Motic®
Technologies for People

30+ YEARS

Comfortable Productivity

Motic Stereo Microscope

SM7 SERIES

MOTIC OPTILUTION

The Most Optimized Optical Solution

As one of the world's leading optical equipment manufacturers, the professional precision of Motic engineering guarantees unparalled satisfaction in any R&D or production environment by providing a more precise and optimized optical solution.

Powerful Performance

The SM7 features an optical system with high resolution, true color reproduction, and low distortion. One of the key characteristics of Motic microscopes is providing clear images for better analysis. Increase your daily workflow and efficiency with Motic's optimized optical solutions.

Advanced Design

Advanced ergonomic design features have been carefully implemented to maximize efficient usage and minimize operator fatigue. Ideal positioning and angles of each module, compact size, and high-quality provide a user-friendly environment for any task. This all comes together to help to reduce fatigue during time-intensive inspections.

Improved Flexibility

A variety of objective lenses and eyepieces allow the user to tailor the SM7 to their specific purpose or task. The customized stand and digital application guarantee the best resolution no matter the environment.

SM7 Series

Intuitive optimized zooming and color reproduction offer you stable, high-quality images.

Interchangeable objective lenses and accessories can be used to provide guaranteed satisfaction in any given inspection environment and for any task.

Motic SM7, the optimal solution when a high-precision Galilean optical system is required

Galilean Optical System

The Galilean Optical Zoom System, denoting an Infinity Optical System, allows for high flexibility. The optical setup can be varied by easily exchanging eyepieces and/or objectives. For best possible image results, a Plan-Apochromatic objective 1X (WD 81mm) is available. The standard eyepieces 10X/22 offer a diopter adjustment range of +/- 5, allowing to insert reticles for visual measurements.

Wide 7:1 Zoom

The SM7 offers the highest zooming specification in its class when compared to the competition. The 8x to 56x zoom range provided makes the execution of any task much easier. A more comfortable, longer working distance is another practical feature to consider when evaluating the SM7 Series,

Superior Optical System

Live color reproduction and high-resolution power are a result of superior optical design that minimizes distortion and aberration offering a clear image on a wide range and variety of samples.

Increased Work Efficiency

SM7's speed, accuracy, and effectiveness offer the best solution for any challenging task or simple day to day, routine work. High-resolution and power lenses can be interchanged easily to obtain better results and increase efficiency,

Stable, High-Performance System

Powerful performance with upscaled color reproduction

Designed with highly stringent criteria to minimize aberration and distortion coupled with ideal coating technology and lens materials

High Resolving Power Objective Lens

Low distortion, longer working distance, ideal lens combination, and superior design offers you a better observation environment for any specimen, ideal lens selection and coating materials guarantee the fidelity of color reproducibility and their longevity. Our interchangeable objective lens feature can adapt the microscope to any working environment.

Eyepiece Designed with Comfortable Viewing in Mind

High eye point design and aberration correction are another clear advantage of Motic microscope eyepieces.They provide an optimal visual field for low acuity power users.

Observation Tube Flexibility

The observation tube is designed to be adaptable to any situation. Our trino head is suitable for video port digital imaging applications. A 60-degree inclination tube is also available to meet special use and custom needs.

User Friendly Ergonomic Design

Extreme eye comfort and easy operability

Compact, multiple functionality design reduces eye fatigue

Slim and Compact Design

Superior ergonomic minimizes operator fatigue and maximizes work efficiency.

Comfortable Zoom Knob / Focus Knob / Click Stop

Careful polyurethane material selection in zoom knobs and focus dials assures comfort during any operation. To avoid repetitive zooming changes, a click stop function has been implemented to improve work efficiency.

High Eye Point and Diopter Function

High Eye Point eyepiece design provides comfortable viewing when operating with glasses or low visual acuity. Diopter control is easily controlled by the eyepieces.

Utilization of High Intensity LED

High Intensity LED

Utilization of High Intensity LED

High Intensity LED

Low energy consumption, long lasting LEDs provide suitable transmission or reflection. LED lighting has been proven to reproduce real color without affecting specimens through excess color temperature providing a longer lifetime and lower energy cost

4 Part LED Ring Illumination

Compact 4 Part Ring LED illumination can simulate different lighting environments for better observation. Light intensity can be easily optimized for glossy samples or specimens,

LED Transmitted / Reflected Light

Other external light is not needed as the light angle can be regulated from the stand arm. Transmitted light is designed to be used with the stand base without any discomfort.

