

## Axio Lab.A1

**Compact, Ergonomic, Efficient.**

Axio Lab.A1 sets new standards in the microscopy of materials. Benefit from an unrivalled price-performance ratio while achieving brilliant image quality based on Carl Zeiss ICS optics.

Its intuitive operation makes Axio Lab.A1 a reliable system for routine applications in the laboratory. Axio Lab.A1 offers the flexibility required for successful examinations, such as in defect analysis, quality inspection and materials testing.

**Key features:**

- 5 position revolving nosepiece (bright- and darkfield)
- Differential interference contrast (C-DIC)
- 4 position reflector turret with push&click contrast modules
- Optimized reflected-light beam path
- 50W halogen reflector illumination



**For convincing performance and economic efficiency  
in materials analysis.**



**We make it visible.**

# Concentration on the Essentials

Uncompromising focus on ease of operation and cost-effectiveness as prime characteristics of Axio Lab.A1.

The **quintuple revolving nosepiece** keeps all relevant objectives ready for use. Select between brightfield, bright- and darkfield, DIC and polarizing objectives – for enhanced operating comfort and increased specimen throughput in a broad spectrum of applications.

A color-corrected reflected-light beam path with **aperture and field diaphragm** for optimum specimen illumination allows objectives to operate at maximum performance level. This way even the smallest sample details and color graduations can be distinguished.

The **four-position reflector turret** with its **push&click mechanism** for contrast modules enables flexibility in selecting and changing between the various contrasting methods.

A **50W halogen reflector lamp** and a wide-range power supply that automatically adapts to the local line voltage are integrated in the stand. Alternatively you can use an **LED lamp** with its convincing advantages: constant color temperature, low energy consumption, and extremely long lifetime.

Benefit from the **extra-large field of view** (FoV number 22) and capture the essentials of your specimen at a glance.



*With its stage travel of 30 mm, Axio Lab.A1 offers ample vertical space for your specimens.*



*Greater flexibility, faster handling:  
Selection of push&click contrast modules.*



*Everything at hand:  
Integrated tool storage.*

# Take Advantage of Flexibility - Choose From a Comprehensive Range of Components

With its selection of accessories, Axio Lab.A1 can be configured for any application.

**ZEISS EC EPIPLAN objectives** are specially designed to fulfill the everyday requirements in materials labs and quality inspection. This tried-and-approved class of universal objectives offers the best combination of economic efficiency and performance.

Select from a **large number of Siedentopf-type binocular and trinocular tubes** to cover all documentation needs with a maximum of ergonomics.

Note that Axio Lab.A1 is available with **differential interference contrast (C-DIC)**: A polarizing method that converts even the tiniest changes in the surface morphology of a specimen into brightness differences, C-DIC delivers excellent contrast in phase objects and other specimens poor in intensity contrast.

The **new professional microscope camera AxioCam ERc 5s**, in a package with AxioVision LE image processing software, is an ideal companion to Axio Lab.A1. AxioVision LE supports the optional Interactive Measurement module, a special feature permitting the measurement of interactively defined contours: areas, orientation angles, perimeter, diameter, centroid and so on.

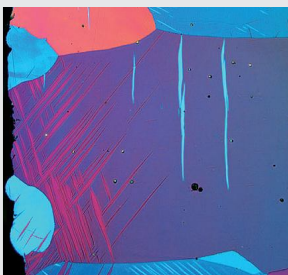


*The cost-effective, universal EC EPIPLAN objectives feature achromatic correction and are manufactured with low strain.*



*The slider with neutral density and color filters helps to perfectly meet the requirements of your specific application.*

*Providing a wide variety of contrasting methods and objectives to choose from, Axio Lab.A1 is the ideal instrument for materials analysis:*



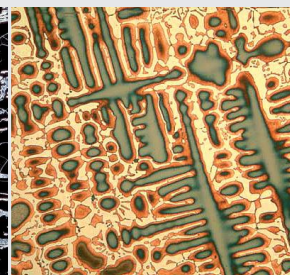
Pure zinc,  
EC Epiplan NEOFLUAR 5x/0.13 HD



Laser-crystallized silicon on glass,  
EC EPIPLAN 10x/0.3



Steel in darkfield,  
EC EPIPLAN 20x/0.4 HD

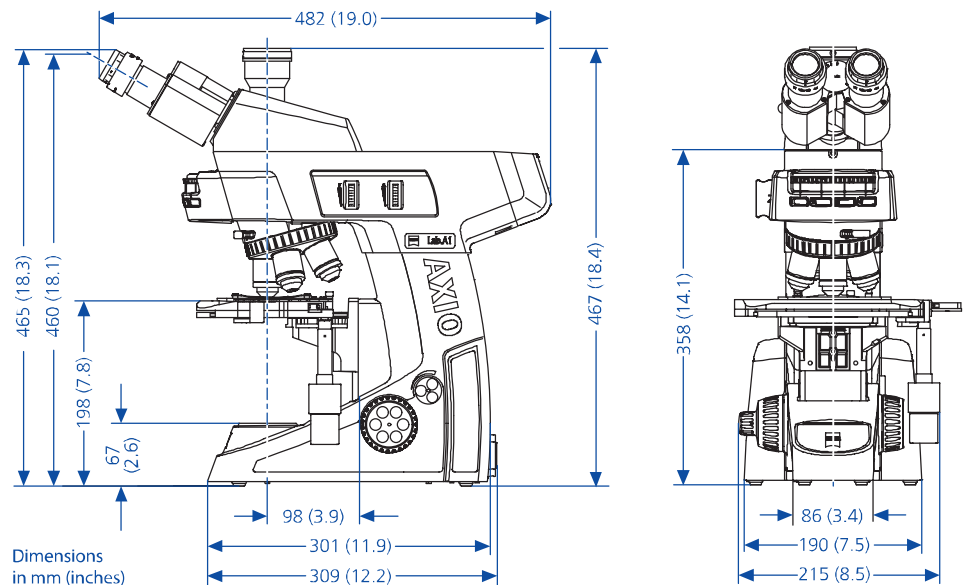


Copper-phosphorus alloy,  
EC EPIPLAN 20x/0.4 HD



Laser-crystallized silicon on glass,  
EC Epiplan NEOFLUAR 5x/0.13





#### Axio Lab.A1 – Technical Data

Stand	Upright microscope Axio Lab.A1 integrated reflected light illumination
Focus	Manual, coaxial coarse/fine drive, 30 mm travel range
Illumination	Halogen reflector lamp HAL 50/12V 50W, optional LED
Nosepiece	5 position nosepiece, for brightfield and darkfield, M27
Reflector turret	4 position for Push&Click modules
Power supply unit	Internal 12V DC 50W stabilized 100...240V AC/50...60Hz/110VA
Filter slider	2 positions; 25 mm diameter
Stage	Mechanical stage, 75x30 mm, coaxial drive right side, anodized surface hardcoated specimen holder included
Eyepieces	PL 10x/20 Br. foc. PL 10x/22 Br. foc.
Camera	AxioCam ERc 5s Sensor: 5 MP CMOS Sensor Resolution: 2560 (H) x 1920 (V) = 5.0 Megapixels Pixel size: 2.2 µm x 2.2 µm Interfaces: 1x SD card slot, 1x mini USB 2.0, 1x AV (S-Video), 1x DVI (HDMI) C-mount

#### Carl Zeiss Microscopy GmbH

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Materials

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