Dual Lens Camera

CMP-U12ATC / CMP-U12ATT

Dual-lens 4K Intelligent Auto Tracking PTZ Camera

Dual Lens | 4K UHD | AI Presenter Tracking | Built-in Microphone | Multiple Interfaces

Designed for executive-level meetings, educational recordings, and more, the CMP-U12ATC / CMP-U12ATT features built-in 4K dual lenses for clear images. Equipped with AI auto-framing, voice tracking, and intelligent switching algorithms, it accurately captures scenes without manual intervention, seamlessly transitioning between panoramic and close-up views to meet diverse requirements.



Features

Integrated Design

The unit adopts a panoramic and close-up dual-lens design, simultaneously outputting multiple streams of panoramic and close-up video, capturing more details during interactive teaching processes.

4K Images

Both the panoramic and close-up lenses utilize a 1/2.5-inch 4K UHD CMOS image sensor, enabling superior quality images at 4K (3840×2160) resolution. It is also compatible with various resolutions such as 1080P and 720P.

AI Assisted Shooting

Support two modes of teaching tracking and meeting tracking.
Teaching tracking: without any auxiliary positioning camera or tracking host can realize smooth and natural tracking shooting of teachers or students;
Conference tracking: automatically adjust the lens according to changes in the position of the conference personnel, can also be locked according to the location of the sound source to give the speaker a close-up shot, to meet the needs of all kinds of conference scene shooting.

Wide-Angle Long Zoom

The panoramic cameras provide optional 48° (CMP-U12ATT) and 107° (CMP-U12ATC) wide-angle lenses for capturing panoramic shots of teachers and students. The close-up cameras, with a 71° field of view and a 12x optical zoom lens, capture clear close-up shots of teachers and students.

Built-in Microphone Array

Equipped with a microphone array that captures audio from all directions, with a pickup distance of up to 6 meters. The unique noise suppression algorithm ensures perfect audio reproduction.

Multiple Interfaces

Supports HDMI 1.4b for HD output, equipped with a 3G-SDI interface for effective transmission over distances of up to 150 meters (1080P30). Simultaneously outputs 4 channels of HD digital signals through HDMI, 3G-SDI, USB 3.0, and LAN.

Built-in Gravity Sensor (optional)

Supports automatic image flipping, providing convenience for engineering installation and use.

Product Specification

Camera Spec of Close-up Camera

Signal System	**HDMI:** 4KP30, 4KP25, 4KP29.97, 1080P30, 1080P25; **SDI:** 1080P30, 1080P25;
Sensor	1/2.5 inches, CMOS, Effective Pixels: 8.51 Megapixels
Scanning Mode	Progressive
Lens	12X, f=4.4mm~52.8mm, F1.8~F2.6
Digital Zoom	16X
Minimum Illumination	0.5Lux @ (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	71° ~ 8.2°
Vertical FOV	42.7° ~ 4.5°
Pan Angle	±170°
Tilt Angle	±30°
Pan Speed	1.61° ~ 75.56° /s
Tilt Speed	0.44° ~ 15° /s
Image Flip	Support
Image Freeze	Support
Preset Position	255
Preset Accuracy	0.1°

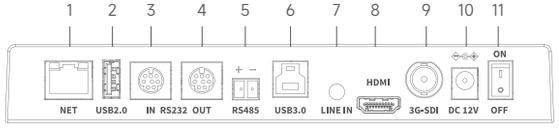
Camera Spec of Panoramic Camera

Signal System	HDMI: 4KP30, 4KP25, 4KP29.97, 1080P30, 1080P25; SDI: 1080P30, 1080P25;
Sensor	1/2.5 inches, CMOS, Effective Pixels: 8.51 Megapixels
Scanning Mode	Progressive
Type of Lens Mount	M12
Lens I (CMP-U12ATT)	Focal length: f=8.0mm, Horizontal FOV: 48°
Lens II (CMP-U12ATC)	Focal length: f=1.97mm, Horizontal FOV: 107°
Minimum Illumination	0.5 Lux @ (F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Digital Noise Reduction	3D Digital Noise Reduction
Backlight Compensation	Support
Image Freeze	Support
Image Flip	Support

Input/Output Interface

HD Output	1 x HDMI, Version 1.4b; 1 x 3G-SDI: BNC, 800mVp-p, 75Ω, as per SMPTE 424M standard

Interface Diagram



1 —— NET
2 —— USB2.0
3 —— RS232 IN
4 —— RS232 OUT
5 —— RS485
6 —— USB3.0
7 —— LINE IN
8 —— HDMI
9 —— 3G-SDI
10 —— DC 12V
11 —— ON/OFF

Input/Output Interface

Network interface	1 x RJ45: 10M / 100M /1000M adaptive Ethernet; PoE+ supported
Audio Interface	1 x LINE In: 3.5mm Jack
USB Interface	1 x USB 3.0: Type-B ; 1 x USB2.0: Type-A
Control Interface	1 x RS485: 2pin 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	1 x DC-005/Φ2.0 type （DC IN 12V）

Network Spec

Video Compression	H.265 / H.264 / MJPEG
Video Stream	First Stream, Second Stream, Third Stream, Fourth Stream
First Stream, Second Stream Resolution	3840x2160, 1920x1080, 1280x720, 1024x576 etc.
Third Stream, Fourth Stream Resolution	720x480, 320x240 etc.
Video Bit Rate	32kbps~51200kbps
Bit Rate Control	VBR, CBR
Frame Rate	50Hz: 1fps~25fps, 60Hz:1fps~30fps
Audio Compression	AAC、G711A
Audio Bit Rate	48Kbps，64Kbps，96Kbps，128Kbps
Protocols	NDI®|HX2（optional), SRT, TCP/IP, HTTP, RTSP, RTMP/RTMP(s), Onvif, DHCP, GB/T28181, Multicast etc.

USB Spec

Operating System Supported	Windows 7 (only supports UVC1.1 features), Windows 8 and above version, Mac OS X, Linux 2.4.6 and above version, Android needs to include the version of UVC-related drivers
Color System / Compression	YUV / H.264 / MJPEG /NV12
Video Format	YUY2: Max.1080P30; H.264 AVC: 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

Generic Spec

Input Voltage	DC 12V/PoE+（802.3at）
Input Current	2A（Max.）
Operating Temperature	-10° C ~ 40° C
Storage Temperature	-40° C ~ 60° C
Power Consumption	18W（Max.）
Dimension (W x D x H)	200 x 177 x 165mm
Net Weight	1.76kg