

MATERIALS SCIENCE

PRECIV

for Conventional Microscopes

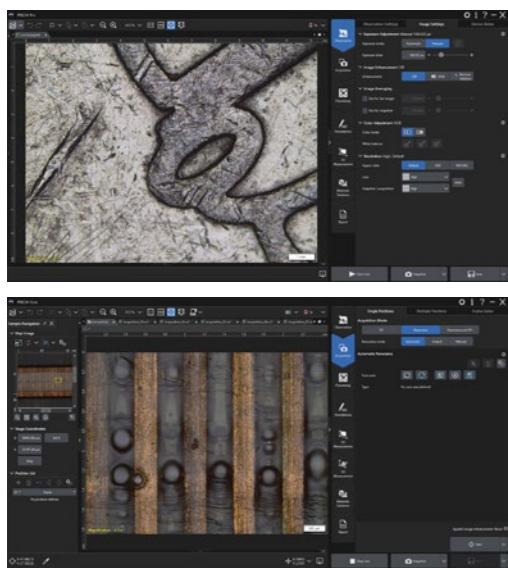


EVIDENT

Imaging Platform for Conventional Microscopy

Simple to Learn and Use

- Intuitive software for all Evident industrial microscopes
- Easy to configure the interface for everyday tasks
- Integrated hardware control for consistent, reproducible inspection
- Complete geometric measurement toolset for 2D and 3D images
- Safe and secure network connectivity



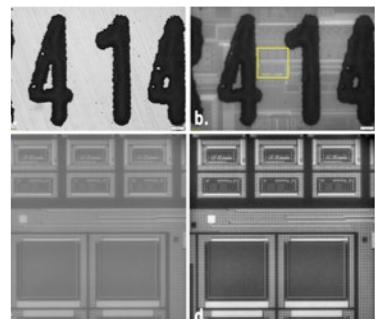
Powerful Imaging Tool

- For Evident conventional, stereo, and digital microscopes
- For Evident digital cameras
- For Evident accessories, including our SZX2-ZMS zoom magnification sensor and MIX Illumination
- For select cameras and motorization devices from third parties



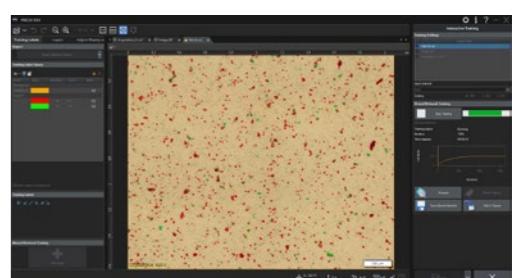
Flexible Imaging Methods

- Brightfield, darkfield, fluorescence, oblique, polarization, differential interference contrast (DIC)
- MIX (brightfield + darkfield)
- Infrared
- High dynamic range (HDR)



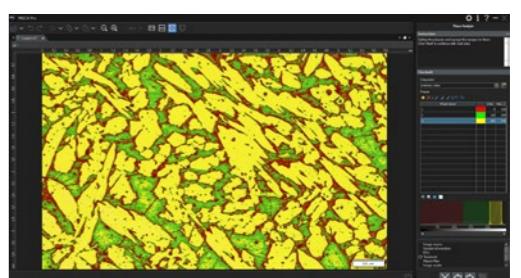
Precise 2D/3D Measurements

- 2D geometric measurements
- 3D profile measurements*
- Image analysis using AI methods



Expandable Software

- Materials Solutions for specialized applications
- Dedicated customized software and hardware solutions



PRECiV™ Version 2.2.1 Specifications for Conventional Microscopes

●: Standard Feature; ○: Optional Feature; — Not Available

	Capture	Core	Pro
Image Acquisition			
Basic image acquisition from Evident cameras, including autocalibration	●	●	●
Extended image acquisition, including HDR, Live HDR (with the DP75 and DP74), and position navigator	●	●	●
Halation removal using the MIX slider (microscope) or LED ring light (stereo microscope)	—	●	●
Video recording	●	●	●
Time-lapse acquisition	—	○	●
Extended focus imaging (EFI) using manual or instant mode	—	●	●
Large-size image acquisition (panorama) using manual or instant mode	—	○	●
Combined EFI and panorama using manual mode	—	○	●
Automatic EFI using motorized devices, including quick scan mode	—	○	○
Automatic panorama using motorized devices	—	○	○
Sample navigation and position list management using motorized devices	—	○	○
Combination of automatic EFI and panorama using motorized devices	—	○	○
Imaging and Customization Tools			
User interface with functions grouped by purpose	●	●	●
Overlay information layer (scale bar, crosshair, digital reticle)	●	●	●
On-screen magnification	●	●	●
Macro Manager	—	●	●
Static annotations	●	●	●
Live zoom	●	●	●
Measurements/Image Analysis			
Basic interactive measurements (horizontal line, vertical line, arbitrary line, polyline, 3-point circle, rectangle, rotated rectangle, 3-point angle, 4-point angle, perpendicular line, parallel line distance, polygon area, XY distance, distance between two crosslines, circle-to-circle distance, linear ruler, point coordinates)	●	●	●
3D line profile measurement and simple 3D measurements	—	○	○
3D analysis applications: 3D line profile measurements, advanced 3D measurements, and surface roughness analysis of 3D images	—	○	○
2D line profile measurements	—	○	●
Advanced interactive measurement, including auto-edge detection and auxiliary lines (angle ruler, 2-point circle, rotated ellipse, closed polygon, magic wand, interpolated polygon, multiple perpendicular lines, asymmetry lines, throat thickness)	—	○	●
Live AI	—	●	●
Neural network labeling	—	●	●
Offline EFI, offline panorama	—	○	○
Image enhancement filters (edge detection filters, smoothing filters, and sharpening filters), intensity and contrast adjustment, shading correction and background subtraction, dynamic contrast enhancement, morphological filters	—	●	●

