

PrimeCam Intervision for TS2 With Screen

All-in-one Microscope Camera

Solution for Binocular Microscopes







Digital Camera

PrimeCam Intervision for TS2 With Screen

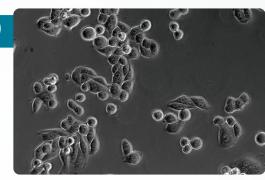
All-in-one Microscope Camera

Solution for Binocular Microscopes



Imaging Solution for Nikon Ts2/Ts2 FL





12 MP



(For Color FL)

Smart display camera Buit-in 0.63X optical adapter 0:100 splitter prism



2_{MP}



(For Mono FL)

Smart display camera Buit-in 0.63X optical adapter 0:100 splitter prism



2MP



Digital Camera

PrimeCam Intervision for TS2 With Screen

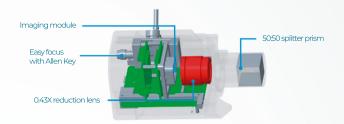
All-in-one Microscope Camera

> Solution for Binocular Microscopes



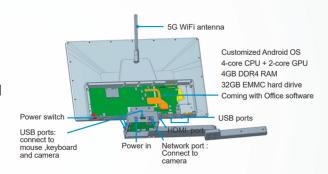
Integrated architecture, precise coupling beam splitting

50:50 splitter prism,0.43X aberration correcting tube lens,precision par-focal mechanism.



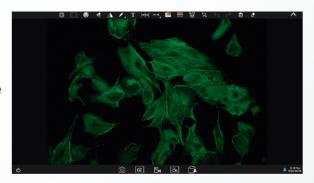
Stable, low power consumption operating system

The main control is PrimeCam, and the OS is customized Android.Instant to use with microscope imaging when power on, synchronous support HDMI output and 5G WiFi hotspot connection



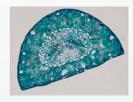
Customized built-in software

Compatible with mobile Microsoft Office and WPS office suite, can install third-party Android Apps. System resource calling, microscopic image processing, easy to operate.



High frame rate at full resolution true color restoration

H264 image algorithm, dual stream real time output. Accurate color reproduction, under the mirror is the screen, a camera with multiple working modes.





H264

MJPG



Scalable linkage APP and PC Software

Mobile terminals or PCs equiped with the company's dedicated software (or APP) can control the camera synchronously through 5G WiFi hotspot in the main board.







Multiple image output methods

The output combinations are: 5G WiFi, HDMI.

















Display 15.6"

Number of pixels	1920(horizontal) x 1080 (vertical)
Pixels arrangement	RGB vertical stripe
Display number of colors	16.7M(8Bit)
Surface treatment	Anti-glare
Surface hardness	3H
Viewing angel range	170 horizontal, 170 vertical
Contrast	800
Brightness	500cd/ m² (average of 5 points)

Accessories, product dimensions and weight

Power adapter and power cord





HDMI cable (2m)



Allen Key (3mm)



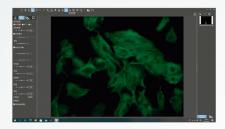
Ethernet Cable



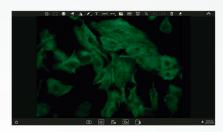




About Software and APP for Stand-alone Cameras



For Windows



Camera Bult-in Software



For IOS and Android



Windows Software: PrimeCam Pro



PrimeCam Pro is a ready-to-use Windows version software that requires no additional driver installation. It works with the full range of PrimeCam 12.0MP, and higher resolution cameras and supports WiFi 5G connections, providing users with more versatile and convenient ways to transfer images.



3

Staining type based on color calibration

Users can choose different image modes according to the staining method of pathological sections to obtain more accurate image color.

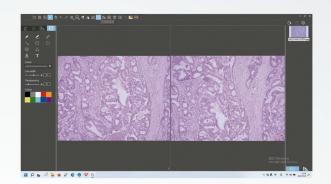
- A Used in bright field for slides mainly in pink or gold.
- **B** Used in bright field for slides mainly in cyan.
- c Used in fluorescence mainly.





