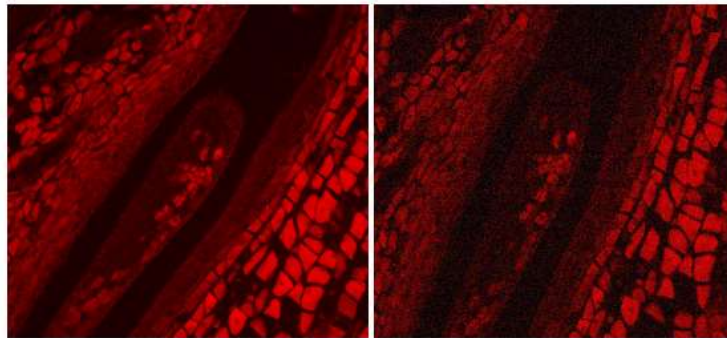


## TiEsseLab Dhyana 400D



Dhyana 400D is equipped with a brandy new 1.2 inch scientific CMOS sensor, which provide 70% quantum efficiency at 550nm. The 1.2 inch sensor size and 6.5X6.5um pixel size is more suitable for microscopy standard C-mount imaging.



Dhyana 400D ( exposure time: 40ms )

CCD 2/3" ( exposure time: 40ms )

Dhyana 400D has advantages of FOV, extremely low noise, high dynamic range, and high frame rate, and more over

### Dhyana 400D Specifications

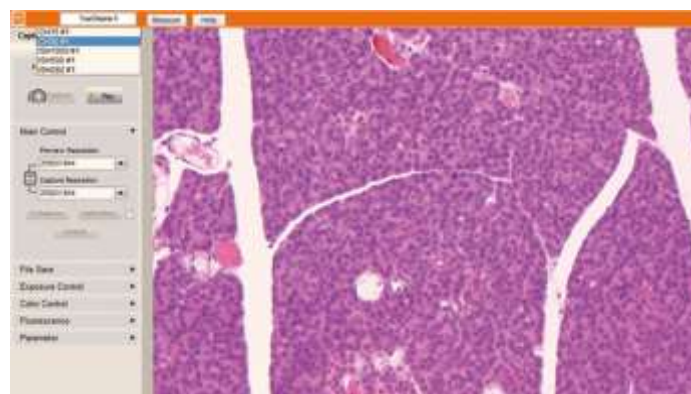
Type	Scientific CMOS
Dimension	½"
Model	G2020
Color/Monochrome	Monochrome
Active pixels	4 Mpixels
Image resolution	2048x2048
Pixel size	6,5µm x 6,5µm
Quantum efficiency	65%@650 nm.
Readout noise	1.8e
Sensitivity threshold	3p
Full well capacity	48.000e
DSNU	0,06%
PRNU	0,02%
Linearity	0.998
Dynamic Range	85 dB
Shutter type	Rolling shutter
Exposure mode	Manual
Exposure time	0.02ms.-10 min
Image processor	Built in processor

Image transfer control	High speed FPGA + HIGH speed DDR
Parameter setting	Gamma, Contrast, ROI, External trigger, Mirroring
Scan mode	Progressive
A/D	16 bit
Cooling	Peltier class II (-25°C)
Frame rate	35 fps (2048x2048)
Data transfer	USB 3.0
A/D Data Cable	1.8 meters USB 3.0 cable
Windows software	TiEsseLab IS Capture/Image J/Matlab
Compatible system	Windows/Linux/Mac
Optical interface	C-Mount
A/Data interface	USB 3.0, 5 Gb/s
Power interface	12V/8A power supply
Operating temperature	0-60°C
Operating Humidity	45%-85%
Storage temperature	-20°C +70°C

### **TiEsseLab ISCapture software**

ISCapture is the professional imaging software application developed by TiEsseLab for full control of TiEsseLab cameras. It fully demonstrates the power of TiEsseLab cameras. The user-friendly interface, complete camera parameter control, advanced image processing functions, live and still image measurements provide for highly efficient workflow. To satisfy the user's application needs, Tiesselab continually upgrades ISCapture. Users can enjoy the latest version software without any extra charge.

### **Advanced Camera Control**



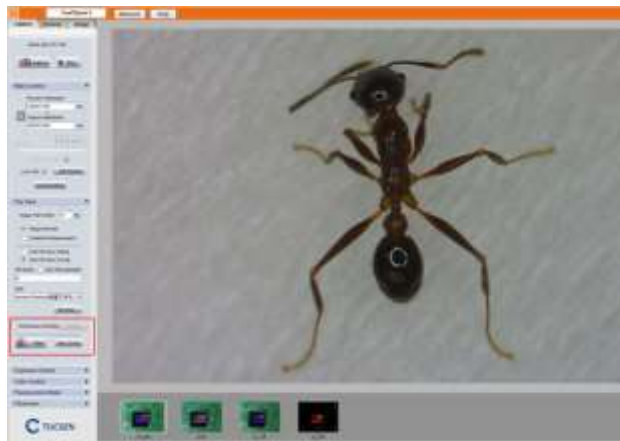
ISCapture provides the full control of TiEsseLab cameras. The exposure time and gain setting allows users to adjust image brightness. The white balance, Red, Green, Blue color channel gain adjustment and saturation are provided for image color adjustment.

### Unique Low Light Imaging Settings



The exposure control, binning resolution combined with the advanced 3D noise reduction functions allows for the acquisition of excellent quality images even in low light applications.

### Still image acquisition and Video Recording functions



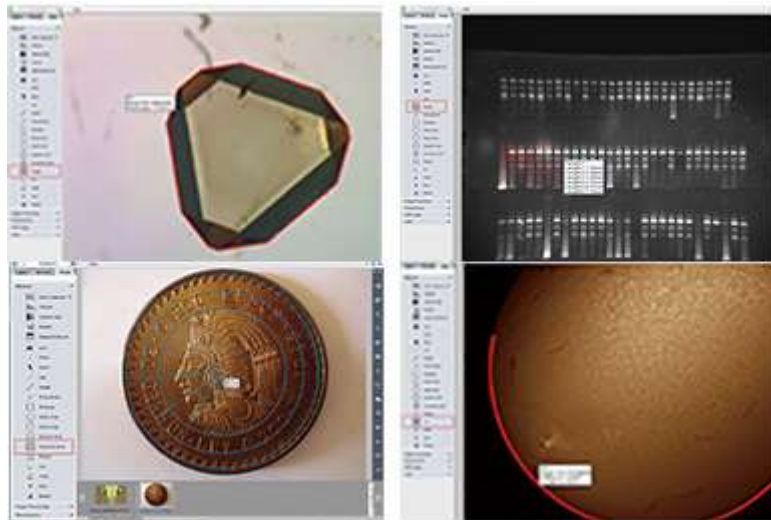
ISCapture not only allows users to acquire the still images but also provides live image recording functions which will meet the many diverse needs of different users

### Convenient Image Management



The intuitive software interface design allows seamless management of all images simply and quickly.

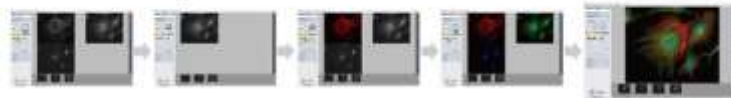
## Image Measurement



The live and still image measurement functions meet all the different application requirements and significantly enhance productivity.

## Image Processing

### Fluorescence photo Combination



### High Dynamic Range(HDR)



### Extended Depth of Focus



### Automatic Image Sticking



The advanced image processing functions, including fluorescence combination, high dynamic range, focus stacking and image stitching, are also integrated into ISCapture.