



Motic[®]
Scientific



Stereomicroscopes for the Best

SM7 Series

COMFORTABLE PRODUCTIVITY IN YOUR LAB

SM7 Series

Encounter True-Color Visualization in 3D

As an established manufacturer of light microscopes and digital documentation tools, Motic's engineering is focused on the full satisfaction of users from biology, medicine and industrial QC. In any case, a 3-dimensional, upright image for inspection purposes or preparation work is needed. Our stereo microscopes are a serious option, especially if price/performance is taken into consideration. The SM7 Series is our new highlight in terms of colour reproduction, resolution and spatial information.



The First Motic Stereo Plan-Apochromat: Enjoy and Be Surprised.

Power in any Aspect

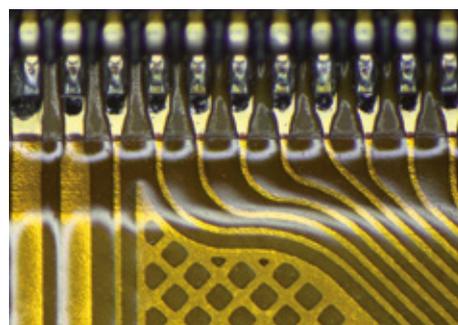
The SM7 features an optical performance with true colour reproduction, high resolution and low distortion. A stand with Incident/Transmitted LED light supplies variable illumination.

Stand Design

Ultra-flat stand bases for a relaxed positioning of hands and forearms facilitate lengthy preparation work. Pick your *C. Elegans* nematodes from the petri dish, mount your gearwheel into the clockwork. The advanced ergonomic design maximizes efficient usage and minimizes fatigue.

Flexibility for Individual Demands

A variety of objectives and eyepieces allow tailoring a personal SM7. Upgrade your workplace with ergonomic stands and powerful optics, whether Apochromatic colour fidelity is in focus or improved resolution power.



SM7 Series

Motic SM7: High-Precision Galilean Optics

Galilean Optical System

The Galilean Optics of the SM7 show a 7:1 Zoom system, resulting in a standard magnification range of 8X-56X. A 10-Position Click-Stop helps to set precise magnifications in case repeatable measurements are required. The standard optical setup can be varied by exchanging objectives and/or eyepieces.

Superior Optics

For the best possible image results, a 1X Plan-Apochromatic objective with a Working Distance of 81mm is available. True-colour reproduction combined with improved Field Flatness and minimized image defects: both the world of living beings and technical samples are covered by our SM7 stereomicroscope.

Resolution Power for Tiny Details

Besides minimized chromatic and spherical aberrations, it is the resolution of the 1X Apochromatic objective which makes the SM7 especially interesting for technical applications. 36% more resolution power, an increase worth mentioning.



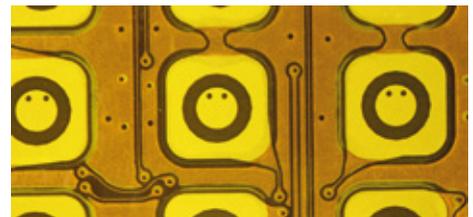
Powerful visualization for both eyes and camera

Eyepieces

The High eyepoint eyepieces 10X/22 suit spectacle wearers and offer a diopter adjustment range within +5/-8 dpt. Easy use of reticles is Motic's top model standard.

Observation Tubes

Our Trinocular head is supplied with a 100:0/20:80 2-position beam split, providing sufficient light to the camera port even under lowlight conditions. C-Mount cameras are adapted to the respective camera sensors. Besides the standard Binocular tube, a 60° inclination tube is available to meet special OEM demands.



SM7 Series

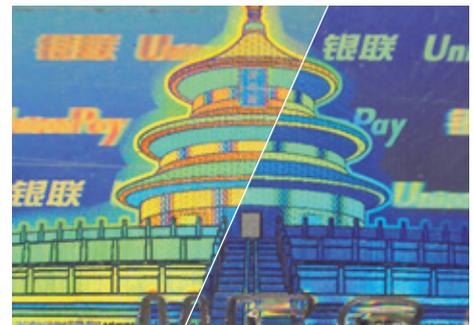
Illumination is the Second Key for the Safe of Information

Illumination

For years LEDs are replacing Halogen light sources in business and private life. A low energy consumption, a long lifetime and, especially for living samples, a low heat production are the main arguments.

Transmitted / Incident Light Stands

The SM7 Stand for transparent and opaque specimen incorporates 3W LEDs for both types of illumination, with separate controls for mixed samples. An optional 4-segment ring illuminator is meant for the standard stand. Herewith surface topographies can be visualized by activating different illumination angles. The SM7 features significantly flat stand bases for ergonomic positioning of hands and forearms. Long preparation work can be done without early fatigue. For ESD sensible work, Motic's ESD and surge protection system complies with both UL and CL standards and regulations. An essential feature for electronic and electric quality control environments.



Moticam S-Line

Scientific-Grade Microscope Cameras

The new Moticam S-line marks a further step in Motic's digital microscopy. By utilizing the latest sCMOS sensors coupled with our own PCB design and on-board image management, each Moticam S series promises professional digital results at an affordable price. This Moticam S-line is designed and manufactured completely in-house under strict German quality guidelines. Whether for Clinical, Research or Industrial, this new generation of Moticams has got the answer for every demand. At Motic, we believe in making High-level Digital Microscopy affordable for everyone. You surely will enjoy this camera line.

Key features



Super-Fast
Frame Rates

USB3.1



USB 3.1
Data Transfer



True color
reproduction



sCMOS
Sensor



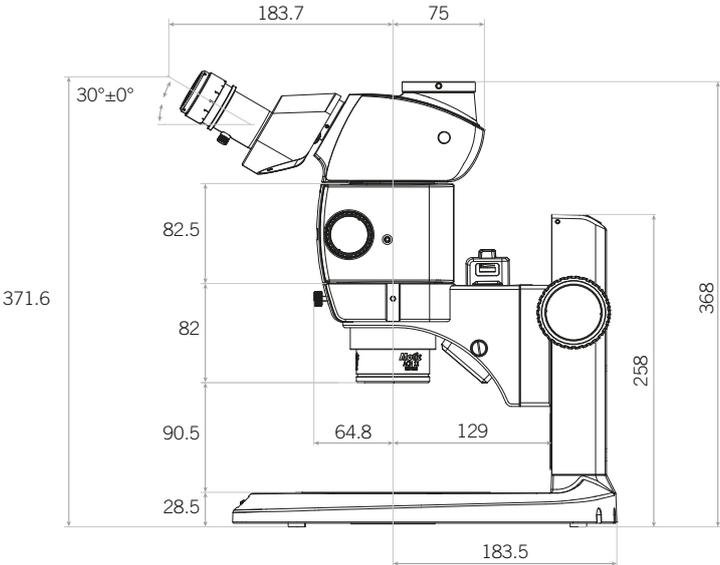
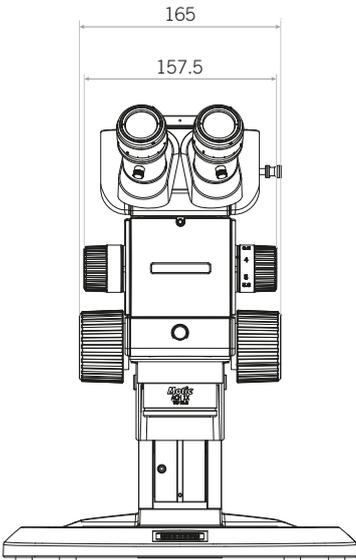
Up to 20MP
Resolution



