

ZEISS Axio Zoom.V16

High resolution and high speed: your zoom microscope for large object fields



Axio Zoom.V16 is the high resolution, apochromatically corrected on-axis zoom microscope from ZEISS. With a magnification range of 16:1, you can zoom from a large overview (33 mm) down to the smallest detail (0.7 μm).

Use Axio Zoom.V16 to achieve a maximum resolution of up to 0.3 μm in a 1.6 mm field. This is a particularly advantageous for automated etching of large tile images. It reduces image acquisition times and thus significantly speeds up your analysis tasks.

Configured to your requirements

Microscope

Axio Zoom.V16 (manual focus)

Axio Zoom.V16 (focus motor)

Illumination methods

Transmitted light: brightfield, darkfield, oblique light

Reflected light: brightfield, darkfield, oblique light, fluorescence

Illumination

Cold light sources CL 1500 Eco, CL 6000 LED, CL 9000 LED CAN with fiber optic spot; ring, linear, vertical, diffusion, surface and coaxial illuminators; VisiLED ring illuminators with segmenting function, fiber optic and LED transmitted light units

Accessories

Eyeieces, eyepiece reticles, interchangeable lenses, stages, polarization equipment, binocular and trinocular tubes, stands for stages, boom stands



Spark plug: inspection of functional ceramic parts; analysis of different types of material structure such as pore formation in ceramics for insulators, conductive composite materials, and steel and copper pins



Carbon brush: extensive views of structural homogeneity; distribution of conductive phases such as Cu particles and hard phases; visualization of manufacturing effects

Simpler. More Intelligent. More Integrated.

- Axio Zoom.V16 combines a 16 $\times$ zoom with a 0.25 numerical aperture. This gives you up to 2.5 times higher resolution as compared to CMO stereo microscopes in comparable fields.
- The eZoom principle of your Axio Zoom.V16 combines the zoom drive with an electronically-controlled iris diaphragm. Select your zoom mode at the touch of a button: the overview provides maximum resolution at higher magnifications and with greater depth of field.
- The EpiRel contrast makes even minor differences in height visible in brightfield: you can illuminate your sample from a slight lateral angle, even for coaxial reflected light. This creates shadows on the sides of the structures which lend your object considerably more plasticity than in conventional brightfield.

Created for your applications

- Analyze the structural elements of your components such as phases, grain size, textures and excretions – also structural defects such as inclusions, pores, cavities, cracks and inhomogeneities.
- Create overview images of entire components and zoom in on the smallest details without changing the objective.
- Capture the morphology and inner structure of wafers.

Specifications

Find the microscope system that best suits your application.

Sample	Stemi 305	Stemi 508	SteREO Discovery.V8	Primotech	Axio Vert.A1	Axio Lab.A1	Axio Scope.A1	Smartzoom 5	SteREO Discovery. V12/V20	Axio Zoom.V16
Use of unprepared samples	●●●●●	●●●●●	●●●●●	●●●	●●●	●●●	●●●	●●●●●	●●●●●	●●●●●
Large samples	●●●	●●●	●●●		●●●●●		●●●●●	●●●	●●●	●●●
High sample throughput								●●●●●	●●●	
Analyze sample composition										
Job to be done										
2D measurement functionality				●●●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●●●
Resolution	●●	●●	●●	●●●●●	●●●●●	●●●●●	●●●●●	●●	●●	●●●
Live 3D impression	●●●●●	●●●●●							●●●●●	●●●
3D image				●●●	●●●	●●●	●●●	●●●●	●●●	●●●
Image acquisition and documentation	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
Creation of reports					●●●●	●●●●	●●●●	●●●●●	●●●●	●●●●
● Less suitable ●●●●● Particularly suitable										

Sample	Axio Imager 2	Axio Imager Vario	Axio Observer	EVO	SIGMA	Shuttle & Find	NMI	Particle Analyzer	CAPA	O-INSPECT	O-SELECT
Use of unprepared samples	●●●	●●●●	●●●			●		●●●	●	●●●●●	●●●●●
Large samples		●●●●●	●●●●●							●●●●●	●●●●
High sample throughput	●●●	●●●	●●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●●●	●●●●●
Analyze sample composition				●●●●●	●●●●●	●●●	●●●	●●●	●●●		
Job to be done											
2D measurement functionality	●●●●	●●●●	●●●●							●●●●●	●●●●●
Resolution	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●	●●●	●●●●●	●●●●●*)	●●●●●*)
Live 3D impression											
3D image	●●●	●●●	●●●	●●●	●●●					●●●●	
Image acquisition											
Documentation	●●●●●	●●●●●	●●●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●●●	●●●●●
Creation of reports	●●●●	●●●●	●●●●				●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
● Less suitable ●●●●● Particularly suitable											
*) Maximum permissible error (MPE)											