Built-in camera



Features

- 1.1080P60 uncompressed HD video
- 2. High quality lens, 10x optical zoom
 3. High-quality image, ND filter, strong light suppression, no flicker
 4. Rich interfaces: SDI, UART/RS485
 5. Remote access: VISCA, Pelco P/D

- 6. Mini size: 60 mm front face

Application Scenario

Meet the high-definition and high-reduction shooting requirements in clinical skills training, standardized training, surgical video, surgical teaching, academic conferences, surgical live broadcast, remote guidance, digital operating room, school medical skill teaching, etc. It can be used in different environments such as light, daily indoor light, etc.



surgical teaching



surgery remote teaching



Academic interactive live broadcast



surgery video



Clinical skills training for medical colleges/vocational schools



digital operating room

Technical Parameters

| 10 times up to 4.35 million 1/2.8" CMOS high-definition surgical movement video camera sensor type | model | MH-DCM210-S |
|---|--|---|
| sensor type 1/2.8* Progressive Scan CMOS scanning system line-by-line scan signal system PAL/NSTC video output SDI output resolution 50HZ:50fps(1920X1080) 60HZ:60fps(1920X1080) Minimum illumination Color: 0.05Lux @ (F1.6, AGC ON) SNR > 52dB lens focal length 4.7-47mm, 10x optical zoom Aperture value F1.6-F3.0 Horizontal field of view 58.6-6.4 degrees (wide angle - telephoto) Close-up 120mm-800mm (wide-angle-telephoto) parameter settings focus mode semi-automatic/automatic/manual/ exposure mode Auto Exposure/Aperture Priority/Shutter Priority/Manual Exposure electronic shutter 1/1 second~1/30,000 second white balance Auto 1/Auto 2/Indoor/Outdoor/Manual/Sodium lamp/Fluorescent lamp gain 16 levels adjustable digital noise reduction 3D Lens initialization built-in Image quality adjustment Brightness, contrast, sharpness, saturation can be adjusted digital zoom 10 interface function External Interface SDI、RS485、power supply、UART external communication Pelco P、Pelco D、VISCA general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C、小于90%RH power consumption SW size 43.5*45.4*68.8mm | | 10 times up to 4.35 million 1/2.8" CMOS high-definition surgical movement |
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| video output resolution SOHZ:50fps(1920X1080) 60HZ:60fps(1920X1080) SOHZ:25fps(1920X1080) 60HZ:30fps(1920X1080) Minimum illumination Color: 0.05Lux @ (F1.6, AGC ON) SNR > 52dB lens focal length 4.7-47mm, 10x optical zoom Aperture value F1.6-F3.0 Horizontal field of view 58.6-6.4 degrees (wide angle - telephoto) Close-up 120mm-800mm (wide-angle-telephoto) parameter settings focus mode semi-automatic/automatic/manual/ exposure mode Auto Exposure/Aperture Priority/Shutter Priority/Manual Exposure electronic shutter 1/1 second~1/30,000 second white balance Auto 1/Auto 2/Indoor/Outdoor/Manual/Sodium lamp/Fluorescent lamp gain 16 levels adjustable wide dynamic range Off/On, 15 levels adjustable digital noise reduction 3D Lens initialization built-in Image quality adjustment Brightness, contrast, sharpness, saturation can be adjusted digital zoom 10 interface function External Interface SDI、RS485、power supply、UART external communication Pelco P、Pelco D、VISCA general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C, 小于90%RH power consumption 5W size 43.5*45.4*68.8mm | scanning system | line-by-line scan |
| resolution | signal system | PAL/NSTC |
| resolution | video output | · |
| SOHZ:25fps(1920X1080) 60HZ:30fps(1920X1080) | resolution | • |
| SNR > 52dB lens focal length 4.7-47mm, 10x optical zoom Aperture value F1.6-F3.0 Horizontal field of view 58.6-6.4 degrees (wide angle - telephoto) Close-up 120mm-800mm (wide-angle-telephoto) parameter settings focus mode semi-automatic/automatic/manual/ exposure mode Auto Exposure/Aperture Priority/Shutter Priority/Manual Exposure leectronic shutter 1/1 second~1/30,000 second white balance Auto 1/Auto 2/Indoor/Outdoor/Manual/Sodium lamp/Fluorescent lamp gain 16 levels adjustable wide dynamic range Off/On, 15 levels adjustable digital noise reduction 3D Lens initialization built-in lmage quality adjustment Brightness, contrast, sharpness, saturation can be adjusted digital zoom 10 interface function External Interface SDI, RS485, power supply, UART external communication Pelco P, Pelco D, VISCA general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C, /小于90%RH power consumption 5W size 43.5*45.4*68.8mm | | |
| lens focal length | Minimum illumination Color: 0.05Lux @ (F1.6, AGC ON) | |
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| Horizontal field of view 58.6-6.4 degrees (wide angle - telephoto) Close-up 120mm-800mm (wide-angle-telephoto) parameter settings focus mode semi-automatic/automatic/manual/ exposure mode Auto Exposure/Aperture Priority/Shutter Priority/Manual Exposure electronic shutter 1/1 second~1/30,000 second white balance Auto 1/Auto 2/Indoor/Outdoor/Manual/Sodium lamp/Fluorescent lamp gain 16 levels adjustable wide dynamic range Off/On, 15 levels adjustable digital noise reduction 3D Lens initialization built-in Image quality adjustment Brightness, contrast, sharpness, saturation can be adjusted digital zoom 10 interface function External Interface SDI、RS485、power supply、UART external communication Pelco P、Pelco D、VISCA general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C,小于90%RH power consumption 5W size 43.5*45.4*68.8mm | focal length | 4.7-47mm, 10x optical zoom |
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| Lens initialization built-in Image quality adjustment Brightness, contrast, sharpness, saturation can be adjusted digital zoom 10 interface function External Interface SDI、RS485、power supply、UART external communication Pelco P、Pelco D、VISCA general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C,小于90%RH power consumption 5W size 43.5*45.4*68.8mm | wide dynamic ra | nge Off/On, 15 levels adjustable |
| Image quality adjustment Brightness, contrast, sharpness, saturation can be adjusted digital zoom 10 interface function External Interface SDI、RS485、power supply、UART external communication Pelco P、Pelco D、VISCA general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C,小于90%RH power consumption 5W size 43.5*45.4*68.8mm | digital noise reduction 3D | |
| digital zoom 10 interface function External Interface SDI、RS485、power supply、UART external communication Pelco P、Pelco D、VISCA general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C,小于90%RH power consumption 5W size 43.5*45.4*68.8mm | Lens initialization | built-in |
| interface function External Interface SDI、RS485、power supply、UART external communication Pelco P、Pelco D、VISCA general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C,小于90%RH power consumption 5W size 43.5*45.4*68.8mm | Image quality ad | justment Brightness, contrast, sharpness, saturation can be adjusted |
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| external communication Pelco P、Pelco D、VISCA general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C,小于90%RH power consumption 5W size 43.5*45.4*68.8mm | interface function | |
| general specification power supply DC12V±25% Working Temperature and Humidity 10°C ~ 60°C,小于90%RH power consumption 5W size 43.5*45.4*68.8mm | External Interface | SDI、RS485、power supply、UART |
| power supply DC12V \pm 25% Working Temperature and Humidity 10°C ~ 60°C,小于 90%RH power consumption 5W size 43.5*45.4*68.8mm | external communication Pelco P、Pelco D、VISCA | |
| Working Temperature and Humidity 10° $\sim 60^{\circ}$ | general specification | |
| power consumption 5W size 43.5*45.4*68.8mm | power supply | DC12V±25% |
| size 43.5*45.4*68.8mm | Working Temperature and Humidity 10℃ ~ 60℃, 小于 90%RH | |
| | power consumption 5W | |
| weight 190g | size | 43.5*45.4*68.8mm |
| | weight | 190g |

Product Highlights











image ready for real

The image processing system adapts to a variety of lighting environments. Through functions such as fast focusing, strong light suppression, and anti-flicker, it can provide high-quality images with clear images, true colors, and rich details under high-illuminance shadowless lamp environments up to 18000lux; built-in ND filter With a variety of scene modes, it is more suitable for shooting under shadowless lights.

Stable and reliable, excellent performance

Designed with medical electrical standards, the electrical and material properties are stable and reliable.

Support quick start and low delay function, the start time is less than 10s, and the video output delay is less than 100ms.

Rich interfaces and flexible access

Provide SMA small SDI interface, flexible choice of UART or RS485 communication interface, support VISCA, PelcoP/D and other communication protocols.

Small and light, flexible installation

Ultra-small size, the outer diameter of the core is 60mm, and the weight is 190g, which is suitable for internal installation of various shadowless lamps.

remote control

Rich interface, flexible access, flexible choice of UART or RS485 communication interface, support VISCA, PelcoP/D and other communication protocols, controlled by computer or professional operating room controller.

Dimensions





