

ZEISS Primostar 1

for Education and Teaching



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Seeing beyond

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Robust, easy-to-use, quality optics and above all, affordable: educational microscopes must have special requirements.

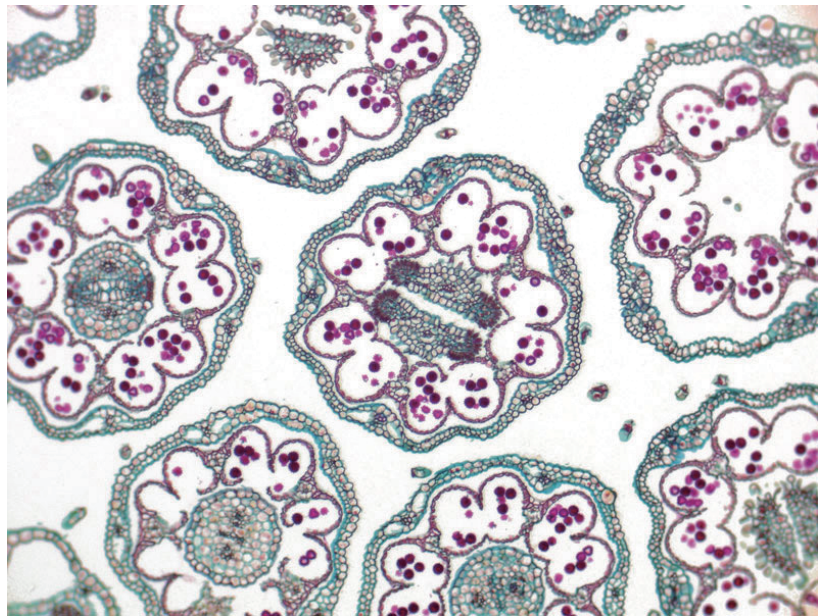
ZEISS Primostar 1 meets them all.

Primostar 1 focuses on the essentials.

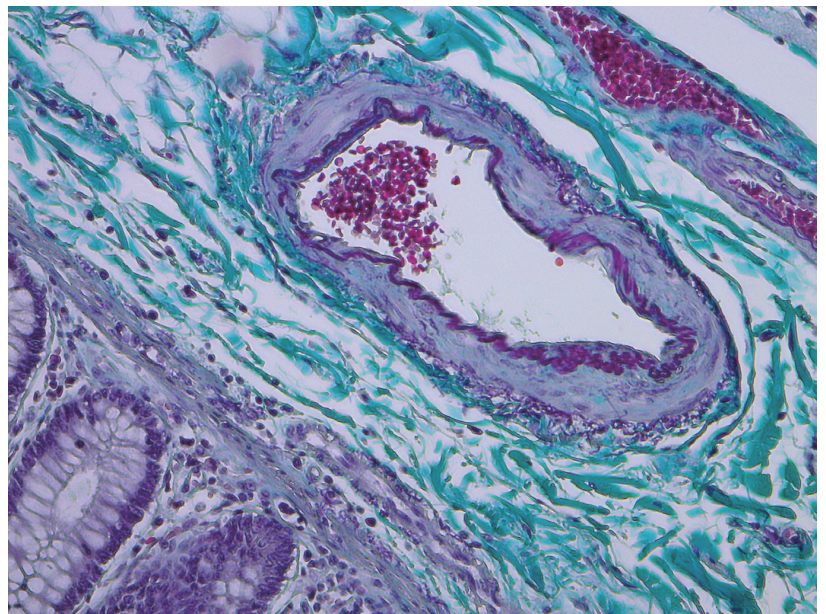
This teaching microscope is optimized for brightfield microscopy of stained samples in the life sciences. Primostar 1 comes as a fixed-package microscope with Fixed-Koehler illumination. Simply plug in and start your discoveries.

For sustainable use, Primostar 1 is made of high quality materials and focusses on energy-saving LED illumination.

Precision makes teaching with Primostar 1 effective and your choice a highly economical investment. Additional plus: 5 year warranty are guaranteed.

