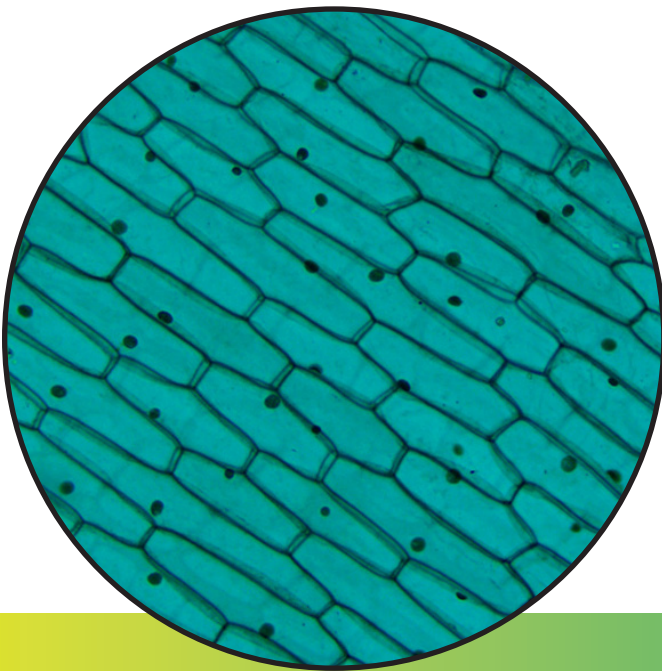# RICHTER OPTICA

Documentation
Microscope Camera
DCM3.2 - 3.2 Megapixels

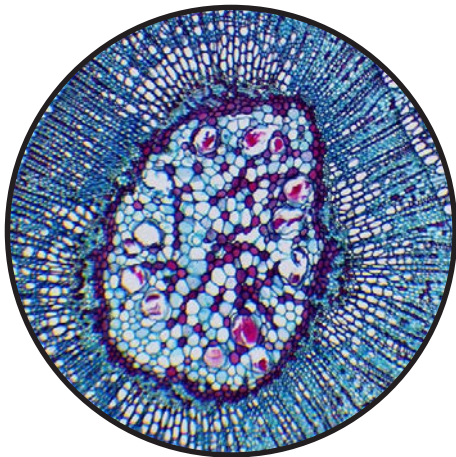# DCM3.2 Camera Features

Documentation Camera

This microscope camera was designed for basic image capture, measurement and documentation purposes.

- 3.2 Megapixels
- USB 2.0 Output
- Includes software
- View live images in software
- Capture & Save Images
- Make measurements

Applications

- Basic Documentation
- Quality Control
- Inspection
- Image Capture
- Measurement
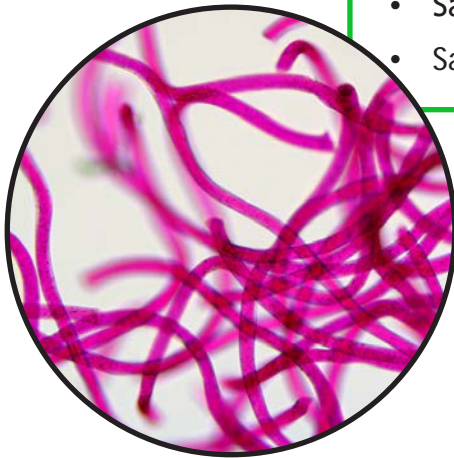

Plant Cells

Spirogyra

RICHTER OPTICA

DCM3.2 Software Features

Image Capture

Capture both still images and motion video.