Comparison Mode

The PrimeCam Pro can display any two or four images for comparison, supporting static image comparison, dynamic image comparison, static and dynamic mixed comparison.



Common tools



































Screen Record

High-content Crop to

Record

mode

equal scale

Annotation Tools







Glow stick Straight line Arrow





Rectangle



Round



Triangle





Font



Add text

Measuring tools

PrimeCam Pro provides the commonly-used measurement tools & scale bar, and supports the generation of reports in PDF, Word or Excel format according to measurements.















parallel lines













Polyline









angle









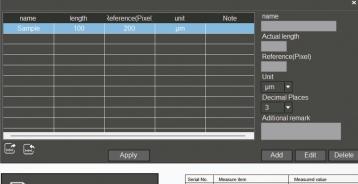


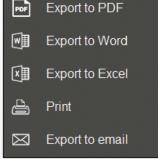
















Camera properties settings

With image properties memory function, restarting the software will restore the image properties value before the software is closed. Support adjusting target brightness, exposure, gain, white balance, image RB parameters, contrast, chroma, saturation, sharpness, gamma, restore the default parameters (Default) and etc.

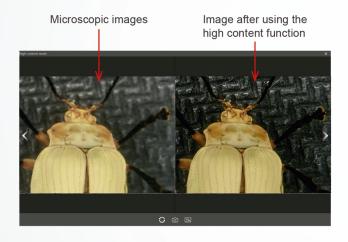


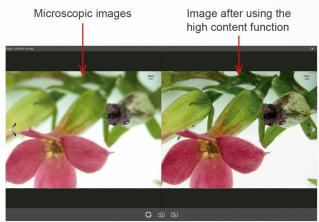




Automatic depth-of-field fusion function for high content images

The automatic depth-of-field fusion function for high content images uses cutting-edge image processing algorithms and real-time fusion technology, aiming to break through the limitation of insufficient depth-of-field in high magnification objective lenses, and to adjust the focal length can obtain a greater depth of field, thus obtaining a sharper image than a real-time single-frame image. Support PrimeCam PRO and higher resolution cameras, take one picture, two archives.







Manual counting function

Convenient to count the number of cell nuclei and export statistical reports with one click



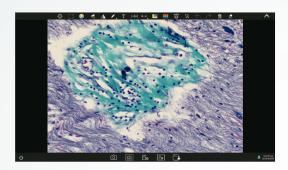


20			
Measure			
			Intensity
1	346	124	50
2	888	483	63
3	302	801	93
4	274	1556	70
5	71	1693	61
6	707	2360	108
7	639	2775	51
8	751	2884	19
9	820	1238	85
10	1877	149	64
11	1786	1281	99
12	1344	1665	117
13	1970	1958	62
14	1602	2928	62
15	1961	2925	71
16	2301	2831	103
17	2628	2276	75
18	2884	1574	47
19	3804	1924	73
20	2940	149	82
Statistic	s		
Item	X	Y	Intensity
Min	71	124	19
Max	3804	2928	117
Range	3733	2804	98
Sun	29895	33574	1455
Mean	1494, 75	1678.7	72, 75
Variance		886572.6	
Std. Dev.		941.5798	
Samples	20		



Manual counting function

PrimeCam Pro is an Android version APP, which is pre-installed into the PrimeCam cameras or smart cameras at the factory and does not need to be installed by the user. After the camera hardware starts, it will automatically enter the PrimeCam main interface. This APP can not be uninstalled by the user, but it can be updated and upgraded through a USB flash drive.



