

Motic®

MORE THAN MICROSCOPY



CLASSIC L I N E



Canada
China
Germany
Spain
USA



Motic was established in 1988 as a hi-tech industrial enterprise specialized in manufacturing conventional compound microscopes. Owned by Speed Fair Co., Ltd, the company has grown into a global brand with sales offices in Canada, Germany, Hong Kong, Spain and the United States.

Our manufacturing base in China consists of four wholly-owned factories with **Motic Xiamen** acting as the production and design headquarters of the company. Xiamen's Research and Development centre has over 100 professional engineers and technicians covering optical, mechanical, industrial, electronic and software design.

Today, **Motic's** dedicated team members of more than 2000 individuals are ready to assist you in finding competitive solutions.



MOTIC

Aim for the FUTURE

During the late 1990s, the company started to explore and develop affordable digital microscopy solutions consisting of imaging hardware and application software. This has proven to be a worthwhile investment turning **Motic** into one of the leading brand names of digital microscopy products.

The main goal of **Motic** remains the same today as it was when the company was founded. The brand **Motic** stands for

Excellent Price-Performance

Innovative Technology

Superb Quality

Friendly Customer Service

Motic is a certified **ISO9001**, **ISO14001** and **ISO13485** company.



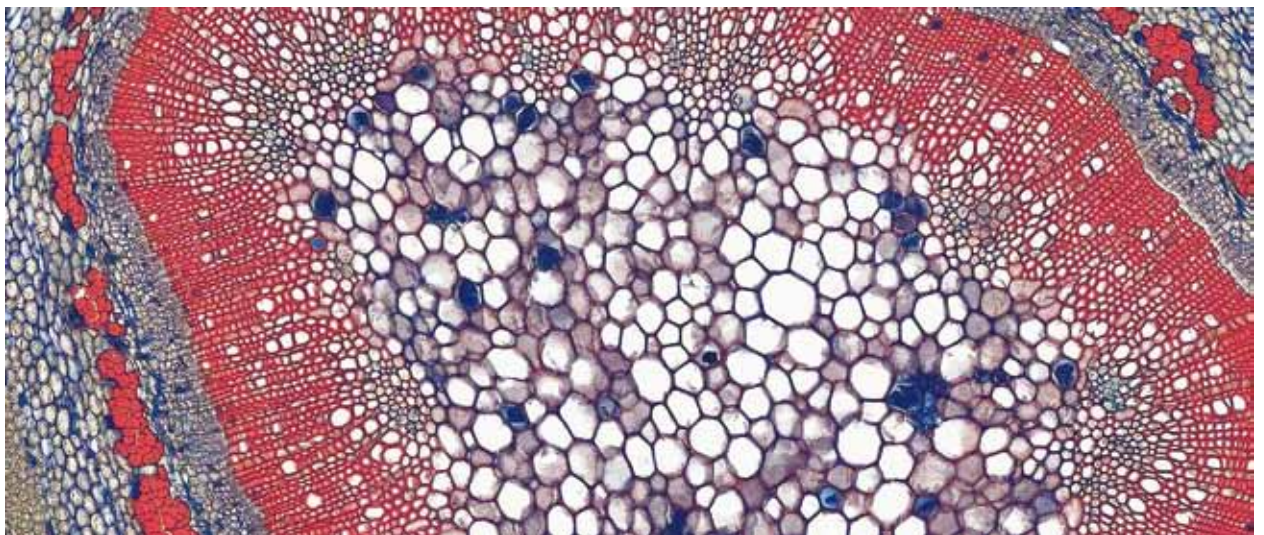
Your Motic Team

Introduction

Motic's complete range of Classic Compound and Stereo microscopes are designed to cover the needs of educators as well as hobbyists. The Classic Line is sold exclusively through authorized Motic distributors.

Our extensive range of digital Moticom solutions are easily added onto a Classic Series microscope. For more information, please consult our Digital Education Moticom Selection Catalogue.

The brand **Motic** assures that you are purchasing a quality instrument that has been thoroughly inspected and adjusted by our trained technicians and backed by the company's dedication to your complete satisfaction. Our **5-Year Limited Warranty** is supported by a complete parts inventory that assures availability even beyond the warranty period. We are aware that the selection of a microscope of any type requires careful consideration of several factors and not only the price. A **Motic** microscope is therefore a solid investment, that will pay off with years of hassle-free and quality work.



