

Parallel-optics type

SMZ1270/1270i SMZ800N



Highly functional standard stereo microscopes

These standard stereo microscopes provide both excellent optical performance, such as high-magnification, high-zooming ratio and high-resolution images, and advanced operability. The expandability of parallel optics makes these models suitable for a wide range of applications.

Highest-in-class zooming ratio and high-quality images

- Highest-in-class zooming ratio of 12.7:1 (0.63 – 8x) with SMZ1270/1270i
- Sharp images with high-level chromatic aberration correction
- New WF series objectives optimized for wide viewfield observation at low magnification

High operability for improved workability

- Automatically detects magnification data in combination with the digital camera control unit (SMZ1270i)
- Nosepiece offers both widened magnification range and on-axis imaging
- Eyepiece tubes with various inclination angles and slim-type stands minimize fatigue during observation

Expandable with a wide range of accessories

- A wide range of accessories, including eyepiece tubes and stands, that equal those of superior models are available



SMZ1270

Standard stereo microscope with the highest-in-class zooming ratio



SMZ1270i

The same as the SMZ1270 but equipped with intelligent functions found in superior models



SMZ800N

Affordable model with improved operability and basic performance

Highest-in-class zooming ratio and high-quality images

Wide zooming range

The SMZ1270/1270i offers the highest-in-class zooming ratio of 12.7x (0.63 – 8x). It offers both low-magnification wide viewfield observation of the whole of a 35 mm petri dish* during screening and high-magnification observation of minute cell structures (* with 1x objective at the lowest magnification).



SMZ1270/1270i enables observation of the whole of a 35 mm petri dish.

Wide viewfield of SMZ1270/1270i

Ampulex

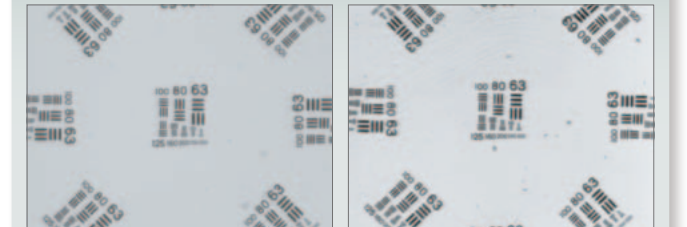


0.63x zoom

8x zoom

The SMZ800N comes with a 1 – 8x zooming range, with higher magnification than conventional models and enables high-resolution observation.

Improved resolution of SMZ800N



SMZ800N

Conventional model

High-level chromatic aberration correction

Apochromat optics are adapted to the SMZ1270/1270i zoom body and semi-apochromat optics to the SMZ800N to achieve high-level chromatic aberration correction. They offers sharp images without blur or color fringe.



Apochromat optics

Conventional optics

Newly developed objectives

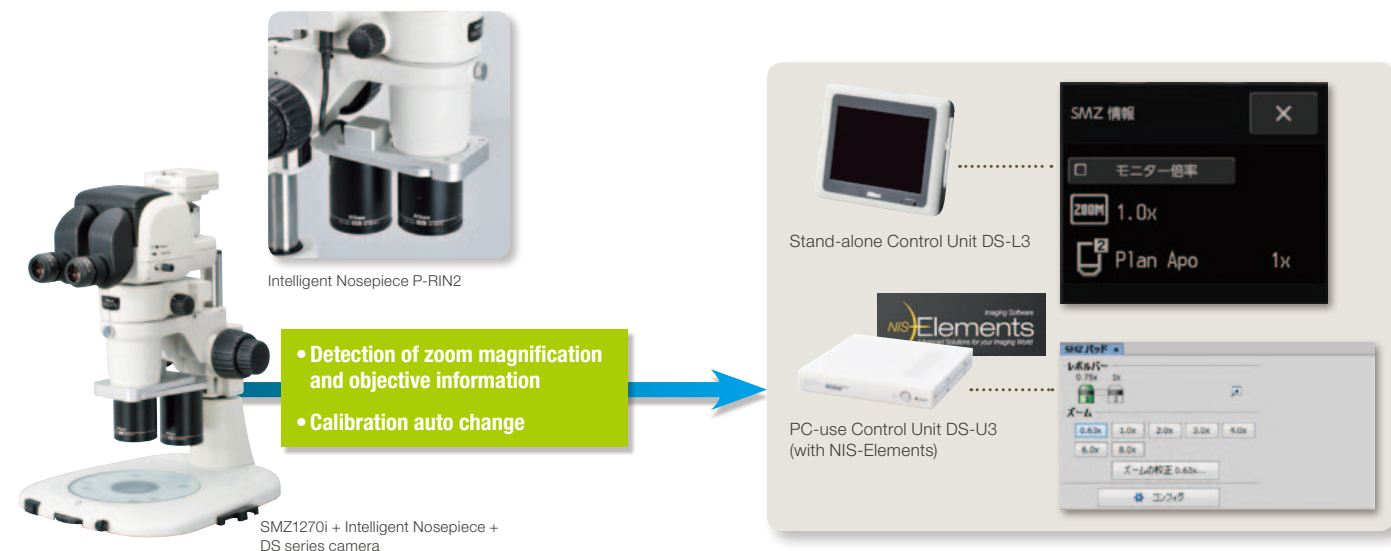
In combination with the newly developed WF series objectives, the SMZ1270/1270i offers a wide and uniformly bright viewfield even at low magnifications. In addition, a 0.75x objective is now available, expanding the lineup of low magnification objectives.



