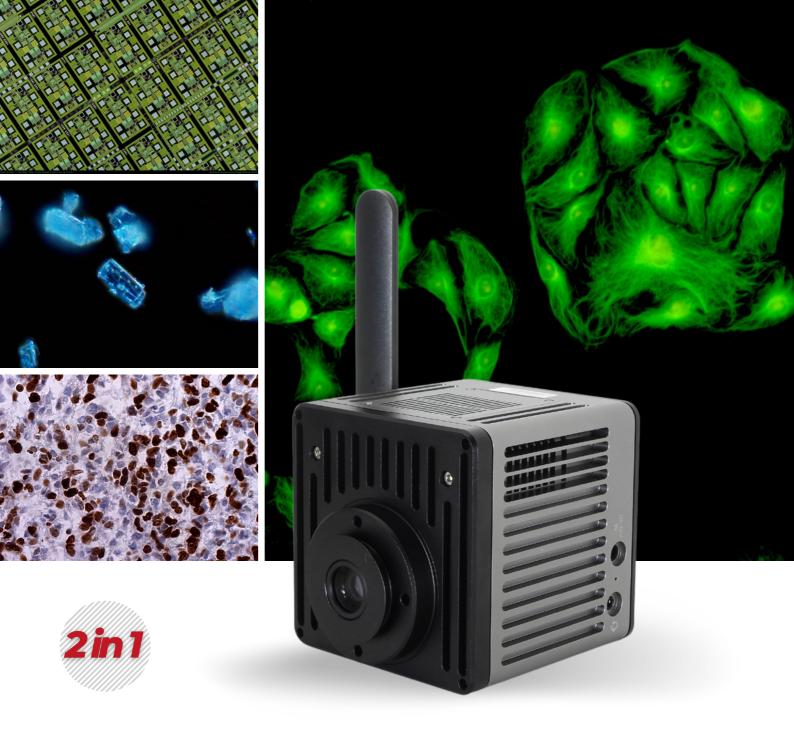


### **MX2000**





# DUAL-SENSOR MICROSCOPE CAMERA FOR MULTIPLE APPLICATIONS

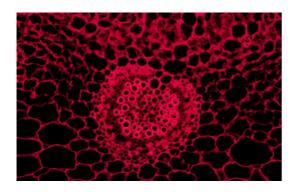
MX2000 is equipped with two high-performance Sony CMOS sensors separately for bright-field and ultra-low light imaging applications. The live image of the two sensors can be switched by a lever, and the dedicated software provides two windows to display their images respectively.

It provides multiple output including USB, 5G WiFi and Ethernet. It's easy to connect to PC through USB or WiFi and supports WAN connection to routers and realizes sharing live images among computers in the LAN. The built-in 5G WiFi module guarantee up to 13 smart devices (Android and iOS) get live image through scanning QR code on the camera. These unique and sophisticated designs not only improve user productivity, but also make collaboration and sharing a breeze.

It is widely used in the low light imaging applications such as microscopic fluorescence imaging, FISH, solar cell EL inspection (NIR), chemiluminescence, industrial fluorescence detection (UV fluorescence), GEL document, etc.

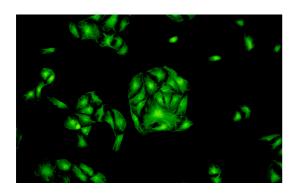
## Exceptional in Low Light & Stunning in Bright Filed

Thanks to the optimized algorithm of automatic exposure and automatic white balance, the camera can not only obtain perfect high resolution "true color" images in bright field, but also perform well in dark field and fluorescence, easy to get the desired image.



#### **Multi-stage Cooling Module**

MX2000 adopts fan cooling and Peltier cooling. Robust and reliable cooling up to 42°C below ambient temperature, greatly reduces the dark current level and guarantee the imaging performance in low light application.



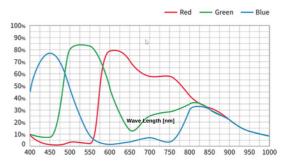
## Cutting-edge Image Codec Technology & Advanced Color-calibration Algorithm

Advanced microscopic image algorithm and the latest H264 video stream encoding and decoding technology makes accurate color reproduction, low bit rate, low noise, high image quality, high speed preview at full resolution. Colors are calibrated according to the characteristics of objectives and light sources for different brands and types of microscopes, resulting in several standard sets of parameters. Users can choose different modes according to the staining method of pathological sections to obtain accurate image color.

