

# C213 Dual-lens 4K Teaching Conference Camera

SKU: 0200213-I

EAN:



## FEATUES

### ● Dual-lens integrated design

Panoramic and close-up integrated design, the panoramic lens has an effective pixel of 4.93 million, and the close-up lens has an effective pixel of 8.29 million, covering the entire classroom in all directions. It is divided into two units, teacher and student. The teacher's panoramic camera uses a 1/2.7-inch high-definition CMOS sensor, and the close-up camera uses a 1/2.7-inch 4K high-quality CMOS sensor. The panoramic camera on the teacher side has a viewing angle of 43°, the close-up camera has a viewing angle of 26°, the panoramic camera on the student side has a viewing angle of 110°, and the close-up camera has a viewing angle of 43°

### ● Intelligent teaching tracking

The educational camera uses advanced image recognition and tracking algorithms, without the need for additional positioning equipment, to easily track and capture teachers or students, ensuring that no teaching details are missed. It can output multiple video streams at the same time, including up to 5M panoramas and 4K close-ups. It supports external and built-in directors to meet the diverse needs of recording hosts and interactive terminals. The teacher and student units are paired, and multi-angle director output can be performed through the network or USB interface.

### ● Micro PTZ, wider coverage

Equipped with a newly designed micro mechanical PTZ, the horizontal rotation range can reach  $\pm 40^\circ$ , and it supports electronic PTZ, combined with more accurate and smoother framing and capture. The camera is equipped with a built-in array microphone (optional for educational cameras) and supports omnidirectional sound pickup up to 6 meters. It combines algorithms such as beamforming, noise suppression and echo cancellation to provide clear and crisp sound quality. Supports multiple video output interfaces such as PoE, USB 3.0, 3G-SDI<sup>2</sup> (optional for educational cameras), which can quickly connect to recording and broadcasting hosts, OPS large screens and other devices, effectively expanding application scenarios.



## CAMERA SPEC OF CLOSE-UP CAMERA

Sensor	Educational Camera: 1/2.7", CMOS, Effective; pixel:8.29Megapixels
Scanning Mode	Progressive
Type of Lens Mount	M12
Student Close -up Lens	f=7.37mm, Horizontal FOV: 43°
Teacher Close -up Lens	f=13.1mm, Horizontal FOV: 25°
Conference Close -up Lens	f=7.37mm, Horizontal FOV: 43°
Digital Zoom	2×
Minimum Illumination	0.5 Lux
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR

Digital Noise Reduction	2D&3D Digital Noise Reduction
Backlight Compensation	Support
Pan Angle	±40°
Tilt Angle	+5° ~ -30°
Maximum	Student Camera:Pan Speed 60° /s,Tilt Speed 30° /s
Rotation Speed	Teacher Camera:Pan Speed 30° /s,Tilt Speed 30° /s
Image Flip	Support
Image Freeze	Support
Preset Position	255
Preset Accuracy	0.5°

## CAMERA SPEC OF PANORAMIC CAMERA

Sensor	Educational Camera:1/2.7", CMOS, Effective; pixel:4.93Megapixels
Scanning Mode	Progressive
Type of Lens Mount	M12
Student Panoramic lens	f=2.2mm, Horizontal FOV: 110°
Teacher Panoramic lens	f=7.37mm, Horizontal FOV: 43°
Minimum Illumination	0.5 Lux; 0.5 Lux (Teacher Panoramic Camera) ; 0.5 Lux (Panoramic Conference Camera)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Digital Noise Reduction	2D&3D Digital Noise Reduction
Backlight Compensation	Support
Tilt Angle	+0° ~ -24°
Image Flip	Support
Image Freeze	Support

## AUDIO

Built -in Array Microphone	4 Microfen array1 , 100Hz to 16kHz frequency response
Simulation Audio Input	1 x LINE In
Simulation Audio Output	1 x LINE Out
Digital Audio Interface	1 x USB audio input output; 1 x SDI audio output <sup>2</sup> ; 1 x network audio input output, supports 1588 -based audio clock synchronization
Built -in Array Microphone	4 Microfen array1 , 100Hz to 16kHz frequency response
Simulation Audio Input	1 x LINE In
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Digital Audio Interface	1 x USB audio input output;1 x SDI audio output <sup>2</sup> ; 1 x network audio input output, supports 1588 -based audio clock synchronization

## USB SPEC

Operating System	Windows® 7 ( Only support 1080P and below ),
Supported	Windows 8.1 and above version ; macOS ™ 10.10 and above version; Google ™ Chromebook ™ Version 29.0.1547.70 andabove version; Linux ( Need to support UVC)
Hardware Requirements	2.4 GHz Intel® Core 2 DUO processor or higher; 2 GB memory or higher; USB 3.0 or USB 2.0 interface
Color System /Compression	YUY2 / MJPEG / H.264
Video Format	Maximum 4K and other different frame rates and resolution video formats
USB Video	UVC 1.1
Communication Protocol	
USB Audio	The maximum 48K sampling rate, supports UAC1.0
UVC PTZ Control	Support

## NETWORK SPEC

Video Compression	H.265 / H.264 / MJPEG
Video Stream	First Stream, Second Stream,Third Stream, Fourth Stream
First Stream Resolution	3840x2160, 1920x1080,1280x720 etc.
Second Stream Resolution	2880x1620, 1920x1080,1920x1080 etc.
Third Stream Resolution	1920X1080,1280x720,1024x576,960x540 etc.
Fourth Stream Resolution	1920x1080,1280x720,1024x576,960x540 etc.
Video Bit Rate	32Kbps ~ 16384Kbps
Bit Rate Control	VBR, CBR
Frame Rate	25/30fps
Audio Compression	AAC/G.711A
Audio Bit Rate	96Kbps、 128Kbps、 256Kbps
Protocols	TCP/IP, HTTP,HTTPS,NDI,SRT,RTSP, RTMP, Onvif,DHCP, GB/T 28181. Multicast etc.

## I/O

USB Interfaces	1 x USB 3.0: TYPE-C
HD Interfaces	1 x SDI <sup>2</sup> , Support 1080P30, Support PoC <sup>1</sup>
Network Interface	1 x RJ45: 10M / 100M adaptive Ethernet; PoE(802.3af),Support NDI <sup>1</sup>
Audio Interface	1 x LINE In: 3.5mm 1 x LINE Out: 3.5mm
Power Interface	DC005 type (DC 12V)
Reset Button	RESET
Infrared Interface <sup>1</sup>	Support

**GENERIC SPEC**

Input Voltage	DC 12V/PoE (802.3af)/ PoC <sup>2</sup>
Input Current	1A (Max.)
Operating Temperature	0° C ~ 40° C
Storage Temperature	-40° C ~ 60° C
Power Consumption	12W (Max.)
Dimension	242.05mm (W) × 86.03mm (D) × 70.55mm (H)
Net Weight	TBD
No Failure Time	30000h
Input Voltage	DC 12V/PoE (802.3af)/ PoC <sup>2</sup>