High operability for improved workability

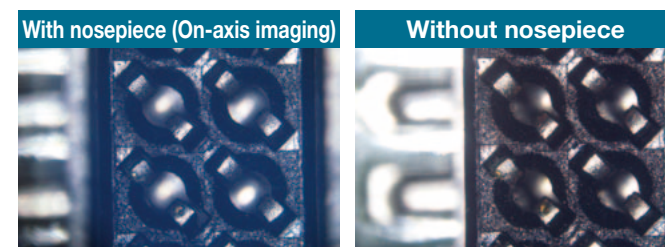
Intelligent function in combination with digital cameras SMZ1270i

In combination with the Camera Control Unit DS-L3 and imaging software NIS-Elements, the SMZ1270i can detect magnification data. In addition, with the Intelligent Nosepiece P-RIN2 attached, data related to the objective in use is also detected. Calibration data is automatically altered, following changes of magnification, to display the appropriate scale and measurement results on the images.



Widened zooming range and on-axis observation with the nosepiece

The nosepiece enables easy switching of objectives and offers seamless observation across a wide zooming range. On-axis imaging enables observation of the bottom of holes, accurate simple measurement and extended depth of focus (EDF) imaging without distortion.



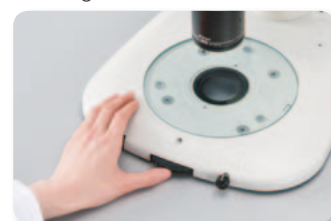
Magnification	0.315x	0.5x	0.63x	1x	4x	8x
SMZ1270/1270i with nosepiece	<div> <div>Magnification range of 1x objective</div> <div>Magnification range of 0.5x objective</div> </div>					
SMZ800N with nosepiece	<div> <div>Magnification range of 1x objective</div> <div>Magnification range of 0.5x objective*</div> </div>					

* Using Plan Apo 0.5x/WF objective

Seamless observation across a wide magnification range is possible by switching between two objectives on the nosepiece

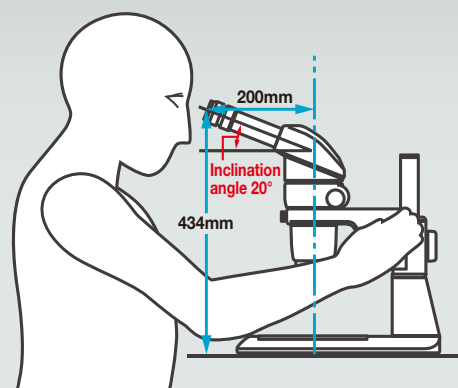
Comfortable observation with natural posture

Eyepiece tubes with various inclination angles are available for comfortable observation. They offer the optimum eyelevel to suit each user, even when an intermediate tube is mounted. In addition, slim-type plane stands and the LED Diascopic Illumination Base enables smooth operation and sample changeover.



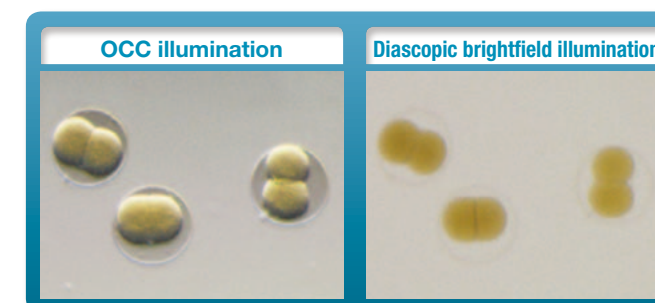
With the LED Diascopic Illumination Base and P-DSF32 Fiber Diascopic Illumination Stand, focus control during observation is possible using the dial in front of the base.

Observation posture



Expandable with a wide range of accessories

In addition to conventional accessories, the level of accessories used with superior models is also available for the SMZ1270/1270i and SMZ800N. These include trinocular tubes and slim-type LED diascopic illumination bases. These allow various microscope configurations to suit numerous research and development applications.