- **Save images as .tiff, .jpg, .bmp, .png, .dcm, .pcx, .tga.**
- Save videos as .wmv, .avi, .h264 & .h265 (.mpeg)
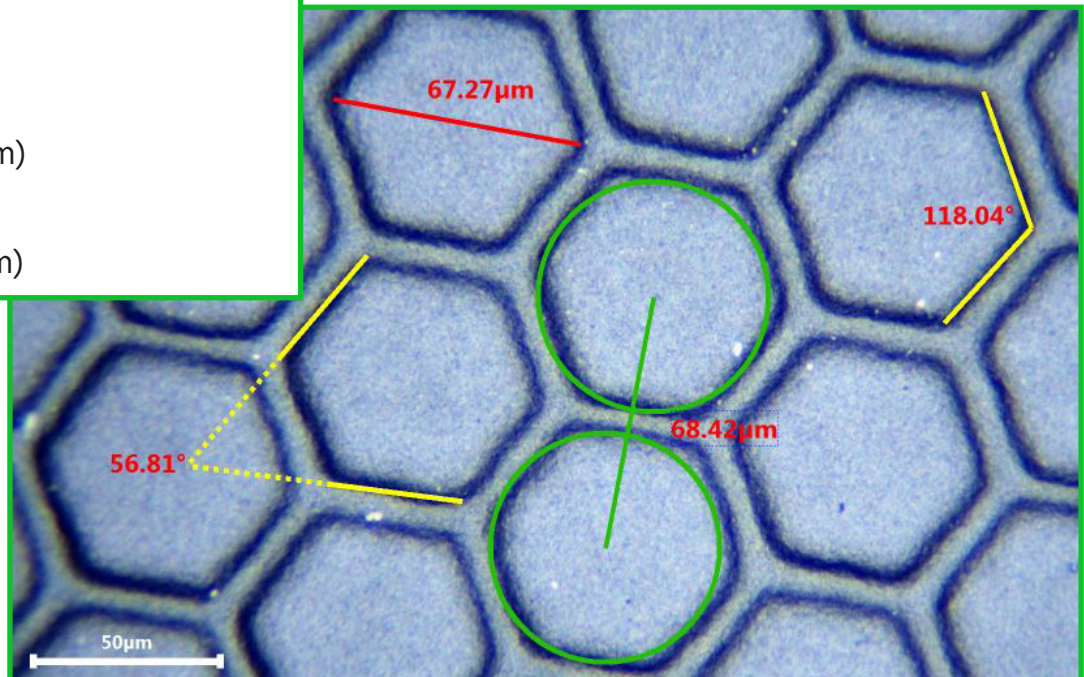
Nylon Fibers

Basic Software Settings

Some of the basic software features include:

- Exposure, Gain, White Balance
- Saturation, Brightness, Contrast, Gamma
- Color Adjustment
- **Power Frequency (anti-flicker)**
- Frame Rate Setting
- Image Rotation
- **Darkfield Correction**
- Image Capture
- Video Capture

Calibration

Accurate calibration should be performed on each objective lens with a stage micrometer. If using a stereo microscope click stops are the only way to make accurate, repeatable measurements. Available calibration measurement options include:

