

# Zowietek

## 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, can reach maximum 1920 x 1080 high resolution and achieve quality image.

#### New Generation of ISP Image Processing Algorithm

The new generation of ISP image processing algorithm provides more complete white balance and automatic exposure functions, 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, through face recognition, it can accurately determine the location of people, realize automatic tracking and automatic frame selection.

#### 1080P60 NDI®|HB<sup>2</sup>

It supports 1080P60 NDI®|HB 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.

#### AAC Audio Encoding

Support AAC audio encoding, better sound quality and smaller bandwidth.

#### Leading Auto Focus Technology

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

#### 60° Wide-angle Lens + 20x Optical Zoom

Use 60° wide-angle high quality lens, support 20x optical zoom.

#### 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.

#### 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 keep the picture clean and clear, and the SNR of image is as high as 55dB.

#### Multiple Interfaces

Support HDMI output, 3G-SDI interface, effective transmission distance up to 150 meters (1080p30). HDMI, SDI, Network USB can output at the same time.

#### Remote Control

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

#### Remark:

1. This function is optional.
2. This function is optional, and you need to pay extra to enable this function.

### Product Specifications

#### Camera

|                         |   |
|-------------------------|---|
| Signal System           | 1080p/60, 1080p/59.94, 1080p/50, 1080i/60, 1080i/59.94, 1080i/50, 1080p/30, 1080p/29.97, 1080p/25, 720p/60, 720p/59.94, 720p/50 |
| 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, One Push, Manual, VAR   |
| 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°  |

#### USB Features

|                                  |   |
|----------------------------------|---|
| Operating System Supported       | Windows® 7 (only 1080P and below supported), Windows 8.1, Windows 10 or higher<br>macOS™ 10.10 or higher<br>Google™ Chromebook™ Version 29.0.1547.70 or higher<br>Linux (support UVC) |
| Hardware Requirements            | 2.4 GHz Intel® Core 2 Duo CPU or higher<br>2 GB RAM or more<br>USB 2.0 interface  |
| 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 | UVC 1.1 or UVC1.5   |
| USB Audio                        | 32K Sampling Rate, Support UAC2.0   |
| UVC PTZ Control                  | Support   |

#### Audio

|                  |   |
|------------------|---|
| Microphone Array | Built-in dual microphones, 100Hz to 16KHz frequency response. |
| LINE IN          | Support LINE IN   |
| Audio Output     | Support HDMI, USB, LAN, SDI, Line Out etc                     |

#### Network Features

|                          |  |
|--------------------------|--|
| Video Compression        | H.264 / H.265  |
| 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                | NDI® HB, NDI® HX2, TCP/IP, HTTP, RTSP, RTMP, Onvif, DHCP, Multicast, SRT, GB/T 28181etc. |

#### Interfaces

|                   |  |
|-------------------|--|
| USB Interface     | 1 x USB3.0, Type-A   |
| HD Output         | 1x HDMI: Version 1.3;<br>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<br>1 x Line In, 3.5mm Jack<br>1 x Line Out, 3.5mm Jack   |
| Control Interface | 1 x RS485: 2pin phoenix port, Max Distance: 1200m, Protocol: VISCA / Pelco-D / Pelco-P;<br>1 x RS232 IN: 8pin Mini DIN, Max Distance: 30m, Protocol: VISCA / Pelco-D / Pelco-P;<br>1 x RS232 OUT: 8pin Mini DIN, Max Distance: 30m, Protocol: VISCA only |
| Power Interface   | JEITA type (DC IN 12V)   |

#### General Specifications

|                       |   |
|-----------------------|---|
| Input Voltage         | DC 12V/PoE (802.3af) <sup>1</sup>         |
| Input current         | 1.0A (Max.)                               |
| Operating Temperature | 0 ~ 40° C (0~104° F)                      |
| Storage Temperature   | -40 ~ 60° C (-104~40° F)                  |
| Power Consumption     | 12W (Max.)                                |
| Dimension             | 169 x 142 x 164mm (6.65" * 5.59" * 6.46") |
| Net Weight            | 1.35Kg (2.97lb, 47.6oz)                   |