HW 40ML/40MN/40MQ/40MH

4K dual-band wireless transmission PTZ camera

| 4K30fps | WIFI | Fixed / 3× / 10× / 20× Zoom |

| AI tracking + auto framing | HDMI+USB3.0 | MJPEG/YUY2 |

Features

■ **4K30 ultra- high-definition video output:**

HW40ML/40MN/40MQ/40MH : Equipped with a new generation 1/2.8-inch CMOS high-quality sensor, with an effective pixel count of 8.29 million, capable of delivering high-quality ultra-high-definition image output up to 4K at 30fps.

■**Fixed focus, 3x, 10x, 20x optional lenses:**

HW40ML : Fixed-focus lens with a distortion-free horizontal viewing angle of 94° .

HW40MN : 3x optical lens, distortion-free horizontal viewing angle of 96.5° .

HW40MQ : 10x optical telephoto lens, distortion-free horizontal viewing angle of 6-7.5 ° .

HW40MH : 20x optical telephoto lens, distortion-free horizontal viewing angle of 58.7 °.

■ **Wifi technology wireless transmission camera:**

It adopts WIFI wireless transmission technology, with the characteristics of high-bandwidth 4K transmission , applicability to more terminals, strong anti-interference, lower power consumption, wider coverage and higher protection .

■**Wireless WIFI output 4K 30 screen :**

External WIFI USB3.0 dongle, HW40 series supports up to 4K30fps ultra-clear image quality , and the maximum transmission distance can reach 30 meters (unobstructed).

■ USB3.0 +HDMI interface :

Simultaneous 4K30fps ultra-high-definition video output via USB 3.0 and HDMI interfaces.

■ Multiple image output options:

You can choose wired or wireless output mode according to your needs.

■ Low light :

The new CMOS image sensor with ultra-high signal-to-noise ratio can effectively reduce image noise in low-light conditions. The simultaneous application of 2D and 3D noise reduction algorithms significantly reduces image noise. Even in ultra-low-light conditions, the picture remains clean and clear, with an image signal-to-noise ratio of over 50 dB .

■ Remote Control:

Using RS232 and RS485 serial ports, multiple cameras can be cascade controlled.

■ Video compression standards:

Supports YUY2 and MJPG video compression formats.

■ Multiple control protocols:

Support for VISCA, PELCO P/D protocols with automatic protocol recognition.

■ Multiple installation methods:

Multiple installation methods, including desktop, ceiling and wall mounting.

■ New generation AI tracking algorithm:

Supports AI tracking and automatic framing .

(*Note: 1. When AI and wireless are turned off: HDMI and USB3.0 wired support 4K30 resolution video output simultaneously;

2. When the AI function is turned on: HDMI and USB3.0 support simultaneous video output, HDMI supports up to 1080p60 resolution output, and USB3.0 supports up to 1080p30 resolution output;

3. When wireless is turned on: the AI function will be automatically turned off and the AI option will be blocked in the menu. HDMI and Wi-Fi wireless support 4K30 resolution output simultaneously ;)

Camera parameters

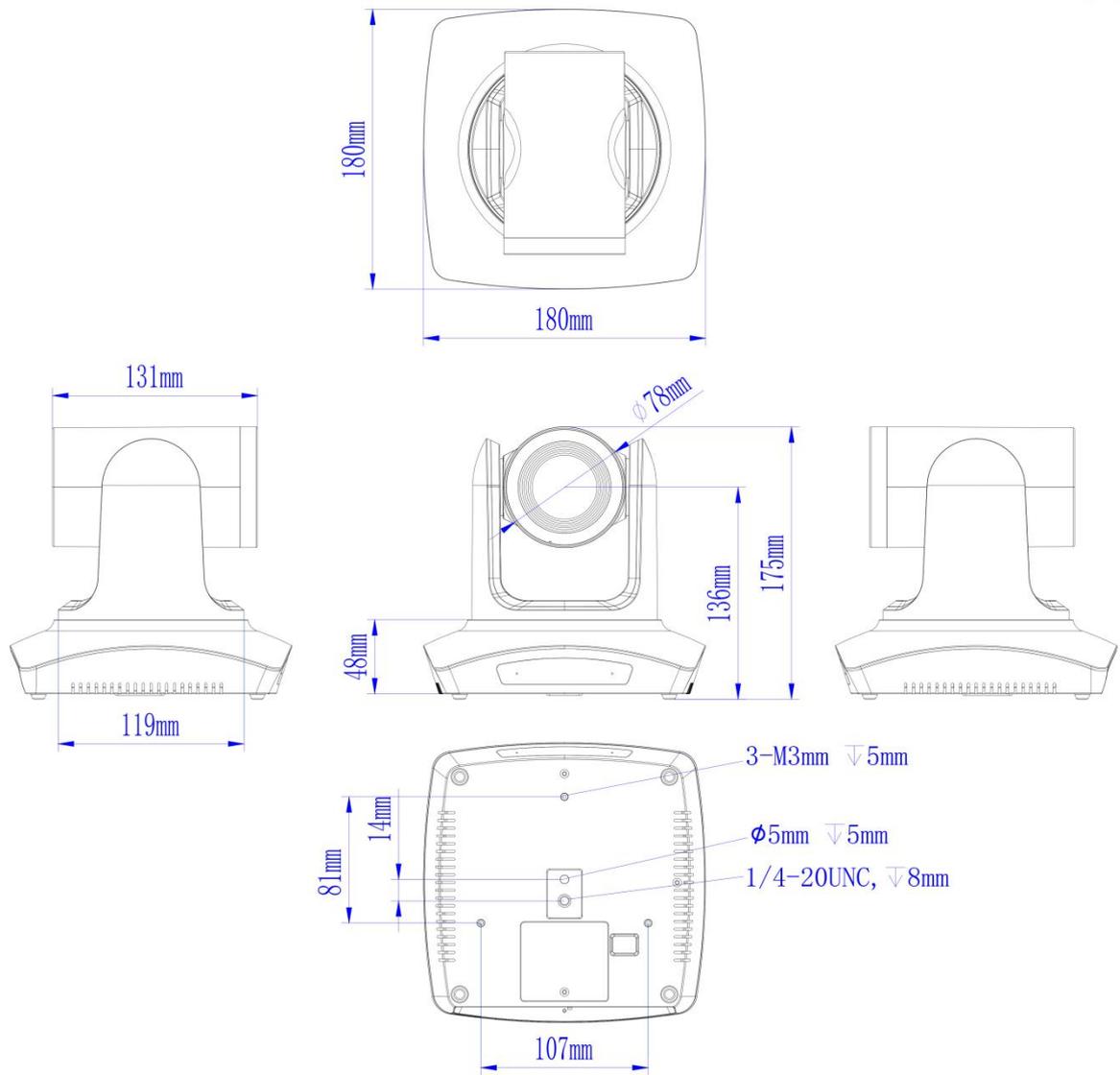| Image parameters	
Resolution	HDMI: 4K30/25, 1080p60/59.94/50/30/29.97/25, 720p60/50
Image sensor	SONY 1/2.8 inch CMOS
Pixel	8.5 million, 8.29 million effective pixels
Scan Mode	Line by line
Lens	HW40ML : Fixed-focus lens HW40MN : 3x optical zoom, f=3.2mm (wide angle) ~ 12.8mm (narrow angle) HW40MQ : 10x optical zoom, f=4.32mm (wide angle) ~ 40.9mm (narrow angle) HW 40 MH : 20x optical zoom, f=5.2mm (wide angle) ~ 104mm (narrow angle) , F1.55 ~ F3.13
Horizontal View Angle	H W 40 ML : 94 ° H W 40 MN : 9 6.5 °(W)~ 29.3 °(T) H W 40 MQ : 6 7.5 °(W)~ 7.6 °(T) H W 40 MH : 58.7 °(W)~ 3.2 °(T)
Vertical View Angle	H W 40 ML : 62 ° H W 40 MN : 51.5 °(W)~ 16.5 °(T) H W 40 MQ : 40.2 °(W)~ 4.3 °(T) H W 40 MH : 32.2 °(W)~ 1.8 °(T)
Focus System	HW 40 MN/MQ/MH : Automatic, Manual
Shutter Speed	1/25s ~ 1/10000s
Minimum illumination	H W 40 ML : 1.5 Lux H W 40 MN : 1.5 Lux H W 40 MQ : 0.1 Lux H W 40 MH : 0.1 Lux @ (F1.5, AGC ON)
Exposure	Automatic, manual
White Balance	Automatic, manual
Backlight compensation	support
Digital noise reduction	2D & 3D digital noise reduction
S/N Ratio	≥50dB
Pan/Tilt	
Pan Angle	±170°
Tilt Angle	-30°~+90°
Pan Speed	1°~60°/s
Tilt Speed	1°~60°/s
Preset Positions	9 preset positions by IR remote controller, 255 preset positions by joystick controller or PC
Preset accuracy	0.1°±10%
Flip	support