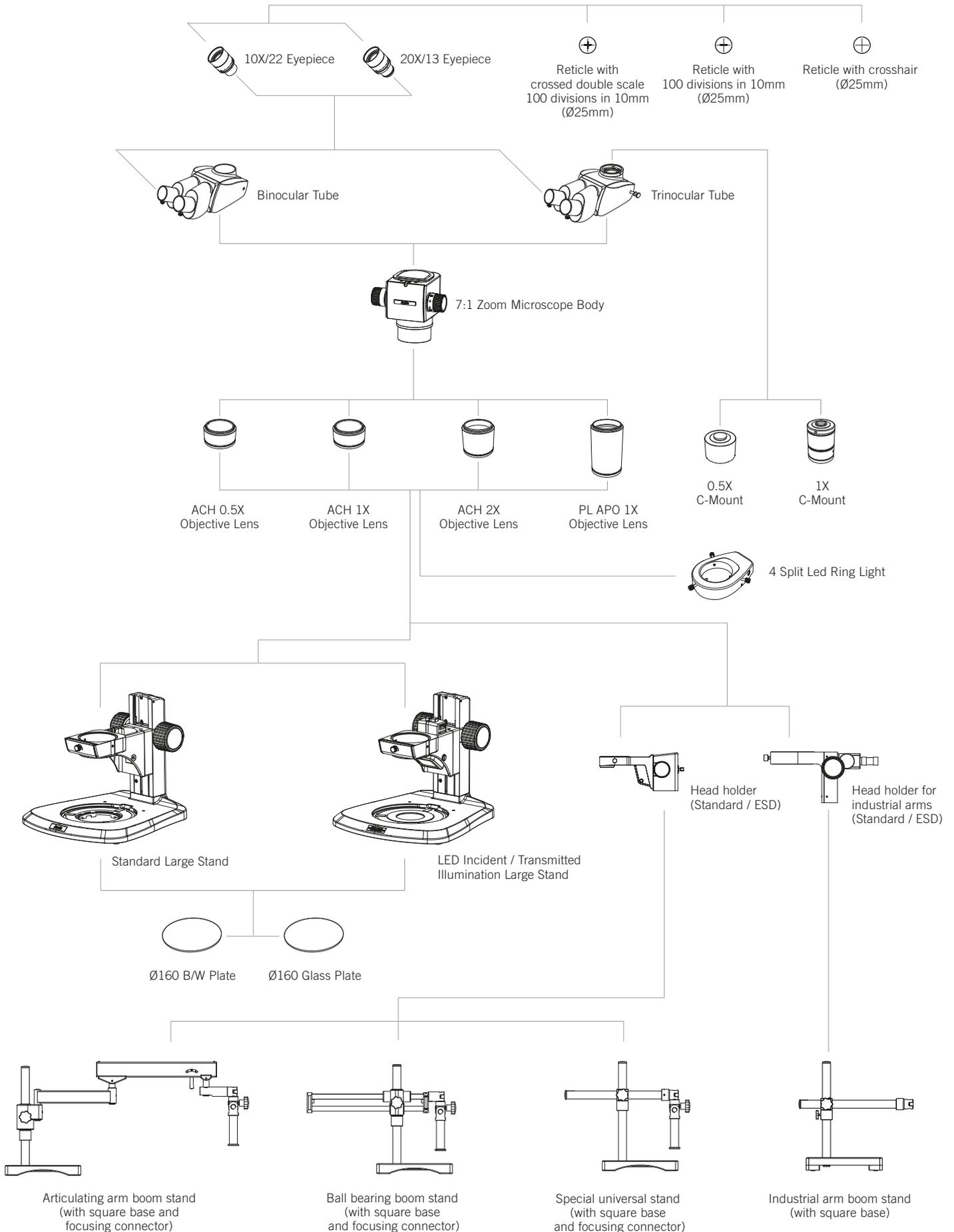
Rolling and Global
shutter models



SM7 Series Dimensions



SM7 Series System Overview



SM7 Series Technical Specifications



● Sku	1100201800061	1100201800021	1100201800071	1100201800031
● Name	SM7-P A1X	SM7TR-P A1X	SM7-P APO1X	SM7TR-P APO1X
Optical system	Galilean infinity optical design. Common Main Objective (CMO)			
● Observation tube	Binocular head	Trinocular head	Binocular head	Trinocular head
Inclination	30° inclined			
Trinocular light split	-	100:0/20:80	-	100:0/20:80
Interpupillary distance	55-75mm			
Diopter adjustment	On both eyepieces, +5/-8 diopter			
Eyepieces	Widefield WF10X/22mm with diopter adjustment			
Objectives system	Zoom, ratio 7:1			
● Objectives classification	Plan Achromat		Plan Apochromat	
Objectives	0.8X~5.6X (10-step)			
● Working distance	90mm		81mm	
Stand type	Fixed-arm stand			
Head holder	For Ø76mm head			
Focus mechanism	Coarse focusing system with tension adjustment			
Focusing stroke	120mm			
● Incident illumination	-			
● Transmitted illumination	-			
● Transformer	-			
● Power supply	-			
Accessories included	Dust cover, Black/White plate Ø160mm			
Dimensions LxWxH	367x290x372mm			
Base	310x290mm			
Column/Arm	254mm			
Net weight	6.9 Kg	7 Kg	7 Kg	7.1 Kg
CONTRAST TECHNIQUES				
Brightfield	Brightfield			



1100201800081	1100201800041	1100201800091	1100201800051	Sku	●
SM7-TLED A1X	SM7TR-TLED A1X	SM7-TLED APO1X	SM7TR-TLED APO1X	Name	●
Galilean infinity optical design. Common Main Objective (CMO)				Optical system	
Binocular head	Trinocular head	Binocular head	Trinocular head	Observation tube	●
30° inclined				Inclination	
-	100:0/20:80	-	100:0/20:80	Trinocular light split	
55-75mm				Interpupillary distance	
On both eyepieces, +5/-8 diopter				Diopter adjustment	
Widefield WF10X/22mm with diopter adjustment				Eyepieces	
Zoom, ratio 7:1				Objectives system	●
Plan Achromat		Plan Apochromat		Objectives classification	
0.8X~5.6X (10-step)				Objectives	
90mm		81mm		Working distance	●
Fixed-arm stand with incident & transmitted illumination				Stand type	
For Ø76mm head				Head holder	
Coarse focusing system with tension adjustment				Focus mechanism	
120mm				Focusing stroke	
LED 3W with intensity control				Incident illumination	●
LED 3W with reflector and intensity control				Transmitted illumination	●
External				Transformer	●
110-240V (CE)				Power supply	●
Dust cover, Glass plate Ø160mm				Accessories included	
367x290x372mm				Dimensions LxWxH	
310x290mm				Base	
254mm				Column/Arm	
7.3 Kg	7.4 Kg	7.4 Kg	7.5 Kg	Net weight	
				CONTRAST TECHNIQUES	
Brightfield				Brightfield	

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Design Change: The manufacturer reserves the right to make changes in instrument design in accordance with scientific and mechanical progress, without notice and without obligation.

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