Easy Application Accessories

A wide range of accessories can be attached without altering the optical system.

Easy Operability and Wider Working Space for all Applications with ESD Surge Protection

Wider Base Stands

A variety of stands can be chosen depending on your particular work environment needs. For example, the SM7 can be equipped with a compact hybrid transmitted and reflected light base or a universal stand for large specimens or samples.

Wide Range of Video Ports

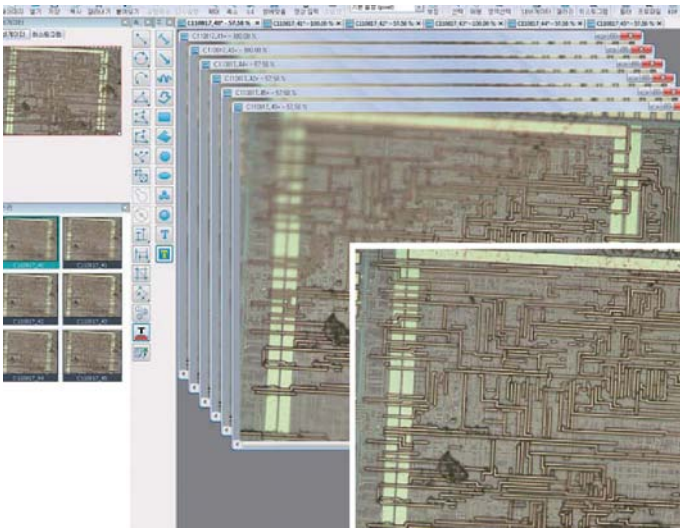
Motic's exclusive video port lenses assure better quality video images for all digital camera systems.

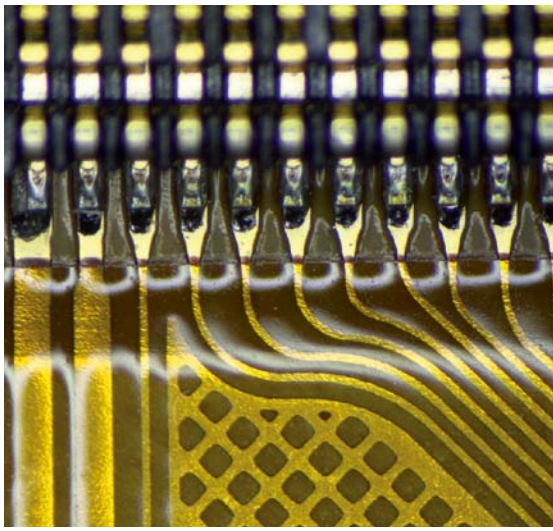
ESD and surge protection

Motic's unique ESD and surge protection system complies with both UL and CL standards and regulations. Yet another advantage of the SM7 Series for electronic and electric quality control usage.

Superior Digital Applications

Clear pictures, true color analysis and easy imaging
are an integral part of the Motic digital imaging system





Motic Analysis: A powerful, professionally designed software program that integrates seamlessly with hardware

Digital Camera

Analysis integrates all Motic microscopes and displays the image observed in any computer or digital imaging system.

