ALL-IN-ONE VIDEO BAR

4K Dual-Lens PTZ Video Bar

RB20

Wired BYOD   **Dual-Lens**   **PTZ**   **Audio 3A algorithm**   **AI-assisted shooting**

The RB20 is designed specifically for medium to large corporate meeting spaces, integrating dual-lens ultra-high-definition audio and video capabilities. It features a 4K ultra-high-definition panoramic and close-up camera system, digital microphone, and full-range speaker in a unified design, simplifying wiring and facilitating easy installation. With built-in advanced AI video processing algorithms, it automatically adjusts the camera framing based on the meeting dynamics.

FEATURES

▼ DUAL-LENS INTEGRATION
This system features a dual-lens design with both panoramic and close-up lenses equipped with 4K UHD CMOS sensors, delivering clear and detailed images. The panoramic lens offers a wide 120 ° angle for an expansive field of view, while the close-up lens features a 70° wide angle and 12x optical zoom, supported by a ±90° rotating mechanical pan-tilt head to accurately capture distant meeting details.

▼ ALL-IN-ONE INTEGRATION
The device combines a 4K panoramic camera, a 4K close-up camera, a digital microphone array, and a full-range speaker into a single, highly integrated unit. This design minimizes cabling and ensures a professional, hassle-free audio-visual experience for meetings.

▼ GROUP FRAMING
Equipped with facial, human shape recognition, and intelligent framing algorithms, it can identify the number of participants and their positional changes, automatically moving the lens and adjusting the focus to achieve intelligent composition and optimal framing.

▼ SPEAKER TRACKING
The built-in sound source localization algorithm automatically directs the camera towards the speaker when someone is talking, presenting a close-up in the center of the screen, delivering a "face-to-face" communication experience.

▼ PRESENTER TRACKING
The speaker features built-in gesture, ReID, and ReFace recognition technologies, allowing it to activate tracking mode with simple gestures. The AI algorithm accurately identifies body shape and face, enabling the close-up camera to automatically track and capture shots as the speaker moves.

▼ AI-POWERED AUDIO 3A ALGORITHM
AI-driven audio algorithms based on deep learning effectively eliminate echo, noise, and reverb, ensuring clear full-duplex audio conversations.

▼ 8-METER PICKUP
The built-in 8 MEMS beamforming microphone array automatically locates the source of the speaker's voice and adjusts to precisely capture it, ensuring consistent audio pickup. Coupled with audio 3A processing algorithms, The pickup range of the device is 8 meters, meeting the needs of medium to large conference rooms.

▼ POE CASCADE PICKUP
Built-in POE power supply network port, support cascade 3 RM702 array microphone, can evenly cover a wider range of conference room scene, to provide equal and consistent pickup sound for each participant.

▼ FULL-RANGE STEREO SOUND REINFORCEMENT
Integrates a full-range high-fidelity speaker, professionally tuned to effectively reduce sound interference, outputting rich bass, full midrange, and clear treble, with natural and authentic human voices.

▼ WIRED AND WIRELESS BYOM
Equipped with a built-in Wired Network or WiFi module, it supports participants using their familiar personal devices (such as laptops, smartphones, or tablets) to join meetings and access the integrated audio-video functions at any time. It also supports wired or wireless screen mirroring from computers to the device, allowing for local or remote meeting screen sharing without the need for cables.

SPECIFICATIONS

▼ CLOSE-UP CAMERA

Sensor	1/2.5 inches, CMOS, Effective Pixels: 8.29 Megapixels
Focal Length	f=4.4~51.1mm, F1.8~2.6
Optical Zoom	12x
Horizontal FOV	70° ~7.4°
Vertical FOV	40° ~4.2°
Pan Angle	-90° ~ +90°
Tilt Angle	-23° ~ +23°
Pan Speed	1.7° ~ 76° /s
Tilt Speed	0.5° ~ 15° /s
PTZ	Support
Backlight Compensation	Support
Digital Noise Reduction	2D & 3D Digital Noise Reduction
SNR	≥ 50dB

▼ PANORAMIC CAMERA

Sensor	1/2.8 inches, CMOS, Effective Pixels: 8.51 Megapixels
Focal Length	2.8mm
Diagonal FOV	120°
Horizontal FOV	110°
Vertical FOV	75°
EPTZ	Support
White Balance	Auto
Backlight Compensation	Support
Digital Noise Reduction	2D & 3D Digital Noise Reduction
SNR	≥ 50dB

▼ VIDEO OUTPUT SPEC

Video Output Format	4KP30, 1080P30, 1080P60, 720P60

▼ AUDIO SPEC

Speaker	2 full-range speakers, individual output power: 8W
Microphone Array	8 beamforming microphones with 8m pickup distance
Extended MIC	Supports up to 3 microphones via DMIC interface
Audio 3A Algorithm	AI-Powered AEC/ANC/AGC
Sampling Rate	Mic 48K, Speaker 48K

▼ USB SPEC

Operating System Supported	Windows® 7 (only supports 1080p and below), Windows 8.1, Windows 10 or higher; MacOS™ 10.10 or higher; Google™ Chromebook™ Version 29.0.1547.70 or higher; Linux (requires support for UVC)
Configuration Requirements	2.4 GHz Intel® Core 2 Duo processor or higher; 2GB memory or higher; USB 2.0 interface (4K requires USB 3.0)
Connection Type	USB 3.0, backward compatible with USB 2.0
Color System / Compression	H.264 / MJPEG / YUY2
USB Video Communication Protocol	UVC 1.1, UAC 1.0
UVC PTZ Control	Support

▼ I/O INTERFACES

USB 3.0	1 × USB 3.0, type-C, Support audio/video transmission and firmware upgrade 1 × USB 3.0, type-A, Reserved
HDMI	1 × HDMI OUT, 1 × HDMI IN
Network Interface	1 × RJ45, 10/100/1000M adaptive Ethernet port
EXT Interface	1 × RJ45, connects to expansion microphone or wired BYOD pod, and supports PSE power supply (IEEE802.3at)
Power Interface	DC 12V
WiFi	Wifi 5, 2.4G/5G Dual-band, IEEE802.11 a/b/g/n/ac, Supports wireless BYOM and wireless screen sharing(requires additional device)
Remote Controller	Support

▼ GENERIC SPEC

Safety Protection	Kingston anti-theft lock socket
Power	DC 12V
Operating Temperature	0° C ~ 40° C
Storage Temperature	-40° C ~ 60° C
Dimension (W × D × H)	Without Stand: 600 x 127.1 x 182.1mm With Stand: 600 x 127.1 x 217.1mm
Net Weight	4kg

INTERFACE

1 —— HDMI OUT
2 —— HDMI IN
3 —— USB3.0
4 —— USB3.0
5 —— LAN
6 —— EXT
7 —— DC 12V