Octific

BIOLOGICAL MICROSCOPE

Smart 22

Precision. Clarity. Discovery.



Infinity. Built for discovery.



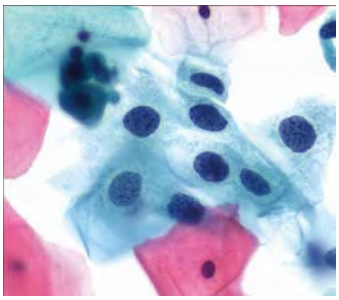
BINOCULAR

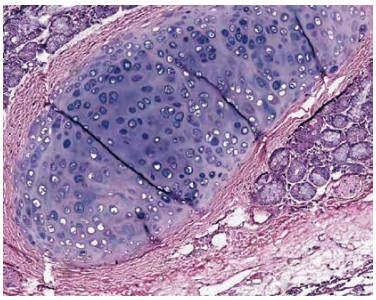


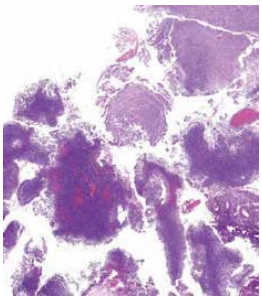
TRINOCULAR

Smart 22 is a high-quality biological microscope, an ideal choice for basic research and teaching experiments. Its infinity color-corrected optical system and compound eye illumination deliver uniform illumination and clear, bright images at any magnification.

User-friendly design makes operation simple and convenient, even for students. Excellent reliability and durability support high-intensity use in the education market.







Comfort in every observation.





Choose FN 18 or FN 20

30° inclined, gemel viewing heads provide a large 47-75 mm interpupillary adjustment range. Binocular and trinocular options are available; the trinocular head has an R:T light-splitting ratio of 8:2.

High-eye-point, wide-field plan eyepieces: PL 10X/18 mm or PL 10X/20 mm, both with adjustable diopter. They correct distortion and color rings at the field edge. Strong construction prevents student disassembly, lens refitting, damage and staining.

Comfort and safety

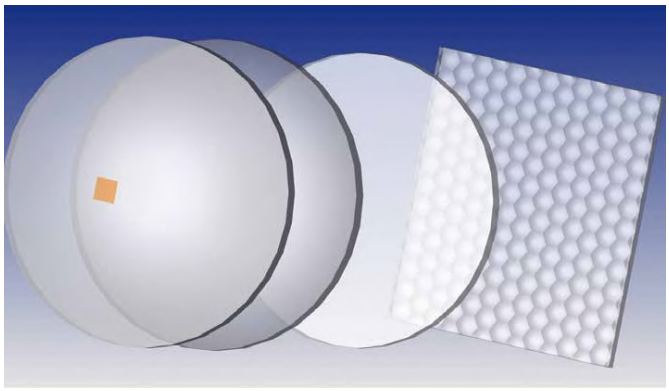
Smooth body curves eliminate sharp edges. The hollow frame provides handle positions for easy carrying. The stable, compact and attractive bell-shaped body incorporates a built-in charging adapter to save laboratory space.

Low-position coaxial coarse and fine focusing: 25 mm coarse range, 0.002 mm fine precision, tension adjustment and upper limit.

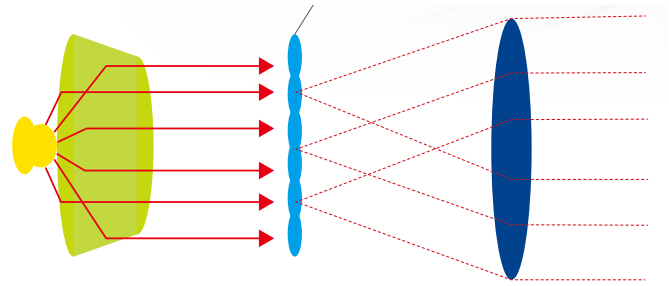


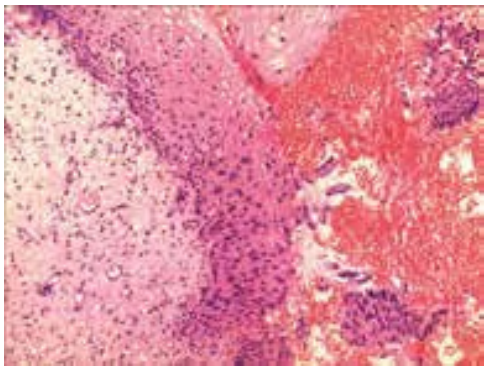
Integrated digital head + external display

Uniform light. Clear detail.



Compound eye illumination improves contrast and illumination uniformity across the specimen surface. The entire field, including the edges, remains uniformly bright at any magnification. Soft, non-harsh light improves imaging and reduces fatigue.





