

<b>Technical Specifications</b>	
Ellipsometer	Auto-Nulling Imaging Ellipsometer in PSCA configuration
Ellipsometric precision and accuracy	Delta/Psi precision 0.002 deg Absolute accuracy 0.1 deg
Thickness relative error (SiO <sub>2</sub> on Si)	0.001 nm
Thickness absolute accuracy (SiO <sub>2</sub> on Si)	< 0.1 nm
Imaging system	CCD camera with 768 x 572 pixels
Light source	<b>Laser unit:</b> Internal solid state laser, 532 nm <b>Spectroscopic Unit:</b> Xenon Arc lamp with filter wheel (48 interference filters). Wavelengths: 380 – 900 nm, bandwidth +/- 6 nm
Imaging optics	To achieve high-resolution real-time focused images, the Nanofilm EP <sup>3</sup> is equipped with an automatic focus scan <b>10x objective:</b> Field-of-view 0.4 mm, lateral resolution: 2 μm <b>5x objective:</b> Field-of-view 0.89 mm, lateral resolution: 3 μm <b>2x objective:</b> Field-of-view 2.5 mm, lateral resolution: 4 μm
Motorized goniometer	Angle-of-incidence range: 40 – 90 deg. Angle resolution: 0.001 deg. Absolute angle accuracy: 0.01 deg. Speed of motion: ca. 10 deg./second
Automatic sample handling stage	Automatic Sample Alignment: typ. 2 sec/ deg Motorized XYZ stage: travel range 90 mm (X/Y), 3 mm (Z) Repeatability: 1 μm

	Joystick: MS WingMan
Reflective liquid cell - <a href="#">image</a>	<p>For ellipsometry of solid substrates in liquid.  Angle of incidence: 60°  Material: PEEK  Liquid Volume: &lt; 0.4 ml  Windows: AR-coated glass  Sample size: minimum 15 x 22 mm</p>
SPR/TIR liquid cell - <a href="#">image</a>	<p>Liquid cell for ellipsometry of transparent substrates and/or SPR measurements.  Material: PEEK  Liquid volume: &lt; 100 µl  Sample size: minimum 15 x 22 mm</p>
EP <sup>3</sup> View Software:	<p><b>Automation:</b></p> <ul style="list-style-type: none"> <li>* Powerful macro language EP<sup>3</sup>script allows the user to simplify complex measurements into push-button operation</li> <li>* User-programmable function buttons</li> <li>* X/Y stages controlled via software</li> </ul> <p><b>Image Processing:</b></p> <ul style="list-style-type: none"> <li>* AutoScan for optimum full field-of-view images</li> <li>* Real-time geometrical correction for angle-dependent image aspect ratio</li> <li>* Image formats supported: TIFF, JPG, PNG</li> <li>* Image browser</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>* Multiple region-of-interest (ROI)</li> <li>* Micro Mapping for high-res maps of Delta/Psi, thickness, refractive index etc.</li> <li>* Optical modelling package for simulation and analysis of thin film systems, supports multiple-angle, multiple-wavelength and spectroscopic analysis</li> <li>* Export data to external software packages for analysis or visualization</li> <li>* Kinetic software add-on for evaluation of binding events</li> </ul>