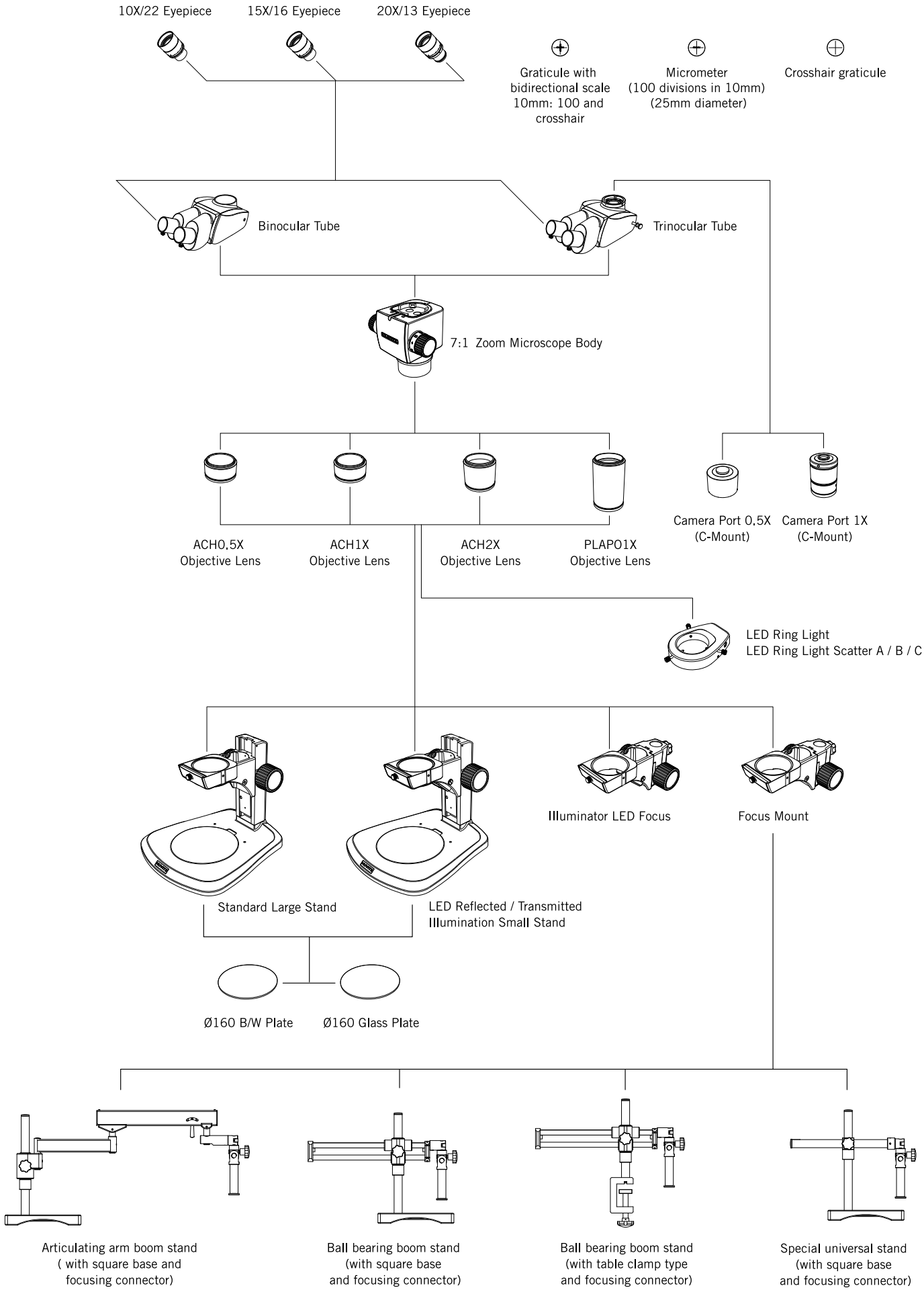
Enhanced Measurement

In addition to 3D measuring capabilities, Motic Analysis can easily perform highly complex metal and biological specimen analysis in an easy to use, intuitive fashion.

Characteristic of Analysis Application

- Intuitive GUI
- Live measurement: Length, area, angle, auto-trace, and more
- Microsoft Excel export/import compatibility
- Focus indicator, color histogram, multi-focus, auto-tiliing
- Wider filter and image processing
- Software upgrade and customer support though website

