

4K Ultra HD Wireless PTZ Camera

Designed for live scenarios like sports events, artistic performances, forums, lectures, and educational broadcasts, these cameras use a 1/1.8-inch 4K UHD CMOS image sensor for 3840×2160 image output. With a sizable battery and wireless transmission module, they require no wiring and can be set up anywhere, ensuring broad coverage for both indoor and outdoor live broadcasting venues.



4K 30fps

Wireless
Transmission

AI Tracking

20X
Optical ZoomOLED
Display

MIMO

Built-in
Battery

Key Features

- 4K UHD**
Utilizing a UHD CMOS sensor, it delivers images at 4K (3840 x 2160) and is compatible with various resolutions such as 1080P and 720P.
- 20X Optical Zoom + 60° Wide -angle Lens**
High-quality ultra wide focus lens, with 20X optical zoom and 16x digital zoom, 60° Wide-angle Lens
- AI Smart Tracking**
The camera, utilizing the AI capabilities of its chip, employs advanced AI algorithms to achieve single-lens humanoid tracking, which enables automatic tracking in scenarios such as education, meetings, and live broadcasting.
- Wireless Transmission**
Reliable wireless transmission with 2x2 MIMO and transmitter beamforming technology, achieving a maximum transmission rate of 300Mbps. Features 200 meters transmission distance, automatic search and intelligent configuration functions, the camera ensures high transmission efficiency.
- HDMI 1.4b**
Supports HDMI 1.4b specifications, allowing direct output of uncompressed 4K raw video.
- Low-Light Enhancement**
A brand-new CMOS image sensor with a 55dB SNR effectively reduces image noise in low-light conditions. The 3D noise reduction significantly lowers image noise, ensuring clear images in low-light situations.
- Built-in OLED Display**
The built-in OLED display shows output resolution, battery level, wireless signal strength, camera status, IP address, and other information.
- Remote control**
Multiple control modes, using RS232, RS485, network, HDBaseT and USB to control the camera.
- Support H.264 Slice Encoding**
Supports H.264 streaming with Slice encoding mode, suitable for highend USB conference video applications.
- Standard Lens Sunshade**
Equipped with a standard lens sunshade, using the sunshade helps suppress glare and prevents stray light from entering the lens, especially suitable for outdoor wireless shooting in sunlight conditions.
- Built-in Large Capacity Lithium Battery**
Featuring a built-in 9450mAh super-large capacity lithium battery, it provides a continuous power source with a low-power design, offering 6 hours of persistent endurance.
- USB Type-C Interface**
Compatible with USB 3.0 and USB 2.0. Supports UVC 1.1 and UAC 1.0 protocols, facilitating both raw and encoded video output.
- Three Power Supply Options**
Supports 12V power adapter, Type-C, and internal battery power supply simultaneously.

Technical Specification

Model	W40
Camera Specification	
Sensor	1/1.8 inches, CMOS, Effective Pixels: 8.42MP
Lens	20x, f = 6.25mm ~ 125mm, F1.58 ~ F3.95
Horizontal FOV	60° ~ 3.5°
Vertical FOV	35.7° ~ 2.0°
Signal System	4K/30p, 25p; 1080/ 30p, 25p
AI Feature	AI Tracking
Automatic ICR (Automatic Switching of Infrared Filter)	Support
Scanning Mode	Progressive
Minimum Illumination	0.5Lux (F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s
DNR	2D & 3D DNR
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Backlight Compensation	Support
Hood	Support
WDR	OFF/ Dynamic level adjustment
Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve
SNR	>55dB
Input/Output Interface	
Interfaces	USB 3.0, HDMI, LAN, Audio-IN, RS485, Reset
Video Output Interfaces	USB3.0, HDMI, LAN
Network Interface	RJ45: 10M / 100M / 1000M adaptive Ethernet port
Audio Interface	1 x LINE IN, 3.5mm Jack 2 x Built -in microphone
USB Interface	1 x USB2.0, Type-A (software configurable as Host or Device)
Control Interface	1 x RS485 In(Optional): 3pin phoenix port, Max Distance: 1200m, Protocol: VISCA / Pelco-D / Pelco-P
Reset Button	Pinhole RESET
Switch	Support
Remote Control Receiving	Support
Display	Can display information such as output resolution, battery power, wireless signal strength, camera status, IP address and other information
Power Interface	JEITA type (DC IN 12V)
Network Specification	
Video Compression Format	H.265 / H.264 / MJPEG
Image Stream	First Stream, Second Stream

First Stream Resolution	3840x2160, 1920x1080, 1280x720 etc.
Second Stream Resolution	1920x1080,1280x720,1024x576,720x576 etc.
Video Bit Rate	32kbps~20480kbps
Bit Rate Control	VBR, CBR
Frame Rate	50Hz: 1fps~50fps, 60Hz:1fps~60fps
Audio Compression	AAC
Audio Bit Rate	96Kbps, 128Kbps, 256Kbps
Protocols	TCP/IP, HTTP, RTSP, NDI, RTMP, Onvif, DHCP, Multicast, etc.
USB Specification	
Support operating system	Windows 7, Windows 8, Windows 10, Windows 11, Mac OS X, Linux, Android
Color space / compression	YUY2 / MJPEG/ H.264
Video format	YUY2: Max.1440P30; MJPEG: Max.2160P30, H.264 AVC: Max.2160P30; H.265 HEVC: Max.2160P30
USB Audio	UAC1.0
USB Video	UVC 1.1
UVC PTZ control	Support
Wireless Features	
Wireless	5. 15~5. 35GHz, 5. 425~5. 725GHz and 5. 745~5. 850GHz
Transmit power	27dBm
Antenna	2*2MIMO, Beamforming
Channel bandwidth	20/40MHz channel width selection
Modulation mode	OFDM
Transfer data rate	Maximum 300Mbps
Network mode	Point-to-point, point-to-multipoint
Penetration	1~2 walls
Transmission distance	200 meters (for longer distances, higher gain antennas can be used)
Standard protocol	802.11a/n
PTZ Specification	
Pan/Tilt Rotation	±170°, -30° ~+90°
Pan Speed	2.7° ~ 35.7° /s
Tilt Speed	2.7° ~ 31.5° /s
Image Flip	Support
Image Freeze	Support
Preset Number	255 presets (10 presets by remote controller)
Other Specification	
Input Voltage	DC 12V
Input Current	3A (Max.)
Operating Temperature	-10° C ~ 40° C

Storage Temperature	-40° C ~ 60° C
Power Consumption	36W (Max.)
Net Weight	1.9kg
Dimension	143mm (W) x 189.3mm (D) x 201.6mm (H)

Accessory

Package	Power supply, USB3.0 cable, Remote controller, User manual
Optional Accessories	Ceiling / Wall Mount (Extra Cost)

Interface Picture:

