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

Academic interactive live broadcast

Clinical skills training for medical colleges/vocational schools

surgery remote teaching

surgery video

digital operating room

Technical Parameters

model parameter	MH-DCM210-S
	10 times up to 4.35 million 1/2.8" CMOS high-definition surgical movement

video camera	
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) 50HZ: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℃ ~ 60℃，小于 90%RH
power consumption	5W
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