Educational binocular tracking camera

FT-ST100

Feature:

1. Integrated design: built-in panoramic camera, realizing the integration of panoramic camera and tracking camera
2. Intelligent teaching tracking: built-in leading image recognition and tracking algorithm, without any auxiliary positioning camera or tracking host, it can also achieve fast, stable and accurate tracking of targets
3. Full-frame image recognition: image detection is performed on each frame, and image recognition sensitivity is high. In complex environments, it can accurately distinguish between people and backgrounds, track accurately, and eliminate interference caused by background changes. When there are multiple moving targets, it can still accurately track the correct target with a very low target loss rate
4. Strong anti-interference ability: more and more flexible identification shielding area settings, so that once the tracking target is locked, it will not be affected by interference from other moving targets or projectors
5. Smooth tracking: The motion sensitivity can be adjusted, and small movements of the tracking target and movements such as hands will not cause misoperation of the camera
6. Image adaptation: According to the distance of the tracking target, the tracking camera automatically changes magnification, and the video always maintains the appropriate size and proportion
7. Strong environmental adaptability: The tracking effect is not affected by the size, shape and seat arrangement of the classroom
8. Ultra-wide dynamic exposure function: avoids the problem of darkening of the tracking target under strong light backgrounds such as projectors
9. Multiple tracking modes: support real-time tracking, movie, regional tracking and multiple tracking mode switching
10. Full HD image: using 1/2.8-inch high-quality image sensor, the maximum resolution can reach 1920x 1080, output frame rate up to 60 frames per second
11. Distortion-free lens: 12X/20X optical zoom lens, distortion-free wide viewing angle
12. Low noise and high signal-to-noise ratio: Low noise CMOS effectively guarantees the ultra-high signal-to-noise ratio of the camera video, and keeps the picture clean and clear even in ultra-low illumination conditions
13. Multiple audio and video compression standards: support H.264/H.265 video compression, support AAC, MP3, G.711A audio compression
14. Multiple video output interfaces: support HDMI, SDI, USB3.0 and LAN (100M. multiple interface methods to output video
15. Multiple network protocols: support ONVIF, GB/T28181, RTSP, RTMP protocols; support RTMP push mode, easily connect to streaming media servers (Wowza, FMS.; support RTP multicast mode, support network full command

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VISCA control protocol
16. Multiple control protocols: support VISCA, PELCO-D, PELCO-P protocols, support automatic identification protocol
17. Support PoE: that is, one network cable can simultaneously transmit power supply, control, and video signals, thereby simplifying wiring installation
18. Super silent PTZ: adopts high-precision stepper motor and precision motor drive controller to ensure smooth and noise-free operation of the PTZ
19. Diversified installation: free choice of installation positioning, the teacher machine supports upright and inverted installation, and the student machine needs upright installation
20. Multiple application places: teaching recording and broadcasting, remote interactive teaching and other application scenarios

Specification:

Image sensor	1/2.8 inch high quality CMOS sensor
Effective pixels	2.07 million, 16:9
Video format	SDI, HDMI interface video format
1080P60/50/30/25/59.94/29.97	720P60/50 /59.94
Lens optical zoom	Teacher camera: 12 times f=4.1~49.2mm: Student camera: 20 times f=5~91.5mm
Viewing angle	Teacher: 7.5° (narrow angle)~78.4° (wide angle); Student: 3.9° (narrow angle)~67.4° (wide angle)
Aperture coefficient	Teacher: F1.8~F2.68; Student: F1.8~F2.9
Digital zoom	X10
Minimum illumination	0.5Lux (F1.8, AGC ON)
Digital noise reduction	2D & 3D digital noise reduction
White balance	manual / automatic / one-button white balance / 3000K / 3500K / 4000K / 4500K / 5000K / 5500K / 6000K / 6500K / 7000K
Focus	automatic / manual / one-button focus
Aperture	automatic / manual
Electronic shutter	automatic / manual
Backlight compensation	on / off
Dynamic range	off / dynamic level adjustment
Video adjustment	brightness, chroma, saturation, contrast, sharpness, gamma curve
Signal-to-noise ratio	>55dB
Video compression format	H.264, H.265, MJPEG, YUY2, NV12
Audio compression format	AAC, MP3, G.711A
Network protocol	RTSP, RTMP, ONVIF, GB/T28181 and IP VISCA
Control protocol	Protocol: VISCA/Pelco-D/Pelco-P; Baud rate: 115200/38400/9600/4800/2400
Panoramic	camera lens parameters
Image sensor	1/2.8-inch high-quality CMOS sensor
Effective pixels	2.07 million
Lens	fixed focus
Focal length	3.24mm
Aperture	F=2.2

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Field of view (D\H\V)	88°\80°\51°
PTZ	parameters
Horizontal rotation	-170° ~ +170°
Pitch rotation	-30° ~ +90°
Horizontal control speed	0.1 ~100°/sec
Tilt control speed	0.1 ~45°/sec
Preset speed	horizontal: 100°/sec, tilt: 45°/sec
Number of presets	Users can set up to 255 presets (10 for remote control)
Interface function performance	
Video output interface	1 HDMI2.0 interface、1 3G-SDI interface、1 USB3.0 interface
1 LAN interface	100M network port (10/100 BASE-TX), support POE (802.af)
Audio input interface	1 dual-channel 3.5mm linear input
Control interface	1 RS485/RS232: 5pin Phoenix head
Power interface	Input AC110V-AC220V Output DC12V/2.5A
Power switch	support
Other parameters	
Storage temperature	-10℃ ~ +70℃
Storage humidity	20% ~ 95%
Working temperature	-10℃ ~ +50℃
Working humidity	20% ~ 80%
Dimensions	253.9mmX179mmX144.7mm(width x height x depth)
Weight	1.50kg
Usage environment	Indoor