Motic warrants all microscopes to be free from defects in material and workmanship under normal use and service for 5 years from date of purchase. For electrical and electronic parts 2 years from date of purchase. It does not cover damage resulting from abuse or misuse, repairs or alterations performed by others than authorized repair technicians of **Motic** or damage occurring in transit. Any modification, even only parts of the instrument or Serial N°, will automatically cancel this warranty. Warranty does not cover bulbs and fuses.



Contents

Series	Page
SFC-3 Student Microscope Series	06
SFC-100 Biological Microscope Series	08
Accessories (SFC-3, SFC-100)	10
MS-2 Student Microscope Series	11
S-10 / S-20 Stereo Microscope Series	12
ST-30 Stereo Microscope Series	14
Accessories (MS-2, S-10 / S-20, ST-30)	18



SFC3

Student Microscope Series

The **SFC-3 Series** is easily recognizable by its classic design. Its large gripping area makes it an easy to handle microscope throughout the classroom and even outdoors. This series is designed with elementary school and hobby users in mind. Its simplicity allows young and inexperienced users to be introduced to the fascinating world of microscopy.

Although designed for more inexperienced users, the optics of the **SFC-3** series offer an excellent image. Coupled with second-to-none mechanical quality, this **Motic** series aims to bring you years of enjoyable use. Both **SFC-3A** and **SFC-3AF** are equipped with a plano-concave mirror, which makes this microscope suitable for fieldwork as well. The mirror can be replaced by an optional **rechargeable LED illuminator**.



SFC3

Student Microscope Series

Model SFC-3A

- Vertical monocular head which can be tilted to 45°
- Widefield eyepiece 10X/14mm with built-in pointer
- Revolving triple nosepiece with positive click-stops
- Corrected parcentric and parfocal objectives 4X/0.10, 10X/0.25, 40X/0.65 Spring
- Coarse focusing adjustment
- 88mm x 82mm stage with stage clips
- Rotating disc diaphragm
- Removable plano-concave mirror



Model SFC-3AF

- Vertical monocular head which can be tilted to 45°
- Widefield eyepiece 10X/14mm with built-in pointer
- Revolving triple nosepiece with positive click-stops
- Corrected parcentric and parfocal objectives 4X/0.10, 10X/0.25, 40X/0.65 Spring
- Coarse and Fine focusing adjustment
- 88mm x 82mm stage with stage clips
- Rotating disc diaphragm
- Removable plano-concave mirror





The image is a composite featuring a blackboard filled with handwritten chemical structures and reactions, with a microscope in the foreground.

Chemical structures and reactions on the blackboard:

- Top Left:** A pyrimidine derivative with methyl groups at positions 1, 3, and 7, and carbonyl groups at positions 2 and 6.
 CN1C=NC2=C1C(=O)N(C)C(=O)N2C
- Top Center:** A purine derivative with a phosphate group at position 9 and a dimethylaminoethyl side chain at position 2.
 CN(C)CCc1nc2c(cnc12)OP(=O)(O)O
- Top Right:** A benzyl derivative with a guanidino group.
 NC(=[NH2+])CCc1ccccc1C(=O)O
- Middle Left:** A reaction showing the bromination of isobutyrate with Br_2 and P to form 2-bromo-3-methylbutyrate.

$$\begin{array}{c} CH_3 \\ | \\ CH_3 - C - COOH \\ | \\ H \end{array} \xrightarrow{Br_2, P} \begin{array}{c} CH_3 \\ | \\ Br - CH - COOH \\ | \\ H \end{array} \rightarrow \begin{array}{c} CH_3 \\ | \\ H_2N - CH - COOH \\ | \\ H \end{array}$$
- Middle Right:** A series of chemical structures including a triamine chain, a guanidino chain, and a complex branched structure with multiple amine and carboxylic acid groups.

$$CH_2 - CH_2 - CH_2 - COOH$$

$$\begin{array}{c} O \\ || \\ HO - C - CH_2 - CH_2 - CH - C(=O)OH \\ | \quad | \\ H \quad NH_2 \end{array}$$
- Bottom Left:** A chemical structure of a guanidino group attached to a methylene group.
 NC(=[NH2+])CCO
- Bottom Center:** A chemical structure of a guanidino group attached to a methylene group, with a label "R" above it.
 NC(=[NH2+])CCO
- Bottom Right:** A chemical structure of a guanidino group attached to a methylene group, with a label "R" above it.
 NC(=[NH2+])CCO

Microscope: A white and black compound microscope is positioned in the foreground, partially obscuring the blackboard. It has a 40x objective lens and a 100x objective lens. The stage is black, and the base is white.

