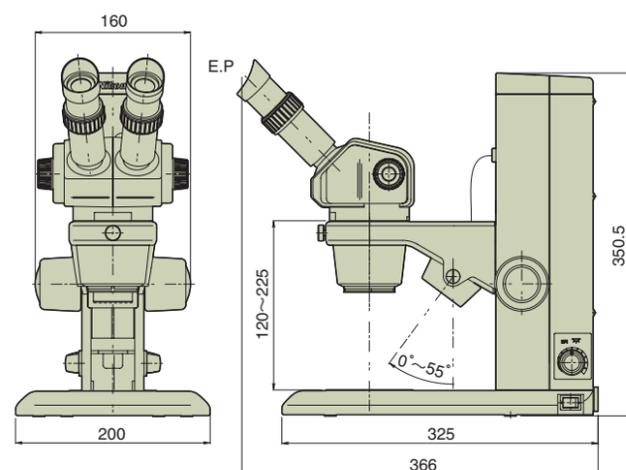


## Specifications

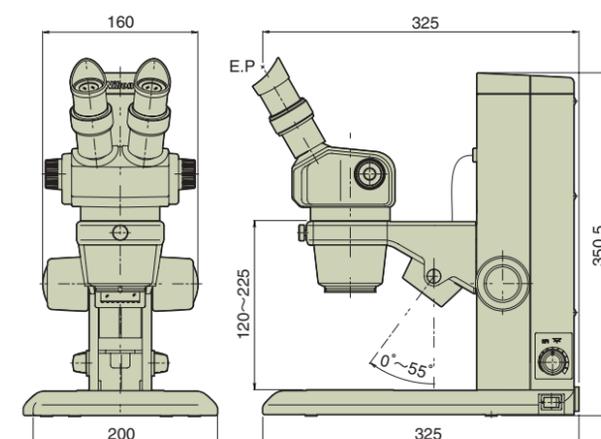
	SMZ445	SMZ460
Type	Twin zooming objective optical system	
Total magnification	8x ~ 35x (4x ~ 70x by replacing eyepiece and/or auxiliary objective lens)	7x ~ 30x (3.5x~60x by replacing eyepiece and/or auxiliary objective lens)
Eyepiece	SM 10xB eyepieces (F.N. 21), SM 15xB eyepieces (F.N.14), SM 20xB eyepieces (F.N. 12)	
Zoom range	0.8x ~ 3.5x (Zoom ratio: 4.4:1)	0.7x ~ 3x (Zoom ratio: 4.3:1)
Auxiliary objective lens	AL0.5x, 0.7x (optional)	
Working distance	100mm (standard configuration), 127.5mm (AL0.7x), 181mm (AL0.5x)	
Eyepiece inclination	45°	60°
Optical system	True erect image, 12° inner bevel, independent adjustment of right and left eyepieces, and 54 to 75mm interpupillary adjustment	
Weight (Zooming body)	Approx. 1.0kg	

## Dimensions

SMZ445 Combination with the LED Stand



SMZ460 Combination with the LED Stand



## Stereoscopic Zoom Microscopes

# SMZ445

# SMZ460



Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. December 2007 ©2007 NIKON CORPORATION

**WARNING** TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING THE EQUIPMENT.



**NIKON CORPORATION**  
6-3, Nishiohi 1-chome, Shinagawa-ku,  
Tokyo 140-8601, Japan  
phone: +81-3-3773-8973 fax: +81-3-3773-8986  
<http://www.nikon-instruments.jp/eng/>



**NIKON INSTRUMENTS INC.**  
1300 Walt Whitman Road, Melville, N.Y. 11747-3064, U.S.A.  
phone: +1-631-547-8500; +1-800-52-NIKON (within the U.S.A. only)  
fax: +1-631-547-0306  
<http://www.nikoninstruments.com/>  
**NIKON INSTRUMENTS EUROPE B.V.**  
P.O. Box 222, 1170 AE Badhoevedorp, The Netherlands  
phone: +31-20-44-96-222 fax: +31-20-44-96-298  
<http://www.nikoninstruments.eu/>  
**NIKON INSTRUMENTS (SHANGHAI) CO., LTD.**  
CHINA phone: +86-21-5836-0050 fax: +86-21-5836-0030  
(Beijing branch) phone: +86-10-5869-2255 fax: +86-10-5869-2277  
(Guangzhou branch) phone: +86-20-3882-0552 fax: +86-20-3882-0580

