

# MS/SFX Series



**Entry-Level Monoscopes & Stereomicroscopes For Students** 

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# Addressed For Simplicity & The Youngest Users

#### **DESIGNED FOR NOVICE USERS**

- » Reliable microscopes for education
- » Particularly recommended for primary and secondary schools
- » Ideal for discovering, biology, material science and amateur field

#### **EDUCATIONAL STEREOMICROSCOPES**

- » Wide range of solutions and magnifications
- » Up to, 20 mm field number
- » Equipped with high performance LED illumination



# Rechargeable Batteries On Field Use

#### **CORDLESS, EASILY TRANSPORTABLE**

- » Stable, yet compact and light weight
- » Dedicated handle for enhanced comfort
- » Fast recharging time

#### NO NEED FOR POWER CONNECTION

- » Powered by rechargeable batteries (SFX models)
- » Long-lasting, up to 8 hours from a single charge
- » Always ready to work, everywhere



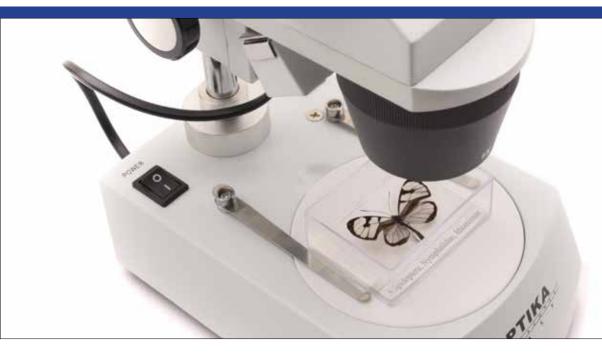
# Attention To Detail

#### HANDY, YET EXTREMELY STABLE

- » Compact, practical and intuitive to use
- » Optics ensuring good quality images
- » Get impressive images and live videos with eyepiece cameras

#### **EASY TO TAKE CARE OF**

- » Sturdy, durable for extended lifetime
- » No maintenance required
- » Dust cover (included) protects from environmental contaminants



# A New Frontier In Illumination Adjustment

#### HIGH COMFORT TOUCH CONTROL

- » Light intensity settable via a simple click
- » 5 pre-set intensity levels
- » Separated control for transmitted and incident light

#### **FULFILL ALL THE LEARNING CHALLENGES**

- » Turnable objective with up to 3 magnifications
- » Precision stand for accurate focusing
- » 3 MP integrated digital camera (on SFX-91D)







# **MS/SFX** Series

OPTIKA MS/SFX Series includes a wide selection of mono/stereomicroscopes designed to satisfy every need in both teaching and amateur fields.

Slim and easy to carry solutions, it is equipped with all you need to start learning to use a scientific instrument: 20 mm field of view, up to 40x maximum magnification, several options concerning illumination (including rechargeable batteries), objectives, and stands.

#### **Greenough Optical System**

The V-shape optical path of Greenough allows us to design a very compact and a slim unit, highly versatile and appreciated for the 3D viewing. Vertical heads or 45° inclined to grant comfortable posture to the user even after several hours of operation.

#### **Incorporating the Most Wanted Features in a Student Microscope**

Stereomicroscopes are the best way to enter the world of magnified 3D vision of objects such as insects, rocks, plants, and many other samples. The binocular head ensures a comfortable view. Optional eyepieces and objectives allow to increase even further the maximum magnification.





### **LED with Rechargeable Batteries - Optimized Illumination**

Money & energy saving thanks to LED long lifetime (65.000 hours, 22 years in case of 8 hours/day) which is more than 20 times compared to a standard halogen bulb. **All the SFX Series** has internal rechargeable batteries for up to 8 hours (at medium intensity) of outdoor use.

### 360° Rotating Heads

**SFX-51** and **SFX-52** have a 360° rotating head, for the most comfortable teaching experience. The head, through rotation, can be shared among different users or adjusted to the user position.

#### **LWD - Long Working Distance**

**ST-50Led** has a special objective with long working distance that allows you to inspect bulky samples, thanks also to its overhanging arm stand and LED flexible incident light.

# Entry-Level Monoscopes & Stereomicroscopes For Students













### Legend

- 1. Transport handle, SFX-91.
- 2. Fly eyes, with SFX-91D and 4x objective.
- 3. Mineral rock, with ST-30FX and 4x objective.
- 4. Mineral rock, with SFX-51 and 4x objective.
- 5. Transmitted and incident light setting, in recharging mode, SFX-52.
- 6. Coin, with SFX-91 and 4x objective.



Portable microscope but also a multifunctional testing instrument for applications where magnifying lenses are not good enough. It has to be used directly on the specimen to be inspected. Total magnification: 100x.

Observation mode: Brightfield.

**Eyepiece:** WF 10x/15.5 mm, micrometric with cross.

**Objective:** Achromatic 10x with anti-fungus treatment.

**Focusing:** Rack and pinion controlled knobs placed on both sides of the stand

**Illumination:** 0.3 W Led penlight. Powered by AAA batteries (not included).



Entry-level monoscope with fixed objective (2x) that can be combined to external illuminators, in case some light is required.

Observation mode: Brightfield.

Head: Monocular head, 45° inclined, 360° rotating.

**Objective:** Achromatic 2x with anti-fungus treatment.

**Stand:** Pillar stand with focus.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Without illumination.

### STX











Simple binocular stereomicroscope equipped with fixed objective (2x) and LED incident illumination, combining bright and uniform illumination with low consumption. Powered by AA batteries (not included).

Observation mode: Brightfield.

**Head:** Binocular vertical head.

Interpupillary distance: Adjustable.

**Eyepieces:** WF 10x/16 mm.

**Objective:** Achromatic 2x with anti-fungus treatment.

**Stand:** Fixed stand with focus.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 0.1W LED, powered by 2 AA batteries (not included).

### ST-30FX



Classic binocular stereomicroscope equipped with turnable objective (2x-4x), pillar stand, and incredibly bright and uniform LED illumination (transmitted and incident).

Observation mode: Brightfield.

**Head:** Binocular head, 45° inclined. **Interpupillary distance:** Adjustable.

Dioptric adjustment: On the left eyepiece.

**Eyepieces:** WF 10x/20 mm, secured by screw, with rubber cups.

**Objective:** Achromatic 2x-4x with anti-fungus treatment.

**Stand:** Pillar stand with focus.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

Illumination: Incident: 1 W LED, transmitted: 1 W LED.

Color temperature: 6,300 K.

100-240Vac/12Vdc external power supply.

### **SFX-31**



Binocular stereomicroscope equipped with turnable objective (2x-4x), pillar stand, and incredibly bright and uniform LED illumination (transmitted and incident) with rechargeable batteries.

**Observation mode:** Brightfield.

**Head:** Binocular heads, 45° inclined.

**Interpupillary distance:** Adjustable.

**Dioptric adjustment:** On both eyepieces.

**Eyepieces:** WF 10x/20 mm, secured by screw.

**Objective:** Achromatic 2x-4x with anti-fungus treatment.

**Stand:** Pillar stand with focus.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 1 W LED, transmitted: 1 W LED. Dial brightness control. Rechargeable batteries.
Color temperature: 6,300 K.

### **SFX-32**











**⊕** 20

1W LED

1W LED

2x-4x

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Binocular stereomicroscope equipped with turnable objective (1x-3x), pillar stand, and incredibly bright and uniform led illumination (transmitted and incident) with rechargeable batteries.

**Observation mode:** Brightfield.

**Head:** Binocular heads, 45° inclined.

Interpupillary distance: Adjustable.

Dioptric adjustment: On both eyepieces.

Eyepieces: WF 10x/20 mm, secured by screw.

**Objective:** Achromatic 1x-3x with anti-fungus treatment.

Stand: Pillar stand with focus.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 1 W LED, transmitted: 1 W LED. Dial brightness

control. With rechargeable batteries. Color temperature: 6,300 K.

### **SFX-33**



Binocular stereomicroscope equipped with turnable objective (2x-4x), fixed arm with handle, and incredibly bright and uniform led illumination (transmitted and incident), settable through the exclusive touch control. Powered by rechargeable batteries.

**Observation mode:** Brightfield.

Heads: Binocular head, 45° inclined.

Interpupillary distance: Adjustable

Dioptric adjustment: On both eyepieces.

Eyepieces: WF 10x/20 mm, secured by screw.

**Objective:** Achromatic 2x-4x with anti-fungus treatment.

Stand: Fixed stand with focus and handle.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 1 W LED, transmitted: 1 W LED. Touch brightness control. With rechargeable batteries.

Color temperature: 6,300 K.

Multi-plug 100-240Vac/5Vdc external power supply.

### SFX-34













Binocular stereomicroscope equipped with turnable objective (1x-3x), fixed arm with handle, and incredibly bright and uniform led illumination (transmitted and incident), settable through the exclusive touch control. Powered by rechargeable batteries.

Observation mode: Brightfield.

Head: Binocular head, 45° inclined.

Interpupillary distance: Adjustable