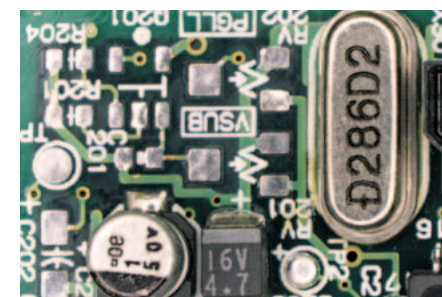


OCC illumination boosts the contrast of transparent sample structures. Hemicentrotus pulcherrimus in two-cell stage

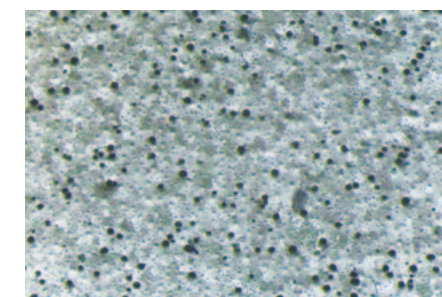


With the LED Diascopic Illumination Base and P-DSF32 Fiber Diascopic Illumination Stand, image contrast under OCC illumination can be easily adjusted.

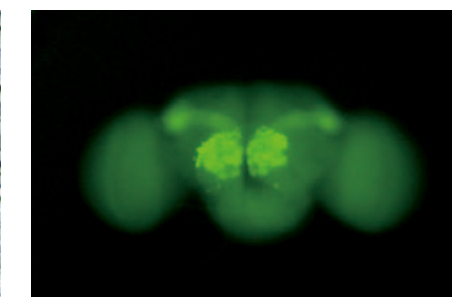
Ring LED illumination



Coaxial illumination



Epi-fluorescence illumination



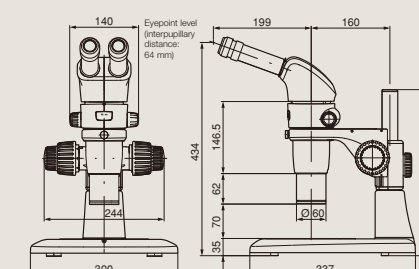
	SMZ1270	SMZ1270i	SMZ800N
Optical system	Parallel-optics type (zooming type)		
Zoom ratio	12.7 : 1		
Zoom range	0.63 – 8x (0.63/1/2/3/4/6/8x stops)		
Total magnification* (when coaxial episcopic illuminator is attached)	3.15 – 480x (depending on eyepiece and objectives) (with coaxial episcopic illuminator: 15 – 540x)		
Tubes	Eyepiece inclination: 20° (P-BT Standard Binocular) / 15° (P-TL100 Trinocular Tube L) / 0°-30° (P-TERG 100 Trinocular Tilting Tube, P-TERG 50 Trinocular Tilting Tube)		
Eyepieces	C-W10xB (F.N. 22), C-W15x (F.N. 16), C-W20x (F.N. 12.5), C-W30x (F.N. 7)		
Objectives	Plan Apo 0.5x/WF, Plan Apo 0.75x/WF, Plan Apo 1x/WF, ED Plan 1.5x/WF, ED Plan 2x/WF		
Working distance (with standard configuration or 1x objective)	70 mm (with Plan Apo 1x/WF)		
Weight (approx.)	9.8 kg (with P-B Standard Binocular Tube + P-DSL32 LED DIA Illumination Base)	11.9 kg (with P-TERG 100 Trinocular Tilting Tube + P-DSL32 LED DIA Illumination Base)	6.8 kg (with P-B Standard Binocular Tube + C-PSN Plane Stand)

Please refer to the system diagram (P. 26-27) for accessory combinations.

Dimensions

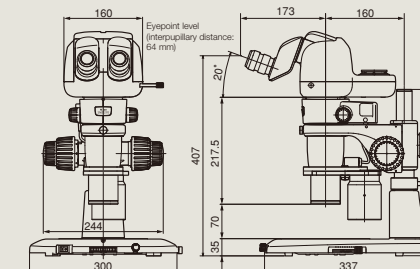
SMZ1270 set

SMZ1270 + P-B Standard Binocular Tube + Plan Apo 1x/WF + C-PS32 Plane Stand



SMZ1270i set

SMZ1270i + P-TERG 100 Trinocular Tilting Tube + Plan Apo 1x/WF + Intelligent Nosepiece P-RIN2 + P-DSL32 LED DIA Illumination Base



SMZ800N set

SMZ800N + P-B Standard Binocular Tube + C-PSN Plane Stand

