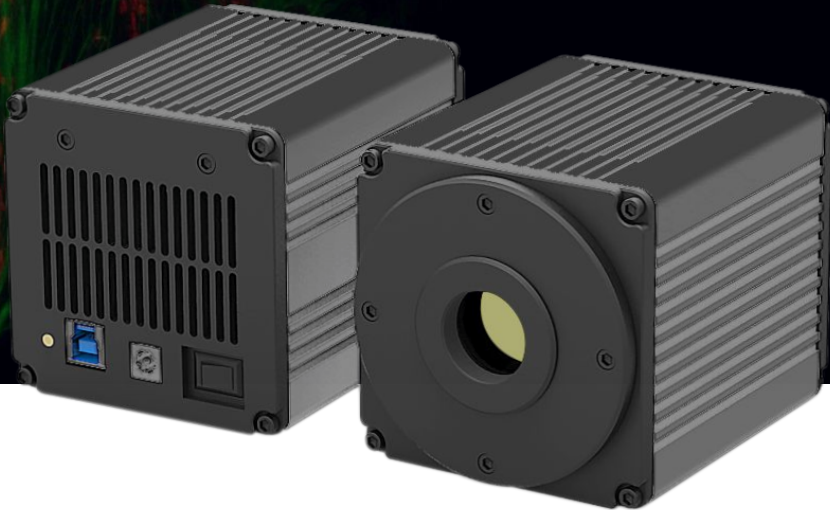


An Extraordinary Microscopy Camera



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

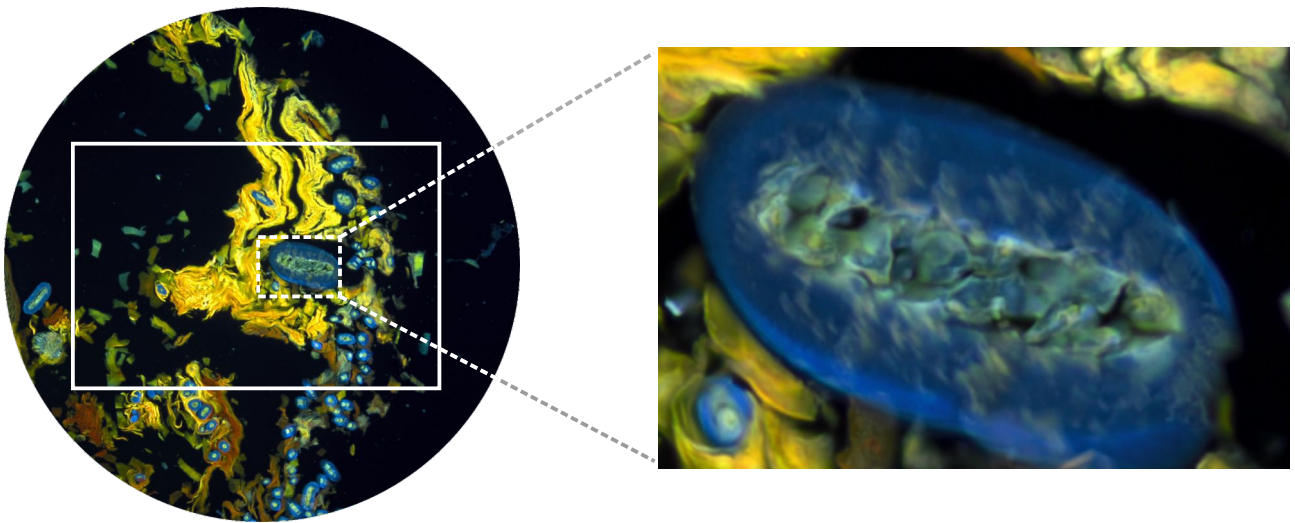


ISO9001 CE RoHS

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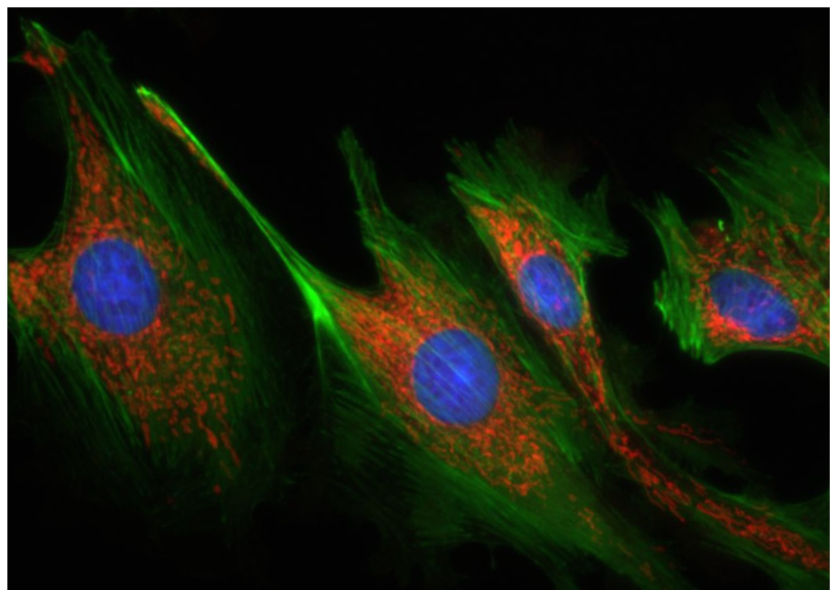
20 megapixels, capturing high-definition detailed images in one shot

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

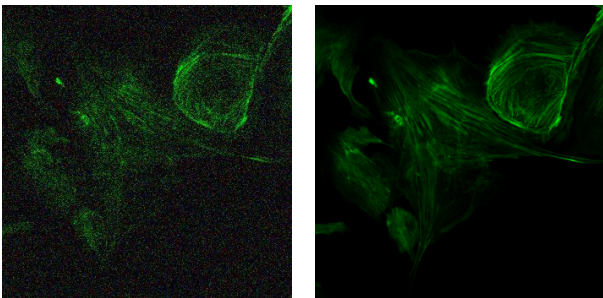
As with the top-level sCMOS camera technology from Tucsen, the FL-20 cooled camera operates at -15°C and can ensure long-term reliable operation, significantly reducing the hot pixels caused by the accumulation of dark current, and obtaining a purer fluorescent background image. More than twice the sensitivity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

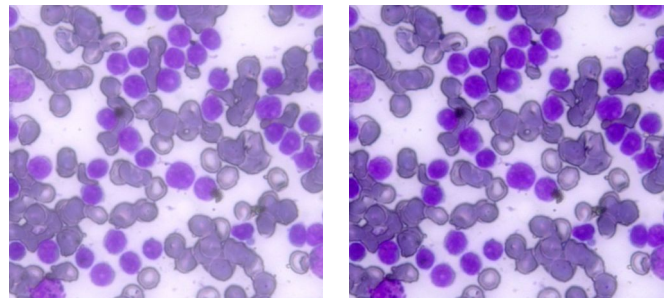
- Real-time 3D noise reduction, effectively eliminating random background noise



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/Monochrome | Color |
| Sensor Model | Sony |
| Quantum Efficiency | 84%@535nm |
| Resolution | 5472(H)x3648(V) |
| Pixel Size | 2.40μm x 2.40μm |
| 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

| |
|--------------------------------------------------------------------------------|
| • 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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