

Image-Pro Version Comparison Chart

	v7	v9	v9.1 - 9.3	v10	v11
Image Management & Display					
Image & MetaData Management					
File Format Support for 65+ file types and Meta Data/Calibrations	X	X	X	X	X
Optical Lens & Dye Libraries - Save characteristics to meta data		X	X	X	X
Set Import / Multi-Dimensional Builder			X	X	X
Full Screen 'File' menu view					X
Channel management - Save unique characteristics per channel					X
Views & Overlays					
Annotation Tools (Text, Arrows, Shapes, etc)	X	X	X	X	X
Timelapse Movie & Surface Views	X	X	X	X	X
Multi-Dimensional Views (Slide Scan, Mosaic, Compare, Bitmap, Slicer, 3D Voxel)		X	X	X	X
ROI (Region of Interest) Drawing & Management		X	X	X	X
Well Plate Viewer					X
Color-Coded Well Plate Heat Maps					X
Processing & Adjustments					
Image Adjustments					
Pseudo-Color by gray level & Tint by Probe/Dye list or RGB/White	X	X	X	X	X
LUT's, BCG, B&W Levels, & Histogram stretching	X	X	X	X	X
Image Filters - 2D & 3D Morphological, Enhancement, Edge, & Large Spectral Filters	X	X	X	X	X
Image correction - Background subtraction & correction	X	X	X	X	X
Resize, Rotate, Resize canvas		X	X	X	X
High Dynamic Range (HDR) image creation - post process			X	X	X
Align, EDF, Tile & Stitch					
Auto Align images - For Z stacks or time sequences	X	X	X	X	X
Extended depth of field (EDF)	X	X	X	X	X
Auto Tile images	X	X	X	X	X
Auto Shading Correction across individual tiles & entire mosaic			X	X	X
Usability					
User Layout Customization					
Floating, Docked, or Fullscreen window modes		X	X	X	X
Views & Layouts Saved per user			X	X	X
AutoRecover unsaved or modified images			X	X	X
Dark Mode Setting - For usage in dark environments				X	X
Customizable Auto Shutdown Timer with AutoSave				X	X
Pinned Panel dock - For organizing multiple open panels					X
Search & Help					
Helpful Feature Documentation	X	X	X	X	X
Universal Search across Recently Used items & Help topics					X
Dockable & Dynamic Help panel for easy access to Documentation					X

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Licensing					
License "Linked" to USB License dongles	X	X	X	X	X
Flexible License Linking/Unlinking to Computer or License Server in addition to USB dongles					X
Online License "Bundle" management - Control module configuration per base product					X
Data Analytics & Reporting					
Data Collection & Display					
Collect 40+ measurements from one or multiple images using any data source available	X	X	X	X	X
Export from Data Collector to Reports, Microsoft Excel, CSV, or text file	X	X	X	X	X
Create custom measurements to collect using the equation editor			X	X	X
Flexible Data tables, Statistics, & Graphs - Sort, Filter, Condense, or Group by Class			X	X	X
Display Data using 3D Plots & Pie Charts				X	X
Display Data using Heat Maps					X
Display annotated images in Data Table along with statistical data					X
Reporting					
Report creation with layout, text formatting, images, data tables, & graphs		X	X	X	X
Save Reports as PDF, Word, HTML, or Rich Text		X	X	X	X
Auditing & Authentication					
Audit Trail - For tracking user actions across the entire application or per image	X	X	X	X	X
Image and file signatures - For creating unique "fingerprints" to check authenticity	X	X	X	X	X
Track usage across multiple sessions over time			X	X	X
Export data to Excel or File			X	X	X
Scripting & Automation					
Intelligent macro recording & editor with command recognition	X	X	X	X	X
Graphical Macro programming tools with App builder		X	X	X	X
Batch process (with folder monitoring)			X	X	X
Direct, Best Fit, & Relative					
Manual tag, Measure Point-to-point, pitch, polygon, rectangle, circle, polyline, angle	X	X	X	X	X
Best Fit measurements - For finding approximate measurements by 'fitting' circles, arcs, & lines to objects	X	X	X	X	X
Measure Relative Distances - For measuring between object centers, minimum, maximum	X	X	X	X	X
Auto Trace Edges - For automatically drawing lines and polygons along edges	X		X	X	X
Auto Snap to Edge - For snapping to (straight edge, any edge, line length, line edges, along edge, circle)		X	X	X	X
Measure on a Live Preview Image (Requires 2D Capture Module)			X	X	X
Polygon Adjustment Options - Nudge, Grow/Shrink, Close/Merge			X	X	X
Magic Wand & Auto-Find Lines, Circles, Irregular Objects			X	X	X
Line Profile & Edge Detection					
Draw Line Profiles as lines or polygons manually or with AutoTrace	X	X	X	X	X
Caliper tool for manual or auto detection of intensity "edges" under the line - Peaks, Valleys, Rising, Falling	X	X	X	X	X
Display measurements as a graph, measurements table, or statistics table	X	X	X	X	X
Define unique intensity patterns for Caliper tool to autodetect under line		X	X	X	X
Group Caliper "edges" into classes - Name and color code		X	X	X	X

