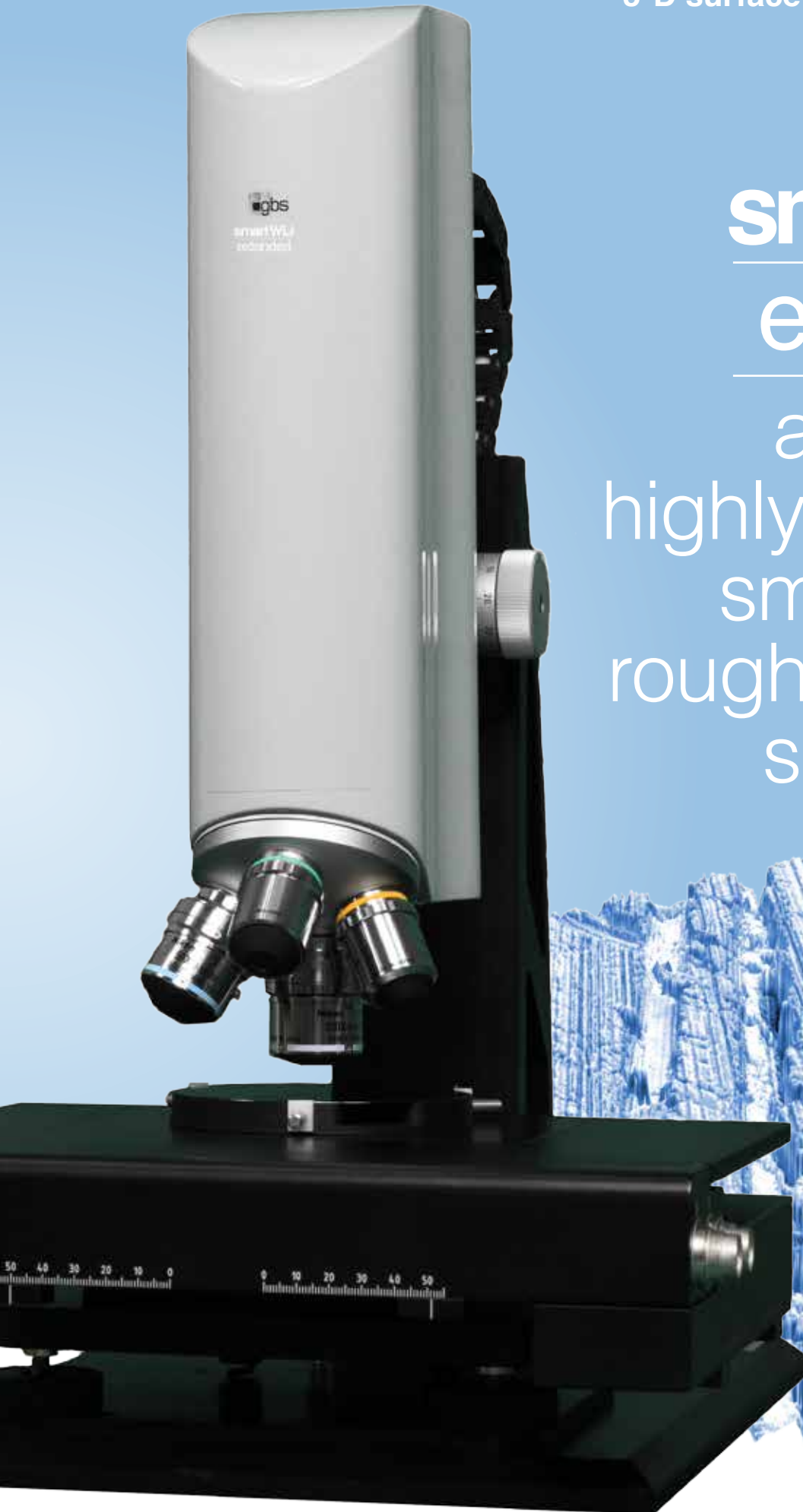


3-D surface measurement device

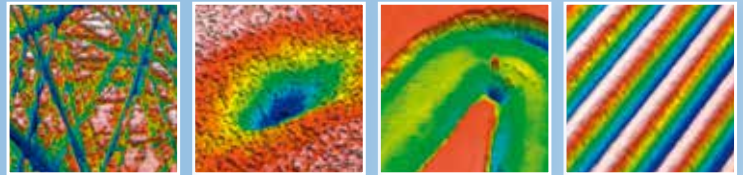
smartWLI extended

adjustable
highly accurate
smooth and
rough surfaces
speedytec



smartWLI extended
combined with
Motorized Stand

smartWLI extended



Material Science • Automotive • Micro Systems • Electronics • Solar

Measurement head						
Measurement principle	White-light interferometry					
Nosepiece	4 position					
Z-Positioning system	piezo-based					
Height measuring range [μm]	Up to 350					
Measurement Array [Pixel]	1936x1216					
Light source [nm]	LED 542					
Vertical resolution [nm]	PSI: 0.1, VSI: 1.0					
Max. scan speed [$\mu\text{m/s}$]	48					
Meas. Head overall dimension [mm^3]	235x80x128 (HxWxD)					
Measuring head mass [kg]	2					
Computer, OS	PC or Laptop with Windows 7					
Measurement time by z-range 20 μm [s]	<3					
Operating temperature [$^{\circ}\text{C}$]	10–35					
Recommended working temperature [$^{\circ}\text{C}$]	18–22					
Software						
smartWLI	Windows 7, 64bit Software for measuring the topography and for exporting the 3-D data using a direct interface to the MountainsMap [®] analysis software					
smartWLI-SDK	SDK for measuring the topography for using in customer own software, Matlab or LabVIEW					
Export format	ASCII, SUR, BCR-STM, BMP, JPEG, TIFF					
MountainsMap [®]	Extensive analysis software as well as profile and 3-D visualisation, measurement data pre- and post-processing, DIN EN ISO roughness and height determination, serial processing, measurement logging					
Objectives						
Magnification (MAG)	2,5x	5x	10x	20x	50x	100x
Numerical Aperture (NA)	0.075	0.13	0.30	0.40	0.55	0.70
Working distance (WD) [mm]	10.3	9.3	7.4	4.7	3.4	2.0
Field of view (FOV) [μm]	7203x4524	3601x2262	1800x1131	900x565	360x226	180x113
Pixel size [μm]	3.72	1.86	0.93	0.47	0.19	0.09
Optical resolution by Dawes [μm]	3.61	2.08	0.90	0.68	0.49	0.39
Stands						
Mobile Stand	Suitable for mounting on rollers larger a diameter of 60 mm or planar objects					
Manual Stand	Manual XY-Stage (movement 73x55 mm^2)					
Motorized Stand 75x50	Motorized XY-Stage (movement 75x50 mm^2)					
Motorized Stand 100x100	Motorized XY-Stage (movement 100x100 mm^2)					
Individual Stand	On request					

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