# PRECiV

for Conventional Microscopes

EVIDENT

Imaging Platform for Conventional Microscopy

Simple to Learn and Use

› Unified software interface increases efficiency with straightforward functions and an intuitive layout that's easy to learn with minimal training
› Clearly-labeled buttons make each feature and function easy to find
› Guided workflows make complex inspections easier
› Leading-edge measurement and image analysis tools to solve complex challenges
› Connectivity that enables efficiency and security
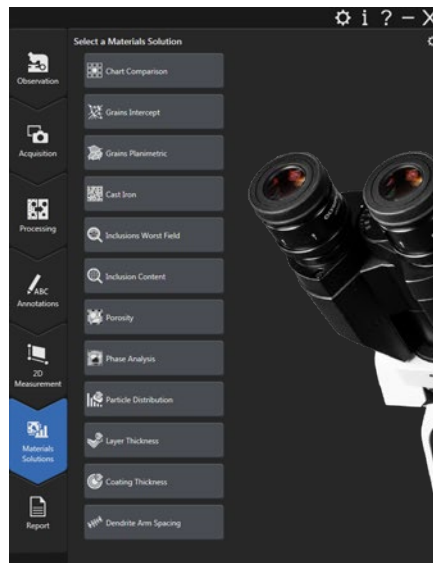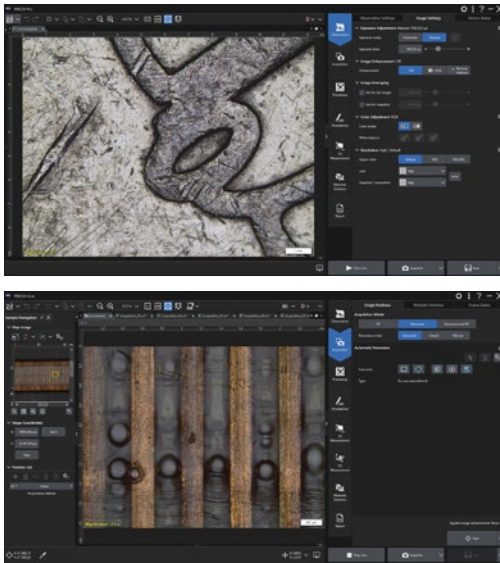
Modular and Versatile

› Supports our:
  › Manual and semi-motorized microscope frames
  › Color and monochrome cameras
 › X, Y, Z motorized stages and accessories

Flexible Imaging using Various Observation Methods

> Brightfield, darkfield, fluorescence, polarization, differential interference contrast (DIC)
> MIX (brightfield+darkfield)
> Infrared
> High dynamic range (HDR)
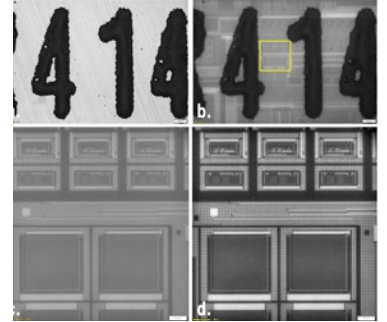
## Precise 2D/3D Measurements

> Profile measurements and surface roughness analysis*
> (*through 3D analysis application software)
> Image analysis with TruAI™ deep-learning technology
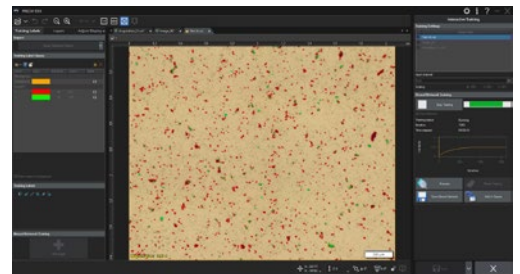
Tailor the Software to Your Needs with Optional Modules and Customized Solutions

> Materials Solutions for specialized applications
> Dedicated customized software and hardware solutions
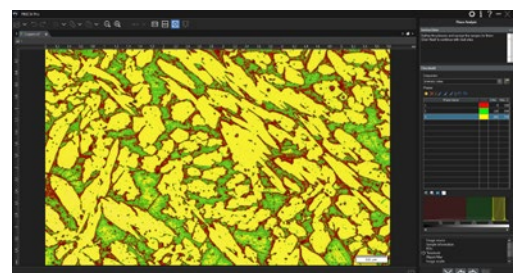
PRECiV™ Version 2.1.1 Specifications for Conventional Microscopes

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

	Capture	Core	Pro
Image Acquisition			
Basic image acquisition from Evident cameras, including auto calibration	●	●	●
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)	—	●	●
Movie recording	●	●	●
Time-lapse acquisition	—	○	●
Extended Focal Image (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	—	○	○
Image and Customization Tools			
User interface with functions grouped by purpose	●	●	●
Overlay information layer (scale bar, cross hair, 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 like 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 labelling	—	●	●
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	—	●	●

	Capture	Core	Pro
Reporting			
Data export to an Evident workbook	●	●	●
Data export to Microsoft Excel	—	●	●
Report and presentation creation in Microsoft 365, Office 2019 and Office 2021	—	○	●
Device Support*1			
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	—	○	○
DSX1000 system and console	—	—	—

	Capture	Core	Pro
Optional Add-Ons			
Motorization	—	○	○
3D Acquisition	—	○	○
Count and Measure	—	○	○
Grain Sizing	—	○	○
Non-Metallic Inclusions	—	○	○
Cast Iron	—	○	○
Layer Thickness	—	○	○
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 4.6.2 or higher
Optimized resolution	1920 × 1080
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 2GB RAM Special requirements to the graphics board for certain functionality

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.
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-ADM3, MSS-50C-OB, MSS-50WC-OB, MSS-150C, MSS-399C, MSSS-FM1; Ludl: MAC6000, 96S100, 96S109-LE, 96S103-6-LE, 96S106-O3-LE, 96A404;
Märzhäuser: TANGO, SCAN 75x50, SCAN130x85, SCAN 225x76, SCAN 200x200, SCAN 300x300, MFD-2; Prior: ProScan 3, ES111, H101F, H105, H112, H117, PS3H122R;
Objective Imaging: OASIS (Operation is not guaranteed, although the connection has been verified.)