

20MP Cooled Camera, the FL-20

20 megapixels, capturing high-definition detailed images in one shot

Thermoelectric cooling noise reduction technology

Advanced real-time image stitching and real-time EDF



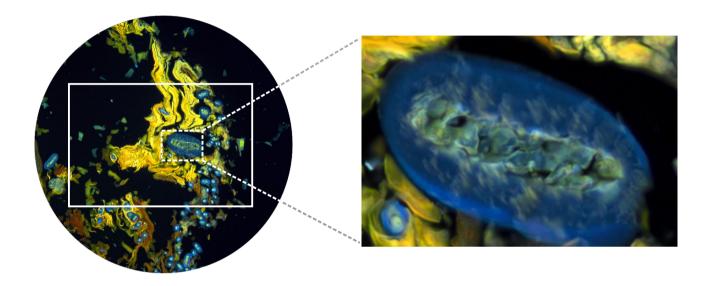
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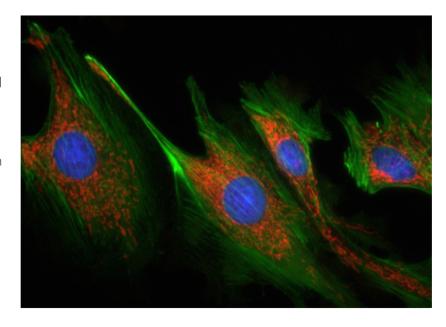
20 megapixels, capturing high-definition detailed images in one shot

The FL 20's 1-inch sensor image can cover the most uniform central area of the image plane, with a resolution of up to 20 megapixels, you can capture the high-definition details of your samples in one shot.



Thermoelectric cooling noise reduction technology to meet more professional color fluorescence imaging needs

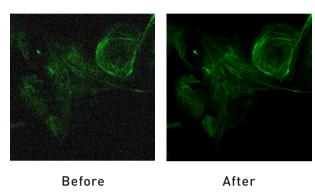
As with the top-level sCMOS camera technology from Tucsen, the FL-20 cooled camera operates at -15 °C and can ensure long-term reliable operation, significantly reducing the hot pixels caused by the accumulation of dark current, and obtaining a purer fluorescent background image. More than twice the sensitivity of a CCD, to meet the needs of professional fluorescence imaging.



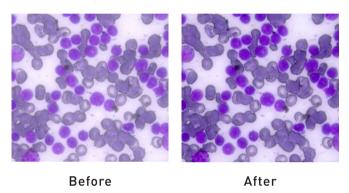
Real-time intelligent image processing, focused on improving image quality

Without sacrificing speed and image information, the FL-20 offers a variety of real-time intelligent image processing capabilities that allow you to view and capture flawless sample images in real time with the push of a button.

Real-time 3D noise reduction, effectively eliminating random background noise



Real-time sharpening, enhanced detail, and more transparent



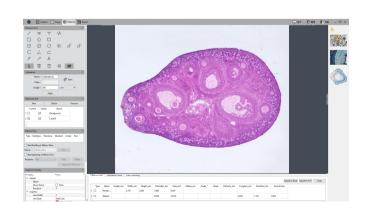
> 50 frames per second high speed video

With a guaranteed field of view, the FL 20 offers a variety of high-speed imaging modes that can be adjusted for fast positioning for an efficient image capture experience.

Resolution	FL-20	CCD
20MP	15fps	<1fps
5MP	53fps	4fps

Revolutionary PC Computing Imaging Software Mosaic V2.1

Unique from the cumbersome process of traditional technology to obtain images after processing, the Mosaic V2.1 provides real-time image stitching and real-time depth of field fusion. This can automatically complete the image while the operator moves the stage - productivity at its best.



Camera Specifications

Product Model	FL-20
Color/Monochrome	Color
Sensor Model	Sony
Quantum Efficiency	84%@535nm
Resolution	5472(H)x3648(V)
Pixel Size	2.40µmx2.40µm
Sensor Size	1inch
Shutter type	Rolling
Readout noise	<1.0e-
Cooling	Forced air(Ambient at +25°C):-15 °C
Frame Rate	14fps @5472x3648, 53fps @2736x1824 67fps @1824x1216
Binning	2x2, 3x3, 4x4
Exposure mode	Auto/Manual
Exposure Time	3us~60min
Picture Format	JPG/PNG/TIFF/DICOM
Data Interface	USB3.0
Bit Depth	16bit/8bit
Camera Size	85mmx85mmx109mm
Power Supply	12V
Camera Weight	990g
PC Software	Mosaic V2
Operating System	Windows(32bit/64bit) , MAC
Operating Environment	Temperature: 0-40°C Humidity: 10%-85%

Software Functions

- $\cdot \; \mathsf{Real\text{-}time} \; \mathsf{depth} \; \mathsf{of} \; \mathsf{field} \; \mathsf{fusion} \quad \cdot \; \mathsf{Real\text{-}time} \; \mathsf{image} \; \mathsf{stitching}$
- · Real-time 3D noise reduction · Real-time sharpening

Modular function configuration

Intelligent 12-bit ISP color reproduction

Real-time fluorescence image synthesis and editing

HDR image synthesis

Micro-imaging-based intelligent automatic exposure

Intelligent flat field correction based on dynamic calculation

Smart measurement workflow

Implements multiple iterations of workflow execution

Supports single shot, delayed camera

Automatic video and delay video generation

Output format selection

User parameter group save and load

Dynamic\static measurement

Layered measurement

Customize measuring gauges, layers, precision

Customize image naming, style, save location

Implements drawing: points, lines, rectangles, polygons, circles, arcs, angles

Data export as TXT or Excel

Report generation and printing

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