SYSTEM OVERVIEW

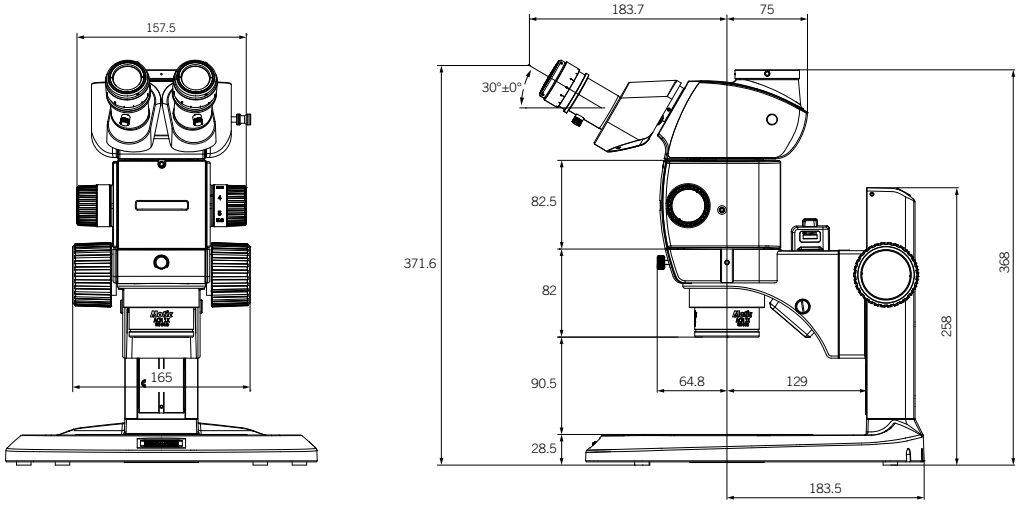


SPECIFICATIONS

	SM7	SM7 Trino
Optical system	Infinity Common Main Objective [CMO, Galilean]	
Observation tube	Binocular tube	Trinocular tube
Inclination	View inclination angle : 30°	
Trinocular light split	/	Light path selection: 2 steps (Binocular 100%, Video 80%-Binocular 20%)
Interpupillary distance	Interpupillary distance adjustable range : 55 to 75mm	
Zoom drive	horizontal knob system	
Zoom ratio values	7:1 (0.8-5.6x)	
Zoom magnification indication	10-step, 0.8,1,1.25,1.6, 2, 2.5, 3.2, 4, 5, 5.6. Click stop for each zoom magnification: On-Off switching possible	
Optional adapter	/	1X C-mount, 0.5X C-mount
Eyepieces	UC WideField 10X/22 with diopter adjustment, +/- 5 diopter, standard	
	UC WideField 15X/16 with diopter adjustment, +/- 5 diopter, optional	
	UC WideField 20X/12.5with diopter adjustment, +/- 5 diopter, optional	
Objective lens mounting	Screw mounting into thread	
Objectives	ACH0.5X, optional, W/D W/D198.5mm	
	ACH1X, standard, W/D 90mm	
	ACH2X, optional, W/D 33.5mm	
	PLAPO 1X, optional, W/D 81mm	

	ST7	ILST7
Stand(standard)	Standard large stand (Fixed arm)	LED reflected / transmitted illumination large stand (Fixed arm)
Stand (optional)	Pole type stand	
Head holder	Mounting diameter: 76mm	
Focus mechanism	Coarse focusing system with tension adjustment	
Focusing stroke	Knob rotation tension adjustment / Focusing stroke : 120mm	
Light source		Transmitted illumination: LED
		Reflected illumination: LED
		AC 100-240V, 50/60Hz, 10W
Optional accessory	4 Segmental LED Ring Light	
Accessories included	Dust cover, Glass plate and Black/White plate (160mm)	

DIMENSIONS (mm)



Canada | China | Germany | Spain | USA

www.motic.com

EN | ES | FR | DE | IT | PT

Motic Instruments (Canada)
130 - 4611 Viking Way. Richmond, BC V6V 2K9 Canada
Tel: 1-877-977 4717 | Fax: 1-604-303 9043

Motic Deutschland GmbH (Germany)
Christian-Kremp-Strasse 11, D-35578 Wetzlar, Germany
Tel: 49-6441-210 010 Fax: 49-6441-210 0122

Motic Hong Kong Limited (Hong Kong)
Unit 2002, L20, Tower Two, Enterprise Square Five, 38 Wang Chiu Road,
Kowloon Bay, Kowloon, Hong Kong
Tel: 852-2837 0888 | Fax: 852-2882 2792

Motic Europe (Spain)
C. Les Corts 12, Pol. Ind. Les Corts. 08349 Cabrera de Mar, Barcelona, Spain
Tel: 34-93-756 6286 | Fax: 34-93-756 6287

*CCIS® is a trademark of Motic Incorporation Ltd.
Motic Incorporation Limited Copyright © 2002-2019. All Rights Reserved.

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.

Updated: 01.08.2019
Code: 1300901305252

Official Distributor: