



# VC-12AT

## 4K60P Professional PTZ Camera

4K60P / NDI®|HX2 / 80.8° Ultra-Wide-angle / AI Tracking



### Product Features

#### ● 4K60P

Using 1/2.5-inch high-quality UHD CMOS sensor with a maximum of 8.51 million pixels can realize 4K (3840x2160) ultra-high-resolution high-quality images. And downward compatible with 1080p, 720p and other resolutions.

#### ● 12x Optical Zoom + 80.8° Wide-angle Lens

It adopts 4K ultra long focal lens with high quality and 8 million ultra-high resolution, 12x optical zoom, and the maximum field angle is 80.8°.

#### ● Electro Mechanical PTZ

Built-in self-developed electro mechanical PTZ, the horizontal rotation range can reach  $\pm 162.5^\circ$ , the rotation speed range is  $1.8^\circ \sim 80^\circ /s$ ; the vertical rotation range can reach  $-30^\circ \sim 90^\circ$ , and the rotation speed range is  $1.5^\circ \sim 49^\circ /s$ .

#### ● Multiple Interfaces

Support HDMI and 3G-SDI interface, effective transmission distance of 3G-SDI is up to 150 meters (1080P30). HDMI or 3G-SDI, USB, LAN can output three HD digital signals at the same time.

#### ● Built-in Dual Microphones<sup>3</sup>

Built-in dual microphones use the beamforming algorithm to accurately pick up the sound. The unique noise suppression algorithm makes the speaker's voice clearer and more realistic, and the pickup distance is up to 6 meters.

#### ● Uncompressed video output

With HDMI2.0 and 3G-SDI interface, it can directly output uncompressed digital video.

#### ● Low Illumination

The application of 3D noise reduction algorithm greatly reduces image noise. Even under the condition of ultra-low illumination, it still keeps the picture clean and clear, and the SNR of image is as high as 55dB.

#### ● Remote Control

Support variety of control methods, you can use RS232, RS485, network and USB to control the camera.

#### ● AI Tracking

With the help of the AI computing power of the chip, the camera is equipped with advanced AI algorithms to realize monocular humanoid tracking, which can realize automatic tracking of scenes such as education, conferences and live broadcasts.

#### ● Voice Tracking<sup>1</sup>

The built-in intelligent AI algorithm uses dual microphones to accurately locate the sound source. The camera can automatically find and track the speaker. When different speakers speak, the camera can switch among different speakers.

#### ● NDI®|HX2<sup>2</sup>

NDI®|HX2 has the characteristics of low latency and plug and play and easy to be implemented and deployed. It has good ecology and supports the simultaneous transmission of audio, video and control commands. It is a new generation of network video transmission mode.

#### ● USB3.0<sup>2</sup>

The optional USB3.0 interface can transmit uncompressed original video images and is backward compatible with USB2.0.

#### ● Gravity Sensor<sup>2</sup>

It supports automatic image flipping function, which is convenient for installation and use.

#### Remark:

1. This feature is available in subsequent firmware releases.
2. This function is optional.
3. The maximum pickup distance is obtained from the VHD laboratory test, and the actual distance varies depending on the user's environment.

# Product Specifications

## Main Features

Uncompressed Video Output	<b>HDMI:</b> 4K60P, 4K59.94P, 4K50P, 4K30P, 4K29.97P, 4K25P, 1080P60, 1080P59.94, 1080P50, 1080P30, 1080P29.97, 1080P25, 1080I60, 1080I59.94, 1080I50, 720P60, 720P59.94, 720P50; <b>3G-SDI:</b> 1080P60, 1080P59.94, 1080P50, 1080P30,1080P29.97; 1080P25, 1080I60, 1080I59.94; 1080I50, 720P60, 720P50
Sensor	1/2.5 inches, CMOS, Effective Pixels: 8.51 Megapixels
Scanning Mode	Progressive
Lens	12x, f=3.47mm~41.65mm, F1.84~F3.72
Digital Zoom	16x(Max.)
Minimum Illumination	0.5 Lux @ (F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Backlight Compensation	Support
Digital Noise Reduction	3D Digital Noise Reduction
SNR	≥ 55dB
Horizontal FOV	80.8° ~ 7.5°
Vertical FOV	49.9° ~ 4.3°
Pan Angle	±162.5°
Tilt Angle	-30° ~ +90°
Pan Speed	1.8° ~80° /S
Tilt Speed	1.5° ~49° /S
Image Flip	Support
Image Freeze	Support
PoE+	Support
Preset Position	255
Preset Accuracy	0.1°

## Interfaces

HD Output	1 x HDMI: Version 2.0; 1 x 3G-SDI: BNC , 800mVp-p, 75Ω, as per SMPTE 424M standard
Network Interface	1 x RJ45: 10M/100M/1000M adaptive Ethernet
Audio Interface	1 x LINE IN: 3.5mm Jack
USB Interface	1 x USB2.0,Type-C (Optional upgrade to USB3.0)
Control Interface	1 x RS485: 3pin phoenix port, Max Distance: 1200m, Protocol: VISCA / Pelco-D / Pelco-P; 1 x RS232 IN: 8pin Mini DIN, Max Distance: 30m, Protocol: VISCA / Pelco-D / Pelco-P; 1 x RS232 OUT: 8pin Mini DIN, Max Distance: 30m, Protocol: VISCA only
Power Interface	JEITA type (DC IN 12V)