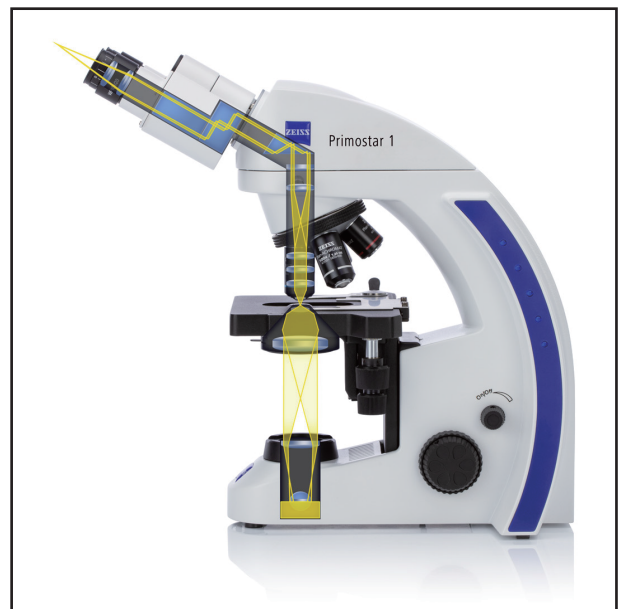


Pig intestine, Masson-Goldner stained



Daisy umbel (*Bellis perennis*) brightfield

- Ready-to-use package – simply plug in and start working.
- Have full control: blue light intensity display on both sides of the stand act as important control function over all microscopes in the course room: for control by the educator and quick control of the light intensity by the users
- For right-hand practice: Operate the stage drive with the right hand and use the focus drive with your left hand
- Rackless stage and stage cover for your safety and comfort
- For longevity: robust and short stage drive with easy-to-read scales
- A must-have: high standards in material selection: the microscopes consist mainly out of metal
- Form follows function: the design combines aesthetics with maximum functionality
- Height adjustable Siedentopf tube with 30° and Field of View 20 mm
- Siedentopf tube: adjustment of the individual eye relief in a wide range from 48 mm to 75 mm
- Eyepieces are theft-protected
- Pre-installed objectives are:
 - Plan-Achromat 4× / 0.10 (W.D. 15.5mm)
 - Plan-Achromat 10× / 0.25 (W.D. 7.0mm)
 - Plan-Achromat 40× / 0.65 (W.D. 0.71mm)
- Antifungus treatment of objectives
- Accessory: Plan-Achromat 100× / 1.25 Oil (W.D. 0.14mm)
- LED lifetime: 25,000 hrs



Technical Data

Dimensions (width × depth × height)	
Stand with binocular tube	approx. 190 mm × 400 mm × 390 mm
Weight	
Primostar 1 with binocular tube 30°/20	approx. 7.5 kg
Ambient conditions	
Transportation (in packaging): Permissible ambient temperature	-40 to +70 °C
Storage: Permissible ambient temperature	-10 to +40 °C
Permissible air humidity (no condensation)	max. 75 % at 35 °C
Operation: Permissible ambient temperature	+10 to +40 °C
Permissible air humidity (no condensation)	max. 75 % at 35 °C
Atmospheric pressure	800 hPa to 1,060 hPa
Operating altitude	max. 2,000 m
Degree of pollution	2
Operating data	
Protection class	II
Protection type	IP20
Electrical safety	in compliance with DIN EN 61010-1 (IEC 61010-1) including CSA and UL directives
Pollution degree	2
Overvoltage category	II
Radio interference suppression	in accordance with EN 61326
Line voltage	100 to 240 V (±10 %) wide-range input power supply, i. e. voltage setting of the instrument need not be changed!
Line frequency	50/60 Hz
Power consumption	70 VA; secondary voltage of external power supply 12 V
Plug-in power unit output	12 V DC; max. 2.5 A
LED class of complete device	3B
Light sources	
LED illumination	white light LED, peak wavelength 440nm, LED class 2
Constant, brightness-independent color temperature of	3,200 K
Homogeneous field illumination	20 mm diameter
Suitable for objectives with magnifications of	4x to 100x
Analogous brightness adjustment from	approx. 15 to 100 %
Optical/mechanical data	
Stand with stage focusing	
With coarse focusing drive	45 mm / rev.
With fine focusing drive	0.5 mm / rev.
Total stage lift	15 mm
Objective change	manual via quadruple objective nosepiece
Objectives	infinity-corrected objective range with W 0.8 mounting thread
Eyepieces	30 mm tube size
With field-of-view number 20	WF 10x/20 Br. foc.
Specimen stage	
Dimensions (width × depth)	140 × 140 mm
Stage travel (X × Y)	75 × 40 mm
Coaxial drive	optionally right or left
Vernier scales	readable from the right
Specimen holder	with spring lever, left
Abbe condenser 0.9/1.25; Fixed-Köhler	for objectives 4x to 100x
Binocular tube 30°/20	
Maximum field-of-view number	20
Interpupillary distance	adjustable from 48 to 75 mm
Tube angle	30°
Viewing height	375 to 425 mm
Viewing port	tube factor 1x
Illuminating mirror	with plane surface and spherical surface with f' = 75 mm

Carl Zeiss Microscopy GmbH
07745 Jena, Germany
microscopy@zeiss.com