SFC100

Biological Microscope Series

Model SFC-100FL

- 45° Inclined Monocular head for comfortable viewing while seated, rotates 360°
- Widefield eyepiece 10X/18mm with built-in pointer
- Revolving triple nosepiece with positive click-stops for precise magnification changes
- DIN Achromatic objectives parfocal and parcentric 4X/0.10, 10X/0.25 and 40X/0.65 with spring
- Separate coarse and fine focusing adjustment with upper-limit stop to prevent damage to slides and objectives
- Large 120mm x 110mm stage with locked-on, spring stage clips
- Special built-in 0.65NA condenser with iris diaphragm and filter holder
- Built-in tungsten illumination



Model SFC-100FL (H)

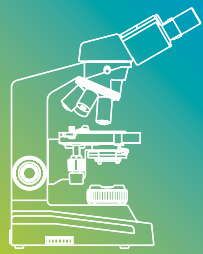
- 45° Inclined Monocular head for comfortable viewing while seated, rotates 360°
- Widefield eyepiece 10X/18mm with built-in pointer
- Revolving triple nosepiece with positive click-stops for precise magnification changes
- DIN Achromatic objectives parfocal and parcentric 4X/0.10, 10X/0.25 and 40X/0.65 with spring
- Separate coarse and fine focusing adjustment with upper-limit stop to prevent damage to slides and objectives
- Large 120mm x 110mm stage with locked-on, spring stage clips
- Special built-in 0.65NA condenser with iris diaphragm and filter holder
- Built-in halogen illumination



Model SFC-100FLED (iris)

- 45° Inclined Monocular head for comfortable viewing while seated, rotates 360°
- Widefield eyepiece 10X/18mm with built-in pointer
- Revolving triple nosepiece with positive click-stops for precise magnification changes
- DIN Achromatic objectives parfocal and parcentric 4X/0.10, 10X/0.25 and 40X/0.65 with spring
- Separate coarse and fine focusing adjustment with upper-limit stop to prevent damage to slides and objectives
- Large 120mm x 110mm stage with locked-on, spring stage clips
- Special built-in 0.65NA condenser with iris diaphragm and filter holder
- Rechargeable LED illumination with intensity control





Accessories

SFC3

Eyepieces

Widefield eyepiece WF10X / 14 mm

Objectives

Objective 4X / 0.10

Objective 10X / 0.25

Objective 40X / 0.65 / S

Spare parts

42 mm plano concave mirror and fork

Dust cover (size A)

Illumination and spare bulbs

Attachable illumination LED cordless rechargeable

LED 20mA, 3.5 V, 70mW

SFC100

Eyepieces

Huygens eyepiece H5X / 14.5 mm

Widefield eyepiece WF10X / 18 mm

Widefield eyepiece WF15X / 12 mm

Huygens eyepiece H15X / 8 mm

Widefield eyepiece WF20X / 11 mm

Micrometer eyepieces

Micrometer eyepiece WF10X / 18mm,
100 divisions in 10mm.

Reticle 19mm (for 18mm eyepiece),
100 divisions in 10mm.

Reticle holder

Achromatic Objectives

Achromatic objective 4X / 0.10

Achromatic objective 10X / 0.25

Achromatic objective 20X / 0.40

Achromatic objective 40X / 0.65 / S

Achromatic objective 60X / 0.85 / S

Achromatic objective 100X / 1.25 / S-oil

Spare parts

Mechanical stage MSH-009

Polarizing equipment B.201

Blue filter

Dust cover (size B)

42 mm plano-concave mirror and fork

Plastic carrying case

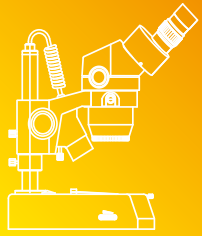
Aluminium box

Spare bulbs

Halogen bulb 12V / 10W

Tungsten bulb 220-240V / 20W

LED 20mA, 3.5 V, 70 mW



MS2

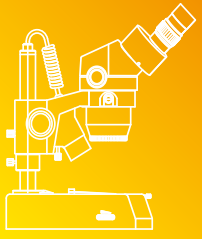
Student Microscope Series

This special Monoscope with a large working distance is perfect for viewing macro specimens such as plants, insects and minerals. The **MS-2** is easy to use and has high quality optics. Its simple but solid construction ensures a long life time. This **light-weight and compact microscope** is ideal for outdoor biology classes or studies in the backyard.

Model MS-2

- 45° Inclined Monocular head, rotates 360°
- Widefield eyepiece 10X/18mm
- Built-in 2X objective with 80mm working distance
- Rack & Pinion focusing block with slip clutch and safety stop
- Pole-stand with white stage plate and stage clips





S10 & S20

Stereo Microscope Series

These stereo microscopes combine simplicity and optical quality. Solid build-quality and student-proof features, makes these an ideal range for the educational environment. Interchangeable objectives and eyepieces allow you to vary the magnification from 10X to 120X.

The binocular vertical head of the **S-10** models and the binocular 45° head of the **S-20** models feature a diopter adjustment on the left eyetube. The rack & pinion focusing block assures fast and precise focusing. With this range, **Motic** provides you with different configurations.



Model S-10-P

- Vertical binocular head with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm
- Removable 2X objective with 80mm working distance
- Rack & Pinion focusing block with slip clutch and safety stop
- Pole-stand with 60mm black and white stage plates and stage clips



S10 & S20

Stereo Microscope Series

Model S-10-L0

- Vertical binocular head with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm
- Removable 2X objective with 80mm working distance
- Rack & Pinion focusing block with slip clutch and safety stop
- Pole-stand with 60mm black and white stage plates and stage clips
- Tungsten 12V/10W incident illumination



Model S-20-L0

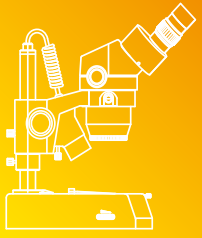
- 45° binocular head with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm
- Removable 2X objective with 80mm working distance
- Rack & Pinion focusing block with slip clutch and safety stop
- Pole-stand with 60mm black and white stage plates and stage clips
- Tungsten 12V/10W incident illumination



Model S-20-2L00

- 45° Binocular head with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm.
- Objective 2X with a working distance of 80mm.
- Rack & pinion focusing block with slip clutch and safety stop.
- Pole-stand with incident and transmitted 12V/10W tungsten illumination.
- Supplied standard with 80mm stage plates (frosted glass, black and white).





ST30

Stereo Microscope Series

This **Classic Motic Series** contains **5 different models**. They are specially designed and developed for both the learning environment as well as quick quality control management. You can choose between the fixed rear-facing head or the new forward-facing head. 360° rotatable head models are also available. Another advanced option is the innovative **cordless LED illumination** available over the standard tungsten system making your images brighter and sharper without producing heat. With its long lifetime and low power consumption, the **LED** versions are an ecologically and environmentally sound choice.



ST30

Stereo Microscope Series

Model ST-30C-2L00

- 45° Inclined rear-facing binocular head with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm
- 2X/4X magnification changer
- Objectives are parfocal, parcentric and achromatic. Magnification is changed by turning the turret 180° to the click stop
- Heavy-duty rack & pinion focusing block with slip clutch
- Pole-stand with incident and transmitted 12V/10W tungsten illumination
- Supplied standard with 80mm stage plates (frosted glass, black and white).



Model ST-30C-6LED

- 45° Inclined rear-facing binocular head with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm
- 2X/4X magnification changer
- Objectives are parfocal, parcentric and achromatic. Magnification is changed by turning the turret 180° to the click stop
- Heavy-duty rack & pinion focusing block with slip clutch
- Pole-stand with incident and transmitted rechargeable LED illumination
- Supplied standard with 80mm stage plates (frosted glass, black and white).



NEW

ST-30C-2L00 (C)

FRONT HEAD

- 45° Inclined forward-facing binocular head, with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm
- 2X/4X magnification changer
- Objectives are parfocal, parcentric and achromatic. Magnification is changed by turning the turret 180° to the click stop
- Heavy-duty rack & pinion focusing block with slip clutch
- Pole-stand with incident and transmitted 12V/10W tungsten illumination
- Supplied standard with 80mm stage plates (frosted glass, black and white).



FRONT HEAD

for comfortable viewing



ST30

Stereo Microscope Series

Model ST-36C-2L00

- 45° Inclined 360° rotatable binocular head with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm
- 2X/4X magnification changer
- Objectives are parfocal, parcentric and achromatic. Magnification is changed by turning the turret 90° to the click stop
- Heavy-duty rack & pinion focusing block with slip clutch
- Pole-stand with incident and transmitted 12V/10W tungsten illumination
- Supplied standard with 80mm stage plates (frosted glass, black and white).