**NIKON SINGAPORE PTE LTD**  
SINGAPORE phone: +65-6559-3618 fax: +65-6559-3668  
**NIKON MALAYSIA SDN. BHD.**  
MALAYSIA phone: +60-3-78763887 fax: +60-3-78763387  
**NIKON INSTRUMENTS KOREA CO., LTD.**  
KOREA phone: +82-2-2186-8410 fax: +82-2-555-4415  
**NIKON CANADA INC.**  
CANADA phone: +1-905-625-9910 fax: +1-905-625-0103  
**NIKON FRANCE S.A.S.**  
FRANCE phone: +33-1-45-16-45-16 fax: +33-1-45-16-00-33  
**NIKON GMBH**  
GERMANY phone: +49-211-9414-0 fax: +49-211-9414-322  
**NIKON INSTRUMENTS S.p.A.**  
ITALY phone: +39-55-3009601 fax: +39-55-300993  
**NIKON AG**  
SWITZERLAND phone: +41-43-277-2860 fax: +41-43-277-2861

**NIKON UK LTD.**  
UNITED KINGDOM phone: +44-20-8541-4440 fax: +44-20-8541-4584  
**NIKON GMBH AUSTRIA**  
AUSTRIA phone: +43-1-972-6111-00 fax: +43-1-972-6111-40  
**NIKON BELUX**  
BELGIUM phone: +32-2-705-56-65 fax: +32-2-726-66-45

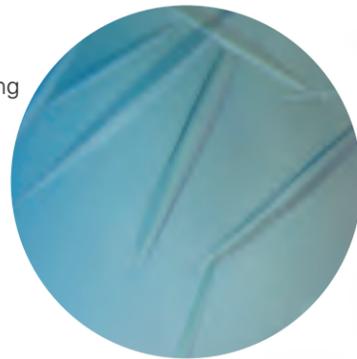
# Premium performance in a compact body

The SMZ445 and SMZ460 deliver the outstanding optical performance you expect from Nikon's cutting-edge series of stereoscopic zoom microscopes. Porro prisms enable a lightweight, compact design. Choose between the two models: the SMZ445 with 0.8x ~ 3.5x zoom

magnification or the SMZ460 with 0.7x - 3.0x zoom magnification, inclination angles of 45° or 60° respectively. With the new diascopic/episcopic LED Stand, these microscopes let you observe a wide range of specimens, from Petri dishes to plants, insects, small animals and minerals.

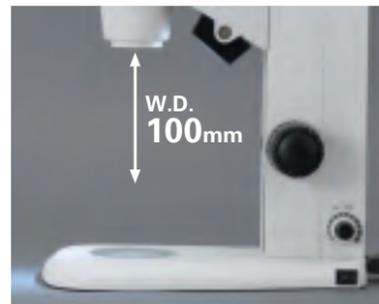
## Outstanding optical performance

High quality images with superior flatness are achieved by following the optical design and quality criteria of all Nikon's high-performance stereoscopic microscope series. The multicoatings on lens surfaces provide clear, bright and high contrast images.



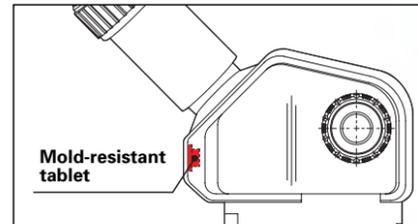
## Long working distance

The long working distance of 100mm allows safe focusing even with specimens having markedly uneven surfaces. This is useful when using tweezers, dissection tools or a pipette during specimen manipulation.



## Mold-resistant finish

The inside of the zooming body is treated with a mold-resistant finish. This maintains the quality of the lenses even in hot, humid environments.

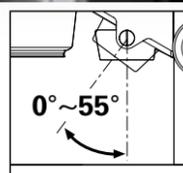


## LED Stand with all-in-one design

The newly developed LED Stand features built-in diascopic and episcopic illumination. The light intensity of each illumination can be adjusted individually, and both can be used simultaneously. The light source uses very bright LEDs. Since they have a very long life, they avoid the cost and trouble of frequent replacement. And while the base is compact and thin, it is designed to be robust for all uses.