Environment-friendly LED illumination consumes less energy than halogen lamps and provides about 100,000 hours of sustainable lighting.



Continuous light adjustment

Rotate the frame-side dimming knob gently to adjust brightness continuously. This avoids brightness jumps and dizziness caused by instantaneous strong light.



Power cord storage

The rear storage box makes full use of internal body space to hold the power cord conveniently, keeping the desktop clean and tidy.

Two objective families.





PLAN

Infinity plan achromatic objectives

Magnification	N.A.	W.D. (mm)	Coverslip (mm)	Immersion	Spring
4X	0.10	11.9	-	-	-
10X	0.25	12.1	-	-	-
20X	0.40	1.56	0.17	-	-
40X	0.65	0.36	0.17	-	Yes
60X	0.85	0.3	0.17	-	Yes
100X	1.25	0.21	0.17	Oil	Yes

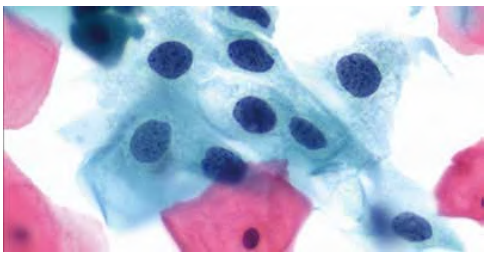
PLAN-PH2

Infinity plan positive phase contrast objectives

Magnification	N.A.	W.D. (mm)	Coverslip (mm)	Immersion	Spring
10X	0.25	12.1	-	-	-
20X	0.40	1.56	0.17	-	-
40X	0.65	0.36	0.17	-	Yes
100X	1.25	0.21	0.17	Oil	Yes

Four ways to see more.

Optional accessories support bright field, phase contrast, simple polarization, dark field and other observation methods.



Bright field

Compound eye illumination with professional plan achromatic objectives produces bright images for observing cell structures and analyzing plant slices.

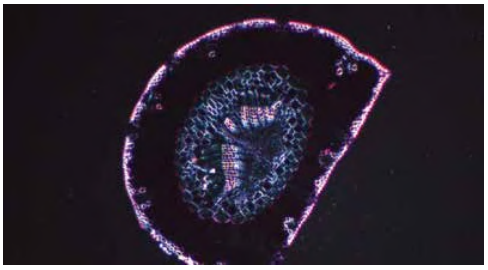
Endometrial Carcinoma · 40X · Bright Field



Phase contrast

For highly transparent specimens, including cells, bacteria and other small transparent objects in biological specimens.

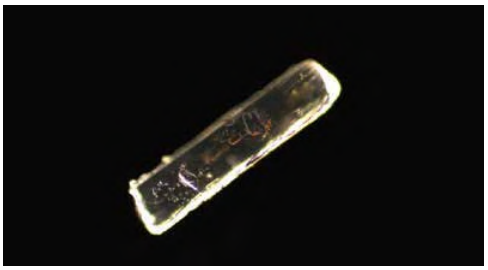
Adherent Cells · 10X · Phase Contrast



Simple polarization

For judging substances with birefringence, including animal and plant cells and humoral crystals.

Pine Needles · 10X · Polarization



Dark field

No special dark-field condenser replacement is needed. Insert dark-field accessories into the condenser and switch the diaphragm to obtain dark-field illumination.

Sodium Glutamate Crystal · 10X · Dark Field

The complete optical system.

Component	Specification
Optical system	Infinity color-corrected optical system
Binocular head	30° inclined, gemel head; interpupillary distance 47-75 mm
Trinocular head	30° inclined, gemel head; interpupillary distance 47-75 mm; R:T light-splitting ratio 8:2
Eyepieces	High-eye-point wide-field plan PL 10X/18 mm or PL 10X/20 mm; adjustable diopter
Objectives	Infinity plan achromatic: 4X, 10X, 20X, 40X, 60X, 100X. Infinity plan positive phase contrast: 10X, 20X, 40X, 100X.
Nosepiece	Reversed quadruple / quintuple nosepiece
Focusing mechanism	Low-position coaxial focusing; coarse range 25 mm; fine precision 0.002 mm; tension adjustment and upper limit
Stage · triangular guide rail	150 × 140 mm double-layer composite mechanical moving stage; double slice clamps; X/Y travel 76 × 50 mm; accuracy 0.1 mm
Stage · X-axis single rail	150 × 162 mm double-layer composite mechanical moving stage; double slice clamps; travel 76 × 50 mm; accuracy 0.1 mm; no protruding rack; wear-resistant and corrosion-resistant stage surface
Specimen holder	Double slice clamps on both mechanical stage options
Condenser	N.A. 1.25 compound eye illumination condenser group; plug-in phase contrast and dark field accessory interface; preset center; optional lifting function
Illumination & power	Adaptive 100-240 V switching power supply; single high-brightness 3 W LED, preset center; continuously adjustable intensity. Cold or warm color optional: cold 4750-5500 K; warm 2850-3250 K.
Camera adapter	0.35X / 0.5X / 0.65X / 1X C-mount adapter; adjustable focusing
Accessories	Polarizers, analyzers, colour filters, filters, phase contrast panels and dark field panels