Calibration and Measurement

Built-in calibration for 4X, 10X, 40X, 100X of microscopes CX23, Ei, E100, students do not need to calibrate themselves; support creating calibration for other microscope models.





straight line



a circle



a rectangle





an angle

Application built-in stand-alone Cameras





Camera properties settings

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Preference Settings

Users can set preferences such as language, brightness, sound, video duration, scale bar, back up files to a USB drive, restore factory settings, etc.



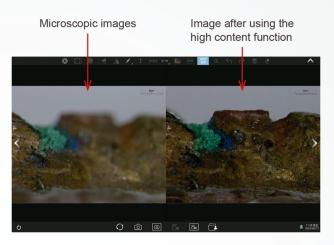




Automatic depth-of-field fusion function for high content images

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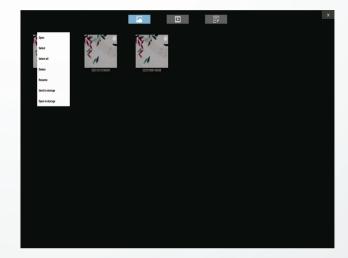
Provide two QR codes for cell phone/tablet to download APP and scan to live stream image.





Image and docs management

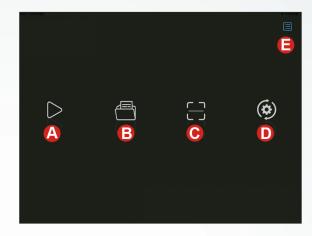
Image and video gallery: Files can be viewed, renamed, copied to a USB drive, etc.





App for smart devices: PrimeCam Pro 5G WiFi

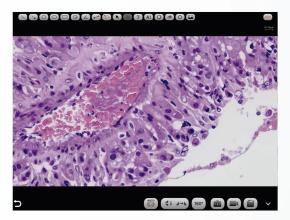
- A Preview: Image preview window.
- **B** Folder manage: photos and videos management.
- **C Scan:** scan the camera's serial number QR code to obtain images (to ensure preview speed, it is recommended that no more than 10 smart terminals are connected to the same camera at the same time).
- **D** Settings: App settings.
- **E** Operation guide: show/hide.



Navigation interface

Commonly used tools: annotations, measurements, image capture





Camera settings

Almost adjustment-free, open manual adjustment, support adjusting target brightness, auto/manual exposure, gain, auto/manual white balance (RB channels are adjusted separately), contrast, chromatic, saturation, sharpness, gamma, restore default



Staining type based on color calibration

Users can choose different image modes according to the staining method of pathological sections to obtain more accurate image color.

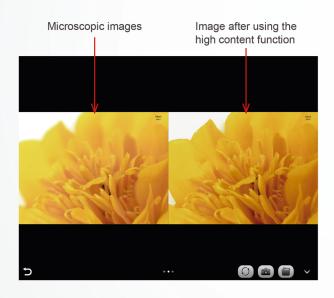
Preset mode

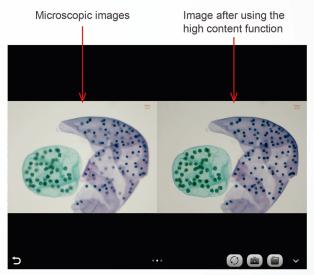
- A Used in bright field for slides mainly in pink or gold.
- **B** Used in bright field for slides mainly in cyan.
- **C** Used in fluorescence mainly

Staining type BF BF FL B FL

Automatic depth-of-field fusion function for high content images

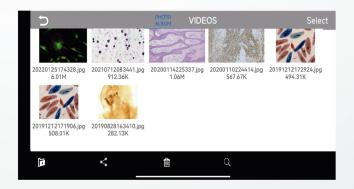
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Folder Management

Supports viewing pictures and videos, renaming, exporting to local albums, sharing to social networks, deleting, and searching by file name.