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Color					
CIE L*a*b* Color Measurement - For measuring colors under cursor & extracting channels as mono images	X			X	X
sRGB and Color Profiling Methods for defining color measurements				X	X
Digital Color Correction - Adjust one image by a reference (image or color transform from points)				X	X
Classification					
Single Variable classification - Auto-classify objects evenly into bins based upon a single measurement	X	X	X	X	X
Assign unique colors to objects by class	X	X	X	X	X
Adjust measurement overlay appearances by class					X
2D Automated Analysis					
					*
Free-Form Segmentation					
Count / Size Manual Object Classification	X	X	X	X	X
Auto Count Bright/Dark Objects	X		X	X	X
Count / Size Sort - Displays objects in a grid sorted by a measurement	X		X	X	X
Manual and automatic 2D object tracking tools	X		X	X	X
Smart Segmentation: Machine learning-based			X	X	X
Learning Classification: Training-based object classification			X	X	X
Voronoi Maps: distribution & nearest neighbors analysis			X	X	X
Protocol-based Segmentation					
Run on single file multi-positional (including multi-well) datasets or collections of individual images					X
Bi-direction feedback between data tables & annotated images & charts					X
Library of Protocol reports for both large datasets & single images					X
Analysis Protocols - Essentials Collection (Objects within Objects, Object Count, % Area)					X
Analysis Protocols - Cell Biology Collection (Apoptosis, Autophagy, Cell Count, Cell Morphology & more)					X*
Analysis Protocols - Cell Biology Advanced Collection (Angiogenesis, Colocalization, Neurite Outgrowth, & more)					X*
Analysis Protocols - Materials Collection (Particles, Pores, Particle Phase, Fiber Thickness, & more)					X*
2D Image Capture					
					*
Camera Device Control					
Digital Camera Control (Access on-device resolution, binning, framerate, etc.)	X	X	X	X	X
Acquisition					
Single frame & Time-lapse "Movie" acquisition	X	X	X	X	X
Live EDF & Tiling	X	X	X	X	X
High-speed streaming to disk		X	X	X	X
Live Analysis (grids, compare, line measurements, counting)		X	X	X	X
Live Image Compare & HDR			X	X	X
Multi-Channel Capture					
					*
LightSource Device Control	X				X
Acquisition of mixed multi-channel & transmitted light datasets					X
Automated capture of multichannel image-set (with a supported multi-channel light source)					X
Guided acquisition of multi-channel image-sets from a manual microscope					X

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Real-Time Deconvolution					*
2D Real-Time Deconvolution integrated with Capture	X				X
Wiener Filter-based algorithm	X				X
2D Iterative-based algorithm					X
3D Visualization & Analysis	*		*	*	*
3D Visualization					
3D viewer with advanced control & volume rendering (Min & Max Projections)	X		X	X	X
Clipping plane viewing	X		X	X	X
Slicer viewing	X		X	X	X
Simple Key Frame Animation movie making			X	X	X
3D Visualization of Big Data Sets				*	*
Big Data Visualization using GPU Processing - <i>Opens Terabyte sized images</i>				X	X
Convert Large Image Sets Into Pyramidal Tiff for Big Data Visualization					X
3D Analysis					*
Iso-Surface based object analysis	X		X	X	X
Automated 3D volume measurements	X		X	X	X
3D object based manual measurements on isosurfaces	X		X	X	X
Guided Segmentation for complex samples			X	X	X
3D Co-localization of probes			X	X	X
Volume"Pseudo-surface" based object analysis				X	X
AutoQuant Deconvolution (Post-Acquisition)	*				*
Deblurring (No/Nearest Neighbor, Wiener Filter)	X				
2D Fixed & Adaptive Deconvolution Algorithms	X				X
Support of both Theoretical & Measured PSFs	X				X
GPU Acceleration					X
PSF generation for WF, CF, 2 Photon, Spinning Disk, & STED modalities					X
Spherical Abberation Correction					X
Batch Deconvolution					X
License Server (for Network-based Licensing)	*			*	*
License Server for Network distribution of floating software licenses access	X			X	X
Dynamic license access anywhere Image-Pro is installed on an internal network	X			X	X
No dongle needed				X	X
Bundles can be left as floating licenses or can be fixed to a single workstation					X
Bundle assignment to License Server can be adjusted anytime as needed					X
User time out returns license back to License Server					X