AI	
AI tracking	support
Auto Framing	support
Tracking size	support
Tracking sensitivity	support
AI guard position	support

USB	
Protocol	UVC 1.1
Operating system	Window7 and above, MacOS, Linux, Android
Video Compression	YUY2, MJPEG
Resolution	3840*2160, 2560 *1 440, 1920*1080, 1280*720, 960*540, 800*600, 720*576, 720*480, 640*480, 640*360, 352*288, 320*240
Frame rate	Up to 30
UVC PTZ control	support

Interfaces	
HDMI interface	1-way, HDMI: version 1.4
USB interface	1-way, USB 3.0 , Type- B socket
Communication interface	1-way, RS232 IN: 8-pin mini DIN, maximum distance 30 meters, VISCA/Pelco-D/Pelco-P protocol 1-way, RS485: 3-core Phoenix port, maximum distance 1200 meters, VISCA/Pelco-D/Pelco-P protocol
Power interface	JEITA RC-5320A Type 4

General Specifications	
Input voltage	DC 12V
Input current	Maximum 0.7A
Power consumption	Maximum 8W
Operating temperature	0~40℃
Storage temperature	-10~60℃
Color	silver
Dimension	(Width) 180* (Depth) 180* (Height) 175mm
Weight	1.2kg
Accessories	DC12V power adapter, IR remote control, operating instructions, USB3.0 video cable, RS-232 serial cable, bracket

WIFI Dongle Parameters

UVC characteristics	
Protocol	UVC1.1
USB version	USB 3.0

Operating system	Windows 7 and above, MacOS, Linux, Android
Video Compression	MJPEG, YUY2
UVC video frame rate	Up to 30 frames
Wireless parameters	
Band	2.4GHz
Power consumption	5V/0.4A
Wireless Network Standards:	IEEE 802.11b/g/n 1T1R
WIFI image output	
MJPEG	3840*2160, 1920*1080, 1280*720, 960*540, 800*600, 640*360, 720*576, 720*480, 640*480, 352*288, 320*240
YUY2	1280*720, 960*540, 800*600, 640*360, 720*576, 720*480, 640*480, 352*288, 320*240
other	
Usage Environment	Recommended indoor
Use distance	2.4G is recommended to be used within 30 meters (unobstructed)
Operating temperature	-10℃~40℃
Storage temperature	-20℃~60℃
color	black
Dimensions	(Width) 12.6*(Depth) 25.15*(Height) 275mm (including antenna)
weight	About 0.3kg

Dimension

Application Scenario

Government-Business Conference

Academic Symposium