Camera intervision series available:







Connection Camera

Download PrimeCam APP









Scan QRCode camera and get the image in yor in device



Specifications

Applicable to Nikon Models IN12 S IN2 FL COLOR IN2 FL MONO Physical Resolution 12.0 MP 2.0 MP 2.3 MP Image Sensor		
Physical Resolution 12.0 MP 2.0 MP 2.3 MP Image Sensor sony IMX412 cMoS sony IMX482 cMoS sony IMX474 cMoS Exposure Mode Rolling Shutter Maximum Resol. 4000-2000 (2000 Physis) 1920-1020 (2073,600 Physis) 1920-1200 (2304,000 Physis) ISO sensitivity Equivalent to 100-12800 Sensor Size 1/1.2" Pixel Size 155µmx155µm 58µm×58µm 586µm×586µm Spectral Response 380-650nm 400-800nm Full through-light Exposure Capability Real-time auto and manual adjustment Exposure Time 10µs×333ms White Balance Real-time auto and manual RB adjustment/ Real-time auto and manual adjustment Preview Resol. 4000-3000@30fps / 3840;2160@30fps / 3840;	Applicable to	Nikon
Image Sensor SONY IMX412 CMOS SONY IMX482 CMOS SONY IMX774 CMOS Exposure Mode Rolling Shutter Maximum Resol. 4000/3000 (2000Pholes) 1920-1080 (2,077,600 Pholes) 1920-1000 (2,304,000Pholes) ISO sensitivity Equivalent to 100-12800 Sensor Size 1/1.2" Pixel Size 155 mx/155 m S8 m*58 m S86 m*1 586 m*58 m S96 m*58 m Full through-light Exposure Capability Real-time auto and manual adjustment Exposure Time 10 m*1 10	Models IN12S	IN2 FL COLOR IN2 FL MONO
Exposure Mode Rolling Shutter Maximum Resol. 4000/3000 (12000Poels) 1920-1020 (2075600 Poels) 1920-1020 (2304,000Poels) ISO sensitivity Equivalent to 1000-12800 Sensor Size 1/1.2" Pixel Size 155µmx1.55µm 5.88µm×5.8µm 5.86µm×5.86µm Spectral Response 380-650nm 400-800nm Full through-light Exposure Capability Real-time auto and manual adjustment Exposure Time 10µs×333ms White Balance Resistime auto and manual RB adjustment/Resistime auto and manual adjustment Preview Resol. 4000/3000@307ps 1920-1000@607ps 1920-1000@507ps 1920-	Physical Resolution 12.0 MP	2.0 MP 2.3 MP
Maximum Resol. 4000/3000 (12000Photels) 1920-1020 (2/073,600 Photels) 1920-1020 (2/304,000Photels) ISO sensitivity Equivalent to 100-12800 Sensor Size 1/1,2" Pixel Size 155µmx1.55µm 5.89µmx5.89µm 5.86µmx5.86µm Spectral Response 380-650nm 400-800nm Full through-light Exposure Capability Real-time auto and manual adjustment Exposure Time 10µsx333ms White Balance Real-time auto and manual RB adjustment/Real-time auto and manual adjustment Preview Resol. 4000-3000(6)30fps 1920-1080(6)60fps 1920-1080(6)60f	Image Sensor SONY IMX412 CMOS	SONY IMX482 CMOS SONY IMX174 CMOS
ISO sensitivity Equivalent to 100-12800 Sensor Size 1/1.2" Pixel Size 155µmx155µm 58µm×58µm 586µm×5.86µm Spectral Response 380-650nm 400-800nm Full through-light Exposure Capability Real-time auto and manual adjustment Exposure Time 10µs×333ms White Balance Real-time auto and manual RB adjustment/Real-time auto and manual adjustment Preview Resol. 4000-3000@30fps 1920-1000@60fps 1920-1000@50fps/s1920-1000@50f	Exposure Mode	Rolling Shutter
