

**Motic®**

MORE THAN MICROSCOPY



**SMZ171**

FLEXIBLE STEREO MICROSCOPE SOLUTION

# SMZ171

Motic's SMZ-171 is an advanced stereo microscope for a wide range of biomedical and material science applications. The Greenough system delivers crisp and clear images in a zoom range of 6.7:1. Five click-stops within the smooth zoom allow a precise reproduction of defined magnifications. The large Field of View is ensured by the 10X/23 eyepieces. The working distance of 110mm

✓ ADDITIONAL EYEPIECES

✓ ZOOM MECHANISM WITH "CLICK-STOPS"

✓ AUXILIARY OBJECTIVES

✓ ALTERNATIVE ILLUMINATION

✓ OPTIONAL BOOM STANDS TO FIT SPECIFIC REQUIREMENTS



in standard configuration gives plenty of space for preparation work, using the impressive depth of view. The SMZ-171 stereo microscope may come as a predefined package ready for advanced demands in both routine and research fields. The flexibility of the system allows more complex setups with boom stands, external light sources and an upgrade to a complete documentation station.

#### FOR CONVENIENT AND FAST WORK IN ROUTINE AND RESEARCH

Motic's SMZ-171 is designed for demanding tasks in routine and research work. The standard eyepiece tubes with 23mm Field of View feature a 45° viewing angle for a comfortable working position. The interpupillary distance of 52-75mm can be adjusted, following individual conditions. The trinocular stand option with a fixed 50:50 light split avoids handling errors in the fast-paced work of modern labs.



#### ZOOM SYSTEM WITH STUNNING 3-D IMAGES

The optics of the SMZ-171 are based on a Greenough system with a magnification range of 7.5 - 50X. The zoom system delivers impressive images with 5 "click-stops" for defined magnifications, a necessary precondition for reproducible measurements. Due to the parfocal optical design, a re-adjustment of the focus position is not necessary while zooming. The extended Field of View (23mm) presents a quick image overview for a fast throughput of samples.



#### ILLUMINATION

The packages of the SMZ-171 feature diverse illuminations. The stands with integrated illumination carry 3W LEDs for both transmitted and incident light. In transmitted light stands a tilting device allows an oblique illumination. Packages without any illumination require at least an external incident light. For boom stands a cold light source is mostly necessary due to the working distance of the setup. A ring light generates a shadow-free image as the sample is illuminated from all directions. A unilateral illumination with light guides is recommended to accentuate the topographic surface of the sample.



#### A HIGHLIGHT WITHIN MOTIC'S SMZ SERIES

The SMZ-171 is a powerful member of Motic's SMZ microscope line. A set of basic packages already covers a wide range of applications. An upgrade to more powerful solutions is possible by combining the SMZ-171 optics with flexible stands and external illumination. Additional eyepieces and auxiliary objectives from the SMZ family expand the basic magnification range of the SMZ-171 from 7.5X – 50X to 2.25X – 200X. For electrostatic sensitive samples, a variety of ESD stands are available.



Our **MOTICAM** range offers the choice between several imaging options. Besides the standard USB cameras, we offer solutions like the Moticam Full HD cameras, tablet solutions, and Wi-Fi cameras working with our free "MotiConnect" App.

Know more at [www.moticamseries.com](http://www.moticamseries.com)



## SPECIFICATIONS

SMZ171



Model	SMZ171-BP	SMZ171-TP	SMZ171-BLED	SMZ171-TLED
Optical System	Greenough			
Observation tube	Binocular	Trinocular	Binocular	Trinocular
Interpupillary distance	52 - 75 mm			
Trinocular light split	-	Fixed 50:50	-	Fixed 50:50
Inclination	45° inclined			
Eyepieces	Widefield N-WF10X/23mm with diopter adjustment			
Objectives system	Zoom, ratio 6.7:1			
Objectives magnification	0.75X ~ 5X			
Working distance	110mm			
Stand	Pole type stand without illumination		Pole type stand with transmitted/incident illumination & cold light input	
Base	303x239mm			
Column / Arm	Height 290mm, Ø 32mm		Height 232mm, Ø 32mm	
Head holder	For Ø 32mm column and Ø 76mm head			
Focus mechanism	Coarse focusing system with tension adjustment			
Focusing stroke	49mm			
Incident illumination	-		LED 3W with intensity control	
Transmitted illumination	-		LED 3W with reflector and intensity control	
Transformer	Internal			
Power supply	-		100-240V (CE)	
Accessories included	Dust cover, black/white stage plate		Dust cover, black/white and frosted stage plates	
Dimensions	303x239x370mm		303x239x405mm	
Weight	5,45kg	5,7kg	5,95kg	6,2kg
<b>Contrast techniques</b>				
Brightfield	Yes			
Simple Polarization	Optional add-on			
Simple Darkfield	Optional add-on			

[www.moticmicroscopes.com](http://www.moticmicroscopes.com)

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