¹ Please contact Evident for supported device information.

² Supports BX41M-LED, BX51, BX51M, BX53M, GX41, GX51, GX53, GX71, MX51, MX63, MX63L, SZ61, SZX7, SZX9, SZX10, SZX12, SZX16, BX3M-CB, BX3M-CBFM, BXFM, DSX1000, and DSX2000.

³ Supports the LC30, LC35, DP22, DP23, DP23M, DP27, DP28, DP73, DP73 WDR, DP74, DP75, SC30, SC50, SC100, SC180, and UC90 microscope cameras.

⁴ Supports ChuoSeiki: QT-BMM3, MSS-50C-OB, MSS-50WC-OB, MSS-150C, MSS-399C, MSSS-FM1; Ludi: MAC6000, 96S100, 96S109-LE, 96S103-6-LE, 96S106-03-LE, 96A404; Märzhäuser: TANGO, SCAN 75x50, SCAN130x85, SCAN 225x76, SCAN 200x200, SCAN 300x300, MFD-2; Prior: ProScan 3, ES111, H101F, H105, H112, H117, PS3H122R;

	Capture	Core	Pro
Reporting			
Data export to an Evident workbook	●	●	●
Data export to Microsoft Excel	—	●	●
Create reports and presentations in Microsoft 365/Microsoft Office 365 (32-bit/64-bit), Office 2021 (32bit/64bit), and Office 2019 (32-bit/64-bit)	—	○	●
Device Support*			
Evident microscopes ² and Evident cameras ³	○	○	○
Third-party X,Y motorized stages (LUDL, PRIOR, MAERZHAEUSER, CHUOSEIKI)	—	○	○
Third-party X,Y motorized focus drives (LUDL, PRIOR, MAERZHAEUSER, CHUOSEIKI)	—	○	○
Third-party SWIR camera	—	○	○
DSX2000/DSX1000 system, console, and macro camera	—	—	—

	Optional Add-Ons		
	—	○	○
Motorization	—	○	○
3D Acquisition	—	○	○
Count and Measure	—	○	○
Grain Sizing	—	○	○
Non-Metallic Inclusions	—	○	○
Cast Iron	—	○	○
Layer Thickness	—	○	○
Measurement Sequence	—	○	○
Porosity	—	○	○
Particle Distribution	—	○	○
Coating Thickness	—	○	○
Phase Analysis	—	○	○
Neural Network Training	—	○	○
Dendrite Arm Spacing	—	○	○
Chart comparison on select standards for grain size, graphite sizing, non-metallic inclusions, and hardened metals	—	○	○
Customized software solutions	—	○	○

	PC Requirements
CPU	Intel Core i5, Intel Core i7, Intel Xeon
HDD	10 GB hard disk space for installation Min. 50 GB for saving images and data
RAM	16 GB RAM (2 x 8 GB RAM) Special requirements to the memory for certain functionality: Training of neural networks: 32 GB RAM 3D analysis application: 32 GB RAM
Operating system	Windows 10 (64-bit), Windows 11 (64-bit); Editions: Pro, Pro for Workstations, Enterprise
.Net framework	Version 4.8.1 or higher
Optimized resolution	1920 x 1080 (Full HD) 3840 x 2160 (4K), 27 in./32 in. (150% display scaling)
License activation	Using an Internet connection or code-based
One-time migration from OLYMPUS Stream	Migration from former OLYMPUS Stream original licenses to selected PRECiV license
Graphics card	64-bit graphics board with 2 GB RAM Special requirements to the graphics board for certain functionality
OS languages	Available languages: English, Simplified Chinese, Spanish, Japanese, Portuguese, Korean, French, German, Polish, Czech, and Russian.



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EVIDENT CORPORATION is ISO14001 certified.

For details on certification registration, visit <https://evidentscientific.com/en/legal/iso>

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• Images on the PC monitors are simulated.

• Illumination devices for microscopes have suggested lifetimes. Periodic inspections are required. Please visit our website for details.