ZEISS Primostar 1

for Education and Teaching

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Seeing beyond

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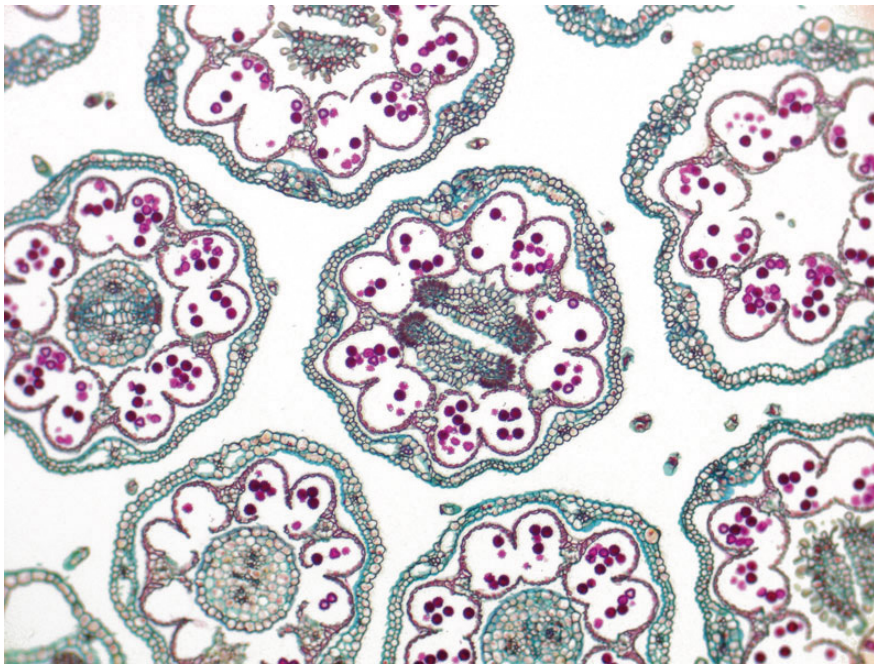
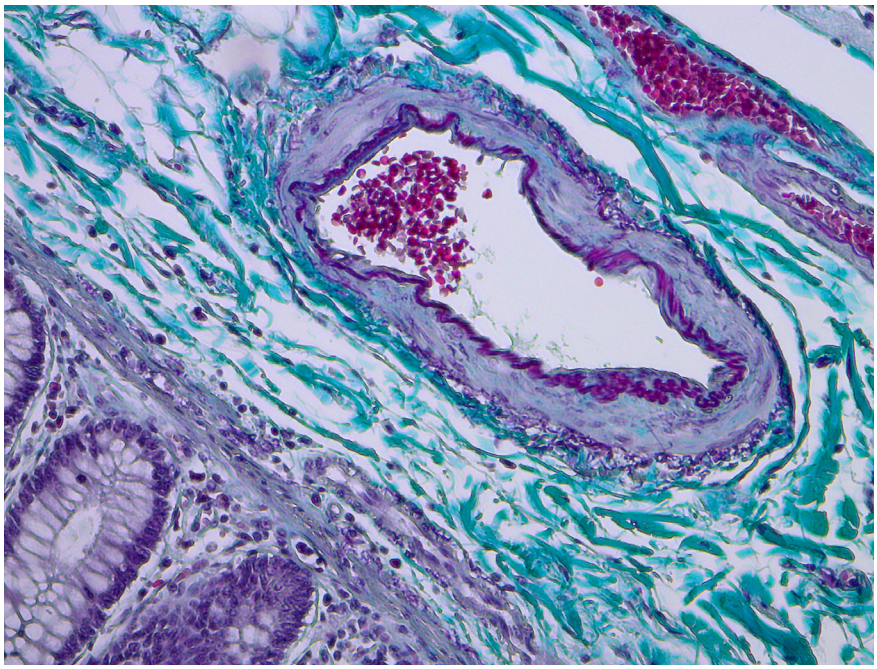
Robust, easy-to-use, quality optics and above all, affordable: educational microscopes must have special requirements. ZEISS Primostar 1 meets them all. Primostar 1 focuses on the essentials. This teaching microscope is optimized for brightfield microscopy of stained samples in the life sciences. Primostar 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.



Daisy umbel (Bellis perennis) *brightfield*



Pig intestine, Masson-Goldner stained

- 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
- Objectives and eyepieces are theft-protected
- Pre-installed objectives are: Plan-Achromat 4×/0.10, 10×/0.25, 40×/0.65
- Antifungus treatment of objectives
- Accessory: Plan-Achromat 100×/1.25 Oil
- 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 440 nm, LED class 2
Constant, brightness-independent color temperature of		3,200 K
Homogeneous field illumination		20 mm diameter
Suitable for objectives with magnifications of		4× to 100×
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 10×/20 Br. foc.
Specimen stage		Mechanical rackless stage 75 × 40 right/left
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 4× to 100×
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 1×
Illuminating mirror		with plane surface and spherical surface with f' = 75 mm

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