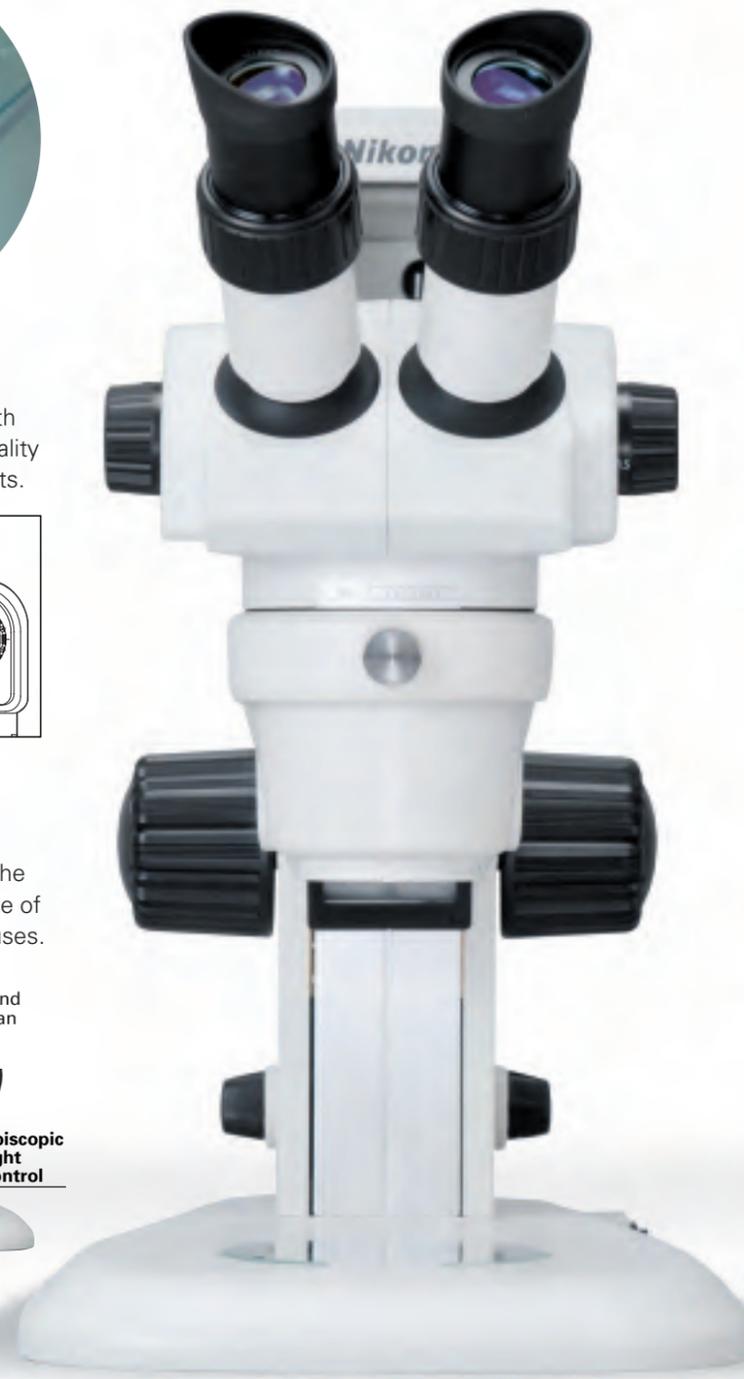
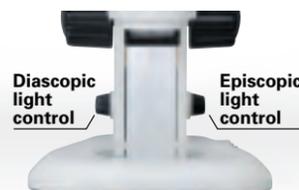


A single stand enables both diascopic and episcopic observation.



The angle of episcopic illumination can be adjusted through a range of 0°~55°.

Diascopic illumination and episcopic illumination can be adjusted separately.



## Stands

In addition to the LED Stand with built-in diascopic and episcopic illumination, Nikon offers other choices like the Plain Stand, which comes in two base stand sizes, and the Diascopic Stand S, with a built-in 6V, 20W halogen lamp.



C-LEDS Hybrid LED Stand C-PS/C-PSC Plain Stand

## Eyeiece lenses

Dedicated eyepiece lenses with diopter adjustments for parfocality. Combining the SMZ445 with 20x eyepiece lenses enables observation at a maximum of 70x. Rubber eyecups are available for the 10x eyepiece lenses.



SM 10xB, SM 15xB, SM 20xB, Eyecups available for SM 10xB eyepieces

## Auxiliary objectives

Simply attaching an auxiliary objective lens achieves a wider field of view and longer working distance. Two type are available, 0.5x (WD 181mm) and 0.7x (WD 127.5mm).

## System Diagram