- Inches (in)
- Meters (m)
- Centimeters (cm)
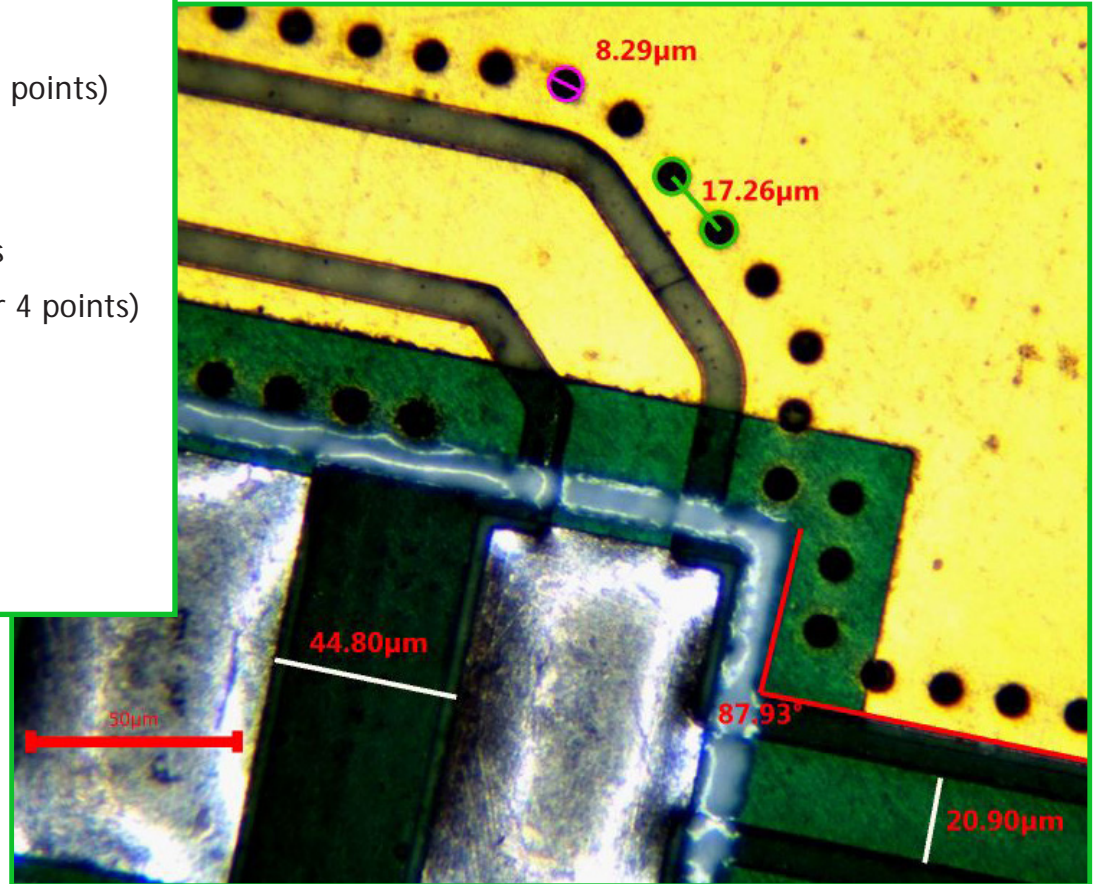- Microns (µm)
- Nanometers (nm)

67.27µm

118.04°

56.81°

68.42µm

50µm

RICHTER OPTICA

DCM3.2 Software Features

Measurement Options

Choose from a large variety of measurement options and tools:

- Angle (3 or 4 points)
- Line
- Parallel
- Two Parallels
- Vertical (3 or 4 points)
- Rectangle
- Ellipse
- Circle
- Annulus
- Arc

Penny, 30x

Penny, 10x

DCM3.2 Camera Specifications

Image Sensor	1/2" (6.55 x 4.92) Sony Aptina CMOS, USB 2.0
Pixel Size	3.2 x 3.2µm
Resolution	2048 x 1536
Frame Rates	11.5fps @ 2048 x 1536
	32fps @ 1024 x 768
	45fps @ 680 x 510
Binning	1x1, 2x2, 3x3
Exposure	0.244ms~2s
Output	USB 2.0
Spectral Range	380-650nm (with IR-filter)
Power	DC 5V or PC USB Port
USB Controls	White Balance, Auto White Balance, Capture still images or motion video with software, USB works with full use of software on PC or laptop.
Software Features	Image capture, still or motion video.
	Adjustment of white balance, color, frame rate, exposure, gain, flip, sampling, bit depth, ROI, histogram, darkfield correction.
	Annotation
	Measurement and calibration: angles, lines, diameter, polygon, etc.
Operating System for Software (USB)	Windows 7, 8, 10 (32 & 64 bit), Linux, Mac OSX. NOTE: with Mac OSX software only provides basic image management, no measurement or extended features.
PC Requirements (USB)	CPU equal or greater than Intel Core2 2.8GHz
	Memory: 2GB or more.
	USB 2.0 Port
Operating Temp	-10°C~50°C
Storage Temp	-20°C~60°C
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Size	80mm x 80mm x 38mm (3.15" x 3.15" x 1.50'), 1lb.

38mm

80mm

80mm

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