Sensor Size 1/1.2" Pixel Size 155µmx155µm 58µm*58µm 586µm*586µm Spectral Response 390-650nm 400-800nm Full through-light Exposure Capability Real-time auto and manual adjustment Exposure Time 10µs×333ms White Balance Real-time auto and manual RB adjustment/Real-time auto and manual adjustment Preview Resol. 400030000630fps 1900-1000600fps 1900-1000600f	Maximum Resol. 4000x3000 (12000Pixels)	1920×1090 (2,073,600 Pixels) 1920×1200 (2,304,000Pixels)
Pixel Size 155µmx155µm 58µmx58µm 586µm×586µm Spectral Response 390-650nm 400-800nm Full through-light Exposure Capability Real-time auto and manual adjustment Exposure Time 10µs×333ms White Balance Real-time auto and manual RB adjustment/Real-time auto and manual adjustment Preview Resol. 4000-3000@301/ps 1920-1080@601/ps 1920-1080@301/ps/default) Power Suplly DC 12V 5A WiFi Protocol 5G WiFi IEEE802.11ac Convertion Bit Depth 12bit	ISO sensitivity Ed	quivalent to 100-12800
Spectral Response 380-650nm 400-800nm Full through-light Exposure Capability Real-time auto and manual adjustment Exposure Time 10 \(\text{Just} \times	Sensor Size	1/1.2"
Exposure Capability Exposure Time 10µs×333ms White Balance Preview Resol. 40003000@30/ps 3840x260@30/ps 1920-1080@60/ps 1920-1080@30/ps(default) Power Suplly WiFi Protocol 5G WiFi IEEE802.11ac Convertion Bit Depth	Pixel Size 1.55µmx1.55µm	5.8µm×5.8µm 5.86µm×5.86µm
Exposure Time 10 µs×333ms White Balance Real-time auto and manual RB adjustment/Real-time auto and manual adjustment Preview Resol. 4000-3000@30fps 3840-2/800@30fps 1920-1000@60fps 1920-1000@00fps 1920	Spectral Response 380-650nm	400-800nm Full through-light
White Balance Real-time auto and manual RB adjustment / Real-time auto and manual adjustment Preview Resol. 40003000630fps 3840,2160630fps 1920-1080660fps 1920-1200660fps	Exposure Capability Real	l-time auto and manual adjustment
Preview Resol. 4000/3000@30fps 3340/2160@30fps 3340/2160@30fps 41920-1080@60fps 1920-1080@60fps 1920-1080@30fps(default) Power Suplly DC 12V 5A WiFi Protocol 5G WiFi IEEE802.11ac Convertion Bit Depth 12bit	Exposure Time	10µs×333ms
Preview Resol. 3840/2160@30fps 1820-1080@30fps(default) Power Suplly DC 12V 5A WiFi Protocol 5G WiFi IEEE802.11ac Convertion Bit Depth 12bit	White Balance Real-time auto and ma	nual RB adjustment / Real-time auto and manual adjustment
WiFi Protocol 5G WiFi IEEE802.11ac Convertion Bit Depth 12bit		1920×1080@60fps 1920×1200@60fps, 1920×1080@30fps(default)
Convertion Bit Depth 12bit	Power Suplly	DC 12V 5A
	WiFi Protocol	5G WiFi IEEE802.11ac
Software and App PrimeCam	Convertion Bit Depth	12bit
	Software and App	PrimeCam

Certifications

- $\hbox{\it 1.} \ Comply with FCC \ certification \ of The \ US \ Federal \ Communication \ Comission.$
- $\hbox{\bf 2.} \ Comply \ with \ European \ (standard) \ safety \ CE \ certification.$
- 3. Comply with the MIC certification issued by the Ministry of Internal Affairs and Communications of Japan (Eletric Wave Method and Electro-Optical Communication Business Law).
- 4. Comply with Jate certification of Japaneses telecommunications law directive.
- 5. Comply with the "Directive on the Restrictive of the Use of Certain Hazardous Substances in Flatrical and Flatrania Equipment" (De US) Directives in accordance
- Substances in Eletrical and Eletronic Equipment" (RoHS) Directives in accordance with EU legistation.