Model ST-36C-6LED cordless

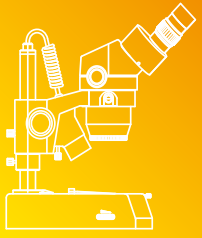
- 45° Inclined 360° rotatable binocular head with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm
- 2X/4X magnification changer
- Objectives are parfocal, parcentric and achromatic. Magnification is changed by turning the turret 90° to the click stop
- Heavy-duty rack & pinion focusing block with slip clutch
- Pole-stand with incident and transmitted rechargeable LED illumination
- Supplied standard with 80mm stage plates (frosted glass, black and white).



Model ST-37C-2L00

- 45° Inclined 360° rotatable binocular head with diopter adjustment on left eyetube
- Widefield eyepieces 10X/20mm
- 2X/4X magnification changer
- Objectives are parfocal, parcentric and achromatic. Magnification is changed by turning the turret 90° to the click stop
- Heavy-duty rack & pinion focusing block with slip clutch
- Fixed-arm stand with incident and transmitted 12V/10W tungsten illumination
- Supplied standard with 80mm stage plates (frosted glass, black and white).





Accessories

MS2

Eyepieces

Huygens eyepiece H5X / 14.5 mm
Widefield eyepiece WF10X / 18 mm
Widefield eyepiece WF15X / 13 mm
Huygens eyepiece H15X / 8 mm
Widefield eyepiece WF20X / 11 mm

Micrometer eyepieces

Micrometer eyepiece WF10X / 18mm,
100 divisions in 10 mm
Reticle 19 mm (for 18 mm eyepiece),
100 divisions in 10 mm
Reticle holder

Spare parts

White stage plate
Dust cover (size A)

S10 S20

Eyepieces

Widefield eyepiece WF5X / 22 mm
Widefield eyepiece WF10X / 20 mm
Widefield eyepiece WF15X / 13 mm
Widefield eyepiece WF20X / 10 mm
Widefield eyepiece WF30X / 8 mm

Micrometer eyepieces

Graduated linear line and plain cross hair,
point=0.1mm/14mm
(Widefield eyepiece WF10X/20mm)
Graduated linear line, point=0.2mm/14mm
(Widefield 10X/20mm)
360° Protactor, 30° increments
(Widefield 10X/20mm)

Graduated linear line and double cross hair,
point=0.1mm/10mm
(Widefield eyepiece WF10X/20mm)

Objectives

Objective 2X (W.D. 80 mm)
Objective 3X (W.D. 61 mm)
Objective 4X (W.D. 48 mm)

Spare parts

Black / White stage plate, Ø 60 mm
Black and White stage plate, Ø 80 mm
Frosted glass stage plate, Ø 80 mm
Dust cover (size B)
Eyecups (pair)
Aluminium box

Spare bulbs

12V / 10W
Tungsten replacement bulb

ST30

Eyepieces

Widefield eyepiece WF5X / 22 mm
Widefield eyepiece WF10X / 20 mm
Widefield eyepiece WF15X / 13 mm
Widefield eyepiece WF20X / 10 mm
Widefield eyepiece WF30X / 8 mm

Micrometer eyepieces

Graduated linear line and plain cross hair,
point=0.1mm/14mm
(Widefield eyepiece WF10X/20mm)
Graduated linear line, point=0.2mm/14mm
(Widefield 10X/20mm)
360° Protactor, 30° increments
(Widefield 10X/20mm)

Graduated linear line and double cross hair,
point=0.1mm/10mm
(Widefield eyepiece WF10X/20mm)

Polarizing and darkfield accessories

Darkfield attachment with iris diaphragm
B.301: Polarizing equipment [1 piece rotary]
Jewellery clamp

Spare parts

Black and White stage plate, Ø 80 mm
Frosted glass stage plate, Ø 80 mm
Dust cover (size B)
Eyecups (pair)
Plastic carrying case
Aluminium box

Spare bulbs

12V / 10W
Tungsten replacement bulb
LED incident light
LED transmitted light





Motic®

www.motic.com

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 Incorporation Ltd. (HONG KONG)

Rm 2907-8, Windsor House, 311 Gloucester Road,
Causeway Bay, Hong Kong
Tel: 852-2837 0888 Fax: 852-2882 2792

Motic Spain, S.L. (SPAIN)

Polígono Industrial Les Corts, Camí del Mig, 112
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 © 2002-2010.
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: June 2011

