CMP-HD20

1080P Professional PTZ Camera With AI Technology

1080P / HDMI+LAN+SDI+USB / 20x Optical Zoom



Product Features

1080P Full HD

Equipped with 1/2.8", 2.07 million effective pixels high quality HD CMOS sensor, It can reach maximum 1920 x 1080 high resolution and achieve quality image.

60.7° Wide-angle Lens + 20x Optical Zoom

Adopts a high-quality ultra-high-resolution full HD telephoto lens, supports a maximum of 20x optical zoom, a 35mm equivalent focal length of up to about 670mm, and a horizontal field of view of 60.7° .

Electromechanical head

Built-in self-developed electromechanical head, the horizontal rotation range can reach ±170 ° , the rotation speed range is 1.7°～ 100° /s; the vertical rotation range can reach -30°～ 90° , and the rotation speed range is 1.7°～ 69.9° /s.

Miltiple Interfaces,low-latency output of all interfaces

It supports 3G-SDI, HDMI, USB and network audio and video to output 1080P60 at the same time, and all video output interfaces meet the low-latency index.

Uncompressed Professionally video output

With HDMI 1.3 and 3G-SDI interface, it can directly output uncompressed digital video.

Low Illumination

The application of 2D and 3D noise reduction algorithm greatly reduces image noise. Even under the condition of ultra-low illumination, it still keeps the picture clean and clear, and the SNR of image is as high as 55dB.

Remote Control

Through the RS232 and RS485 serial ports and USB, the camera can be controlled remotely.

Leading Auto Focus Technology

Using advanced focusing algorithm, the lens can focus quickly, accurately and stably.

New Generation of ISP Image Processing Algorithm

The new generation of ISP image processing algorithm provides more complete white balance and automatic exposure functions, It is which significantly improves the image output performance of the camera, and the imaging effect is also better. Widely used in education recording and broadcasting, distance education, video conferencing, live broadcasting, broadcasting and other industries.

Upgraded AI Technology

Using upgraded AI technology and pedestrian re-recognition technology, it can accurately determine the location of each person based on information such as pedestrian clothing, body shape, hairstyle, and face recognition, and realize automatic identification and tracking of target human figures, automatic frame selection, and intelligent privacy for meetings. Blur function [2].

Exclusive Audio Processing Algorithm

The exclusive audio processing algorithm can eliminate reverberation, effectively reduce environmental noise, and support EQ adjustment to optimize sound effects; the device supports dual mic pickup, and can also be connected to external microphones, wireless bees, etc., to meet the pickup needs of most scenarios.

1080P60 FULL NDI [1]

It supports 1080P60 FULL NDI technology, which brings us ultra-low latency high-quality audio and video signal transmission, which can achieve unparalleled ultra-high-resolution image quality and lossless effects that are closer to vision.

Remark:

1. NDI is an optional function, and you can experience 25 minutes for free each time you turn it on, and you need to pay extra for the full experience.
2. This feature is available in subsequent firmware releases.

Product Specifications

Main Features

Uncompressed Professionally video output	**HDMI、3G-SDI:** 1080P60，1080P59.94，1080P50，1080I60，1080I59.94，1080I50，1080P30，1080P29.97，1080P25，720P60，720P59.94，720P50
Sensor	1/2.8 inches, CMOS, Effective Pixels: 2.07 Megapixels
Scanning Mode	Progressive
Focal length	20x, f4.42mm ~ 88.5mm, F1.8 ~ F2.8
Minimum Illumination	0.5 Lux @ (F2.0, AGC ON)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual,
Backlight Compensation	Support
Digital Noise Reduction	2D & 3D Digital Noise Reduction
SNR	⩾ 55dB
Horizontal FOV	60.7° ~ 3.36°
Vertical FOV	34.1° ~ 1.89°
Pan Angle	±170°
Tilt Angle	-30° ~ +90°
Pan Speed	1.7° ~ 100° /s
Tilt Speed	1.7° ~ 69.9° /s
Image Flip	Support
Image Freeze	Support
Preset Position	255
Preset Accuracy	0.1°

Interfaces

USB Interface	1 x USB3.0,Type-A
HD Output	1x HDMI: Version 1.3; 1x 3G-SDI: BNC , 800mVp-p, 75Ω, as per SMPTE 424M standard
Network Interface	1x RJ45: 10M/100M/1000M adaptive Ethernet,Support PoE
Audio Interface	Built-in dual microphones 1 x Line In, 3.5mm Jack 1 x Line Out, 3.5mm Jack
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	JEITA type (DC IN 12V)

Audio

Microphone Array	Built-in dual microphones, 100Hz to 16KHz frequency response.
Analog Audio Input/Output	Support 3.5mm Line-In; Support 3.5mm Line-Out
Digital Audio Output	Support HDMI, USB, LAN, 3G-SDI etc

Network Features

Video Compression	H.265 / H.264
Video Stream	First Stream, Second Stream
First Stream Resolution	1920x1080, 1280x720, 1024x576 etc.
Second Stream Resolution	1280x720,1024x576,720x576 etc.
Video Bit Rate	32Kbps ~ 102400Kbps
Bit Rate Control	VBR, CBR
Frame Rate	1fps ~ 60fps
Audio Compression	AAC
Audio Bit Rate	96Kbps, 128Kbps, 256Kbps
Protocols	FULL NDI, NDI®|HX2, TCP/IP, HTTP, RTSP, RTMP, Onvif, DHCP, Multicast,SRT, GB/T 28181etc.

USB Features

Operating System Supported	Windows 7 (only supports UVC1.1 features), Windows 8 and above version, MacOS 10.5 and above version, Linux 2.4.6 and above version, Android needs to include the version of UVC-related drivers
Color System / Compression	YUY2 H.264 / MJPEG
Signal System	Support variety of video formats with different frame rates and resolutions, up to 1080p/60 YUY2 output.
USB Video Communication Protocol	UVC1.1 and UVC1.5
USB Audio	32K Sampling Rate，Support UAC2.0
UVC PTZ Control	Support

General Specifications

Input Voltage	DC 12V/PoE（802.3af）
Input current	1.0A (Max.)
Operating Temperature	0 ~ 40° C
Storage Temperature	-40 ~ 60°C
Power Consumption	12W (Max.)
Dimension	169mm x 142mm x 164mm
Net Weight	1.35Kg