

CAMERAS

4K UHD Intelligent Teaching Camera

RC-31



4K 30fps

Dual-camera
CollaborationIntelligent
TrackingAutomatic
Program
DirectAutomatic
Generate
Whiteboard
Video Stream

RC031 is a 4K UHD intelligent teaching camera designed specifically for the education field. By setting up a teacher unit and a student unit, it can provide coverage of the entire classroom. The camera is equipped with built-in AI tracking algorithms and intelligent switching strategies, allowing for real-time switching of different perspectives, including panoramic and close-up views of the teacher, panoramic and close-up views of the students, as well as close-up views of the teacher's whiteboard. It can automatically generate unobstructed views of the whiteboard, enabling a comprehensive presentation of the teacher's perspective and the students' perspective, making it an ideal tool for interactive teaching in schools.



FEATURES

▼ 4K UHD VIDEO QUALITY

The camera utilizes a 1/2.7" high-quality 4K CMOS sensor with 8.31 Megapixels, providing an ultra-clear video teaching experience.

▼ AI TRACKING CAPTURE

The camera is equipped with AI algorithms for detecting human heads, faces and bodies. The teacher unit can automatically track and capture the teacher's movements, unaffected by student movements or the presence of large screens. The student unit can accurately detect student standing actions, regardless of other student movements.

▼ INTELLIGENT WHITEBOARD GENERATION

During a class, the camera can automatically remove any obstruction of the whiteboard by capturing human figures, providing real-time unobstructed video streams and snapshots of the whiteboard for easy viewing by students.

▼ INTELLIGENT SWITCHING STRATEGY

The camera features an AI-based automatic switching strategy, allowing real-time switching of different perspectives based on the dynamic conditions in the classroom. This includes panoramic and close-up views of the teacher, panoramic and close-up views of the students and close-up views of the teacher's whiteboard. The switching process is as smooth as manual broadcasting.

▼ DUAL-UNIT DUAL-PERSPECTIVE

The camera offers both a teacher unit and a student unit. The teacher unit has a 44° field of view and supports autofocus, while the student unit has a 95° field of view, capturing the entire classroom scene.

▼ EASY INSTALLATION AND WIRING

The camera supports PoE (Power over Ethernet) connectivity, allowing for a simple and efficient installation. With its compact design, it doesn't take up much space in the classroom. The camera also offers a variety of interfaces, making it compatible with existing school equipment such as large screens, speakers, and monitoring systems.

SPECIFICATIONS

▼ CAMERA

| | |
|-------------------------|---|
| Sensor | 1/2.7", CMOS, 8.31 Megapixels |
| Scanning Mode | Progressive |
| Lens Mount | M12 |
| Lens One (For Teacher) | Focal length: f=7.2mm, Wide Angle: 44° |
| Lens Two (For students) | Focal length: f=2.8mm, Wide Angle: 95° |
| Minimal Illumination | 0.5Lux @ (F1.8, AGC ON) |
| Shutter | 1/30s ~ 1/10000s |
| White Balance | Auto, Indoor, Outdoor, One Push, Manual |
| Backlight Compensation | Support |
| EPTZ | Support |
| Auto-Focusing | Lens one Support |
| PoE-Powered | Support |
| Digital Zoom | 8X |

▼ IPC FEATURES

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|------------------------------------|---|
| Video Compression | H.265 / H.264 / MJPEG |
| Video Stream | Primary video stream, Secondary video stream, Tertiary video stream, Quaternary video stream |
| Primary Video Stream Resolution | 1920x1080, 1280x720, 1024x576, 960x540, 640x480, 640x360, 320x240, 320x180 |
| Secondary Video Stream Resolution | 3840x2160, 1920x1080, 1920x1080, 1280x720, 1024x576, 720x576(50Hz), 720x480(60Hz), 720x408, 640x360, 480x270 |
| Tertiary Video Stream Resolution | 1920x1080, 1280x720, 1024x576, 960x540, 720x576(50Hz), 720x480(60Hz), 720x408, 640x360, 480x270, 320x240, 320x180 |
| Quaternary Video Stream Resolution | 1024x576, 960x540, 720x576(50Hz), 720x480(60Hz), 720x408, 640x360, 480x270, etc. |
| Video Bit Rate | 32Kbps ~ 16384Kbps |
| Bit Rate Type | Variable Rate, Fixed Rate |
| Frame Rate | 1~30fps |
| Audio Compression | AAC / G.711a |
| Audio Bit Rate | 96Kbps, 128Kbps |
| Support Protocols | TCP/IP, HTTP, RTSP, RTMP, Onvif, DHCP, GB28181, Multicast, etc. |

INTERFACE

- 1 — LAN
- 2 — LINE IN
- 3 — LINE OUT
- 4 — USB 2.0
- 5 — DC 12V
- 6 — Indicator Light

▼ USB FEATURES

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|----------------------------------|--|
| Operating System | Windows 11, Windows 10, Windows XP, Windows Vista, Windows 7, Windows 8, Mac OS X, Linux |
| Color System / Compression | H.264 / MJPEG |
| Video Format | MJPEG: Max 2160P30fps |
| USB Audio | UAC1.0 |
| USB Video Communication Protocol | UVC 1.1 ~ UVC 1.5 |

▼ INPUT / OUTPUT INTERFACE

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|--------------------|--|
| USB | 1x USB 2.0; Type-C |
| Network Interface | 1x RJ45: 10M/100M Adaptive Ethernet, PoE support |
| Audio Interface | 1x 3.5mm LINE IN 1x 3.5mm LINE OUT |
| Power Jack | DC005 (DC 12V) |
| Indicator light | Power indicator light |
| Infrared Interface | Support |

▼ GENERAL SPECIFICATION

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|-----------------------|---------------------------------|
| Input Voltage | DC 12V / PoE (802.3af) |
| Input Current | 0.5A (Max) |
| Operating Temperature | -10°C ~ 40°C |
| Storage Temperature | -40°C ~ 60°C |
| Power Consumption | 6W (Max) |
| MTBF | >30000H |
| Dimension | 110mm (W) x 96mm (D) x 44mm (H) |
| Weight | 0.2kg |

