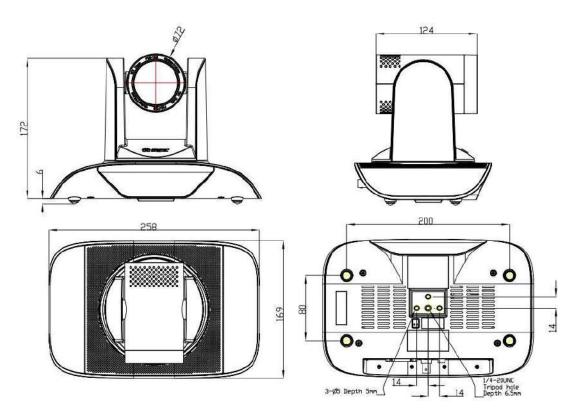
Figure 1-1 Product Interface

Product Interface Description:

- 1. Lens
- 2. Camera Body
- 3. Remote Control Receiving Indicator
- 4. Bottom DIP Switch
- 5. Tripod Mounting Hole
- 6. Fixing Hole
- 7. Rotary DIP Switch
- 8. RS232 Control Port (Input)
- 9. USB3.0 Interface

- 11. Audio Input Interface
- 12. HDMI Interface
- 13. Network Interface
- 14. DC12V Power Input

Overall Dimensions



Remote Controller



1. Standby Button

Press and hold for 3 seconds to put the device into standby mode. Press and hold again for 3 seconds to re-initiate a self-test and return to the HOME position. If preset position 0 is set, and there is no operation within 12 seconds, the PTZ will move to preset position 0.

2. Device Selection

Select the address number of the device you wish to control.

3. Number Keys

Set or recall preset positions 0-9.

4. * Button and # Button

5. Focus Control Buttons: Adjust focus.

[Auto Focus]: Enter auto focus mode.

[Manual Focus]: Enter manual focus mode; adjust focus using the [Focus +] or [Focus -] buttons.

6. Zoom Control Buttons

[Zoom +]: Zoom in (narrow the angle); [Zoom -]: Zoom out (Widen the angle).

7. Set and Clear Preset Buttons

Set preset: Save a preset position by pressing [Set Preset] + a number key (0-9) to assign the current position to the corresponding number.

Clear preset: Remove a preset position by pressing [Clear Preset] + a number key (0-9) to delete the preset associated with that number.

8. PTZ Control Buttons

Up/Down/Left/Right Arrows: Control the PTZ to turn up, down, left or right. [HOME] button: Return the PTZ to the center position or enter the next level menu.

9. Backlight Compensation Control Button

Backlight On/Off: Turn on/off the backlight.

10. Menu Button

Enter/exit the OSD (On-Screen Display) menu, or return to the previous menu level.

11. Device Infrared Remote Control Address Setup

[*]+[#]+[F1]: Address 1; [*]+[#]+[F2]: Address 2;

[*]+[#]+[F3]: Address 3; [*]+[#]+[F4]: Address 4.

12. Function Key Combinations

[#]+[#]+[#]: Clear all preset positions.

[*]+[#]+[6]: Restore factory default settings.

[*]+[#]+[3]: Set menu language to Chinese.

[*]+[#]+[4]: Set menu language to English.

[*]+[#]+[9]: Switch between upright and

inverted mounting mode.

[*]+[#]+Auto: Enter aging mode.

[#]+[*]+Auto: Stop aging mode.

[*]+[#]+Manual: Restore

IP/username/password to default.

[#]+[#]+[0]: Switch video format to 1080P60.

[#]+[#]+[1]: Switch video format to 1080P50.

[#]+[#]+[2]: Switch video format to 1080I60.

[#]+[#]+[3]: Switch video format to 108050.

[#]+[#]+[4]: Switch video format to 720P60.

[#]+[#]+[5]: Switch video format to 720P50.

[#]+[#]+[6]: Switch video format to 1080P30.

[#]+[#]+[7]: Switch video format to 1080P25.

[#]+[#]+[8]: Switch video format to 1080P59.

[#]+[#]+[9]: Switch video format to 1080I59.