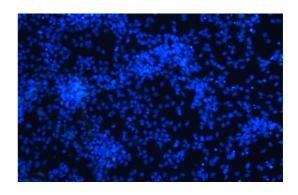


## More Pixels, More Details; Larger Pixels, More Sensitive

In real applications, users are often limited by the shortcomings of the camera, so they cannot obtain high resolution and high sensitivity from a single camera. Thus, they usually use two different cameras. The MX2000 just solves this problem perfectly. The sensor IMX147 provides 20 megapixels high resolution with excellent bright-field imaging performance, while the other sensor IMX482 provides a full resolution preview speed of 60 fps; 5.8µm pixel size and up to 85% quantum efficiency makes it easy to capture signals in ultra-low light environments.



Spectral Sensitivity Characteristics of IMX482





#### USB Mode

Unique algorithm guarantees high-speed transmission (60fps at 2MP, 10fps at 20MP) through H264 stream protocol, comes with Pixit Pro 64bit software for PC. No need to install driver.

#### 2 5G WiFi Mode

Using dedicated APP 'KoPa WiFi Lab' to view realtime images through mobiles, tablets and laptops simultaneously, up to 10 devices.

#### 3 Ethernet Mode

Connects to the router, allowing different computers in the same LAN to obtain real-time images simultaneously.

## MORE OUTPUTS, MORE APPLICATIONS

The camera MX2000 provides three output methods: USB, WiFi and Ethernet, and can stream live image simultaneously with multiple interfaces.

#### 4 Swtiching Lever

Users can select the sensor by push-pull lever as needed. The 12V DC power input ensures that both sensors work synchronously, so the users can easily capture 20-megapixel bright-field images, and quickly switch the camera to the ultra-sensitive sensor and capture fluorescence images

#### Mount Type for Option

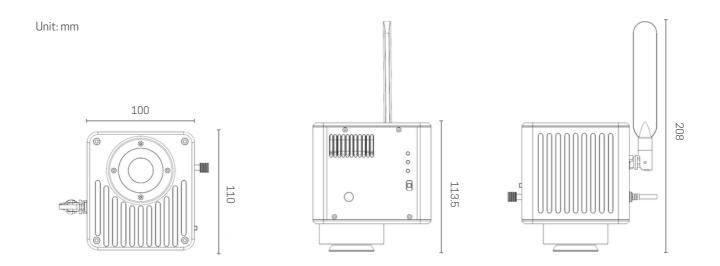
Users can choose a specific dovetail mount according to their microscope type, or choose a C-mount. Regardless of the choice of mount, the built-in 0.63X relay lens ensures the maximum field of view.



#### **Specifications**

CMOS Array 19 Pixel Size 5.8 Sensor Dimensions 11 Peak Quantum Efficiency 85	ny CMOS IMX482 20 x 1080 (2MP) 3µm x 5.8µm 1mm x 6.2mm (12.86mm diagonal) 3% at 530nm	Sony CMOS IMX147  5183 x 3888 (20MP)  1.2 μm x 1.2 μm  8.74mm x 7.67mm (7.82mm diagonal)
Pixel Size 5.8 Sensor Dimensions 11 Peak Quantum Efficiency 85	3μm x 5.8μm 1mm x 6.2mm (12.86mm diagonal)	1.2µm x 1.2µm 8.74mm x 7.67mm (7.82mm diagonal)
Sensor Dimensions 11 Peak Quantum Efficiency 85	1mm x 6.2mm (12.86mm diagonal)	8.74mm x 7.67mm (7.82mm diagonal)
Peak Quantum Efficiency 85	-	-
,	% at 530nm	
Full Well Canacity* 51		TBD
ran vvon supusity	5k e-	TBD
Frame Rate 60	fps at full resolution	15 fps at 3840 x 2160
Exposure Time 10	lus ~ 10s	10us ~ 330ms
Cooling 42	°C (below ambient temperature)	no
Shutter	Electronic rolling	
White Balance	Realtime automatic, Manual	
Digital Interface	USB, WiFi, WAN	
Optical Interface	C-mount or Dovetail mount (0.63X)	
WiFi Protocol	IEEE 802.11ac	
Image Format	JPG, BMP, PNG, TIFF	
Power Input	DC 12V, 3A	
Software	Pixit Pro (come with camera)	
Operating Systems	Windows 7, Windows 10, Windows 11	
Stock Conditions	Temperature: -20 °C +70 °C	
Weight	1.62kg	

#### **Dimensions**



Specifications are subject to change without any obligation on the part of the manufacturer.

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