

An Extraordinary Microscopy Camera

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

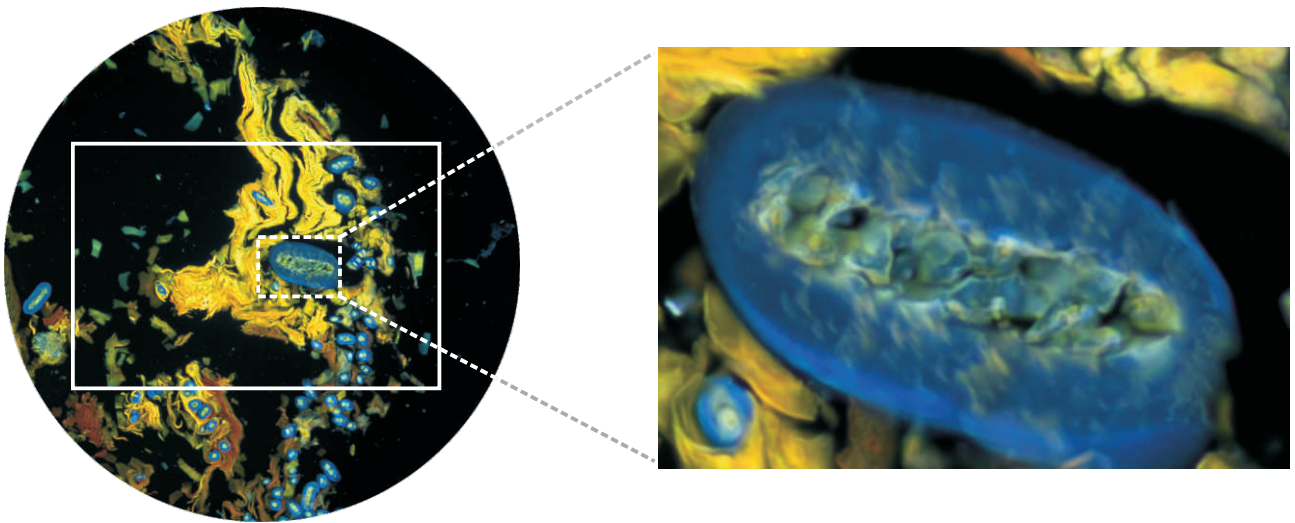


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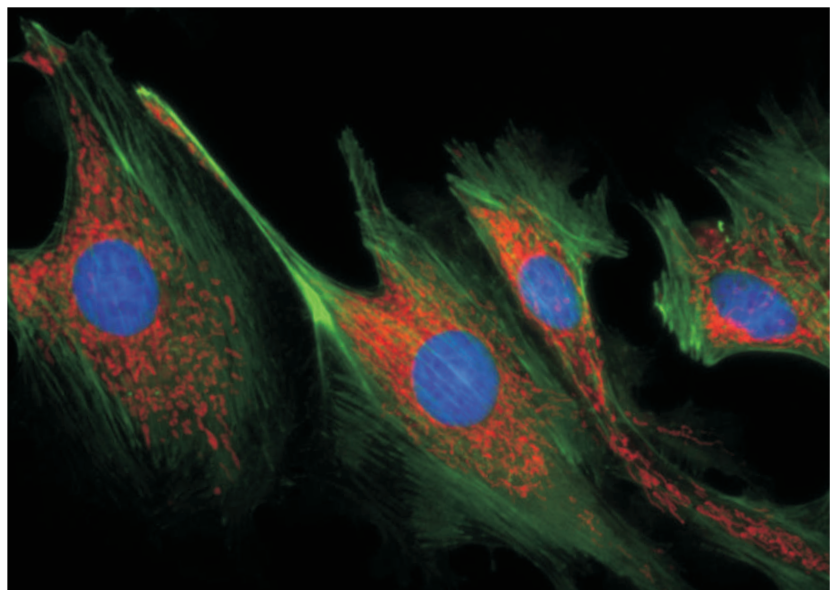
20 megapixels, capturing high-definition detailed images in one shot

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

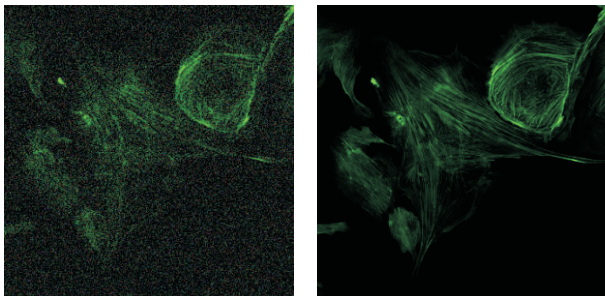
As with the top-level sCMOS camera technology from Tucsen, the FL-20 cooled camera operates at $-15\text{ }^{\circ}\text{C}$ and can ensure long-term reliable operation, significantly reducing the hot pixels caused by the accumulation of dark current, and obtaining a purer fluorescent background image. 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.

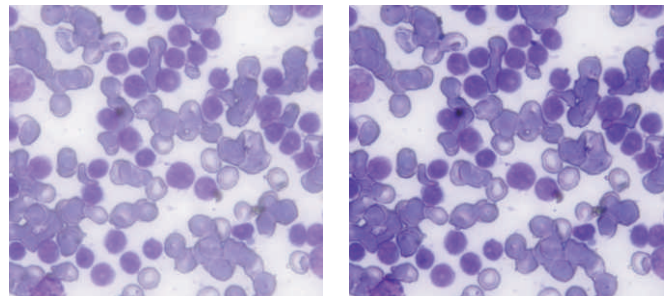
- Real-time 3D noise reduction, effectively eliminating random background noise



Before

After

- Real-time sharpening, enhanced detail, and more transparent



Before

After

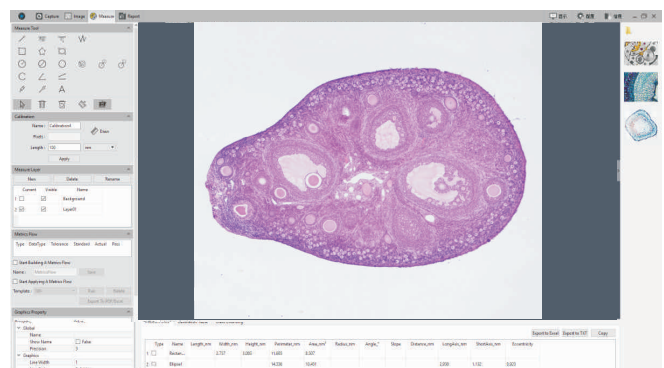
> 50 frames per second high speed video

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/Mono	Color
Sensor Model	Sony
Quantum Efficiency	84%@535nm
Resolution	5472(H)x3648(V)
Pixel Size	2.40μm x 2.40μm
Sensor Size	15.86mm; 1inch
Shutter Mode	Rolling
Read 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 Settings	Auto/Manual
Exposure Time	18us - 10min
Picture Format	JPG/PNG/TIFF/DICOM
Data Interface	USB3.0
Bit Depth	16bit/8bit
Camera Size	85mmx85mmx109mm
Power Supply	12V
Camera Weight	980g
PC Software	Mosaic V2.1
Operating System	Windows, Mac
Operating Environment	Temperature: 0-40°C Humidity: 10%-85%

Software Functions

• Real-time depth of field fusion • Real-time image 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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