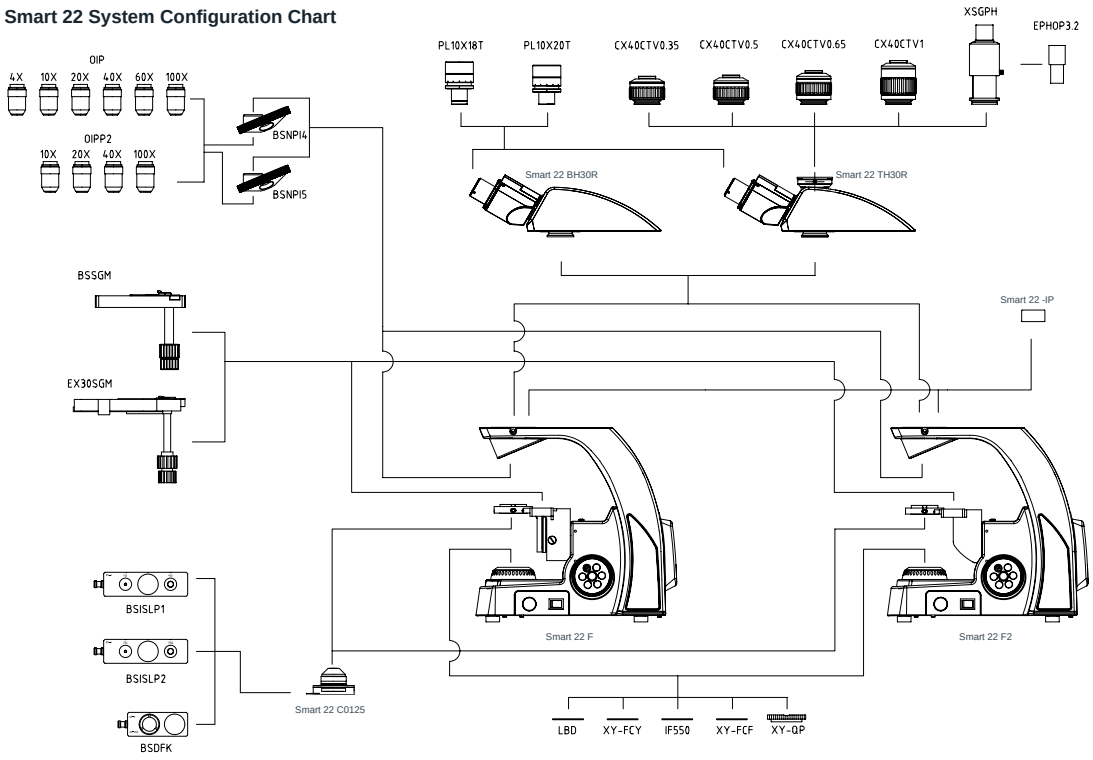


Plug-in observation accessories

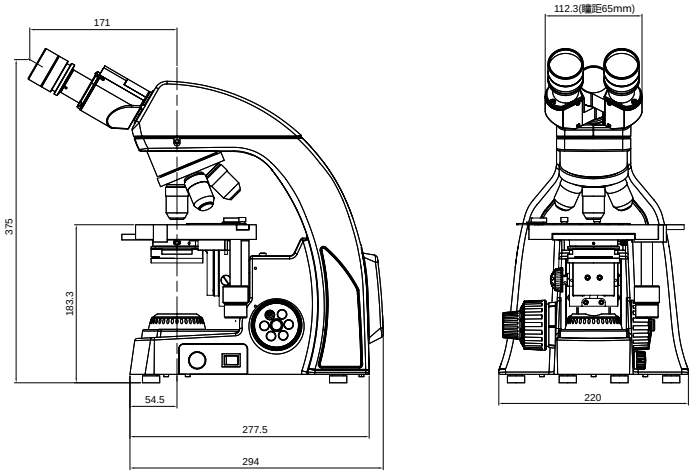
Phase contrast and dark-field accessories use the condenser interface. Select the head, stage, objectives and accessories to suit the required observation method.

Specifications and appearance may change without additional notice.

One system. More possibilities.



Instrument dimensions in millimeters



Drawing values: 375, 294, 277.5, 220, 183.3, 171 and 54.5 mm; 112.3 mm at 65 mm interpupillary distance.

Manufacturer certification references