## Stream Essentials - Advanced imaging and superior analysis for materials science

Stream Essentials takes materials science imaging to the next level: IEFI and MIA offer excellent imaging and reporting functionality, which combined with the processing, measurement and analysis capabilities, make this package the best in its class.

Stream Essentials

- Instant Extended focal imaging (IEFI)
- Multiple image alignment (MIA)
- Image pre-processing
- Superior phase analysis with object counting

Functions		
Basic Image Acquisition	Live image acquisition	Captures live images in various formats
Basic Image Tools	Image history and properties	Displays image history and properties
	Image navigator	Enables tool window for image navigation and zooming
	Gallery view	Displays thumbnails of open images in a gallery
	Layers	Enables viewing, extraction and deletion of single image layers
	Image processing filters and tools	Enables contrast adjustment, edge detection, smoothing and sharpening of images, and shading correction
	Static annotations	Draws text, arrows, lines, rectangles and elipses on the image
Interactive Measurement	Field of view measurement	Measures distances, angles, rectangles, circles, ellipses and polygons
Olympus device control	Olympus microscope control	Controls motorized Olympus microscope systems BX2, IX2, GX, SZX, SZX2, MX, reads out Prior SZX-ZE
	Olympus cameras	Controls Olympus cameras DP20, DP70, DP71, DP72, SC30, UC30, XC10, XC10IR, XC10T, XC10TIR, XC30, XC50, XM10, XM10IR, XM10T, XM10TIR
Extended image acquisition	Movie	Creates .avi movie files
	Software autofocus	Performs contrast-based software autofocus (requires Olympus microscope with motorized Z axis or external motorized Z axis*) *supported in Stream Motion
Basic Reporting	Data export and statistics	Exports measurement data to MS Excel and Stream workbook format, enables statistical analysis of measurements
	Report generator	Creates reports interactively and exports to RTF / PDF
Basic Customisation	MyFunctions	Creates a workflow and large button bar for frequently used commands
Extended device control	Non-Olympus cameras	Controls non-Olympus cameras. Q-Imaging cameras: MicroPublisher 3.3 RV, Jenoptik cameras: ProgRes C3, ProgRes CT3, Hamamatsu cameras: C9300
	Imaging source converter	Controls DFG-1394 A-D converter (FireWire and USB2.0)
Advanced acquisition process	Instant EFI	Instantly creates an EFI image while focusing
	Manual MIA	Creates panoramic images over areas (requires manual XY stage)
	Time lapse	Captures still images over time frequency
Extended Image Tools	Image arithmetic	Performs arithmetic and logical operations with images
Basic Image Analysis	Phase Analysis	Performs threshold based phase segmentation on full image and ROIs (rectangle, circle and polygon), calculates area, area fraction and object count
Advanced customization	Macro Recorder	Allows recording and editing of macros
Options		
Remote Viewing	NetCam	Enables remote live image viewing via TCP/IP
Extended Image Analysis	Objects analysis	Performs threshold based object detection and classification