## Network Features

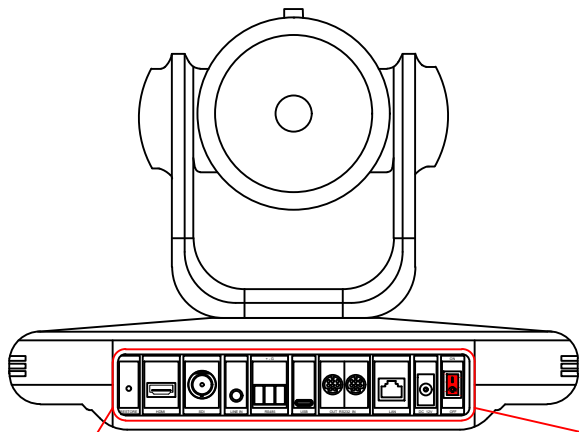
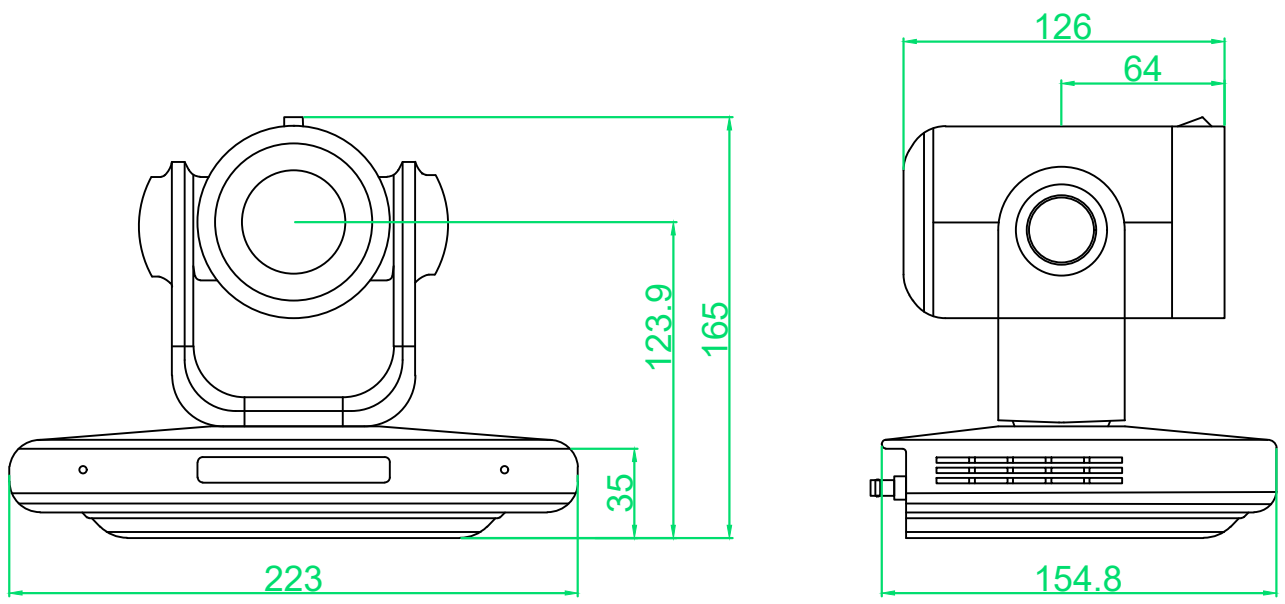
Video Compression	H.265 / H.264 / MJPEG
Video Stream	First Stream, Second Stream
First Stream Resolution	3840x2160, 1920x1080, 1280x720, 1024x576 etc.
Second Stream Resolution	720x576, 720x480, 320x240 etc.
Video Bit Rate	First Stream: 32kbps~51200kbps Second Stream: 32kbps~20480kbps
Bit Rate Control	VBR, CBR
Frame Rate	50Hz: 1fps~50fps, 60Hz:1fps~60fps
Audio Compression	AAC
Audio Bit Rate	96Kbps,128Kbps
Protocols	NDI® HX2, SRT, TCP/IP,HTTP,RTSP, RTMP(s),Onvif,DHCP,Multicast, etc.

## USB Features

Operating System Supported	Windows 7, Windows 8, windows 10, windows 11, MacOS 11.6.6 or higher versions, Ubuntu 18.04.4 lts or higher versions, Android 8.0.0 or higher versions
Color System / Compression	YUY2 H.265 / H.264 / MJPEG
Video Format	YUY2 :Max.1080P30(USB3.0) ²; YUY2 :Max.1080P5(USB2.0); H.264 : Max.2160P30; H.265 HEVC: Max.2160P30; MJPEG: Max.2160P30
USB Audio	Support
USB video Communication Protocol	UVC 1.1~1.5
UVC PTZ Control	Support

## General Specifications

Input Voltage	DC 12V / PoE+(802.3at)
Operating Temperature	0 ~ 40° C
Storage Temperature	-40 ~ 60°C
Power Switch/ Recovery key/ IR Remote Input	Support
Indicator lamp	Power State, Run State, TALLY Lamp
Power Consumption	18W (Max.)
Dimension	223 x 154.8 x 165 (mm)
Net Weight	About 1.8kg



- HDMI CABLE
- 3G SDI CABLE
- AUDIO CABLE
- RS458 CABLE
- USB CABLE
- RS232 CABLE
- RS232 CABLE
- NETWORK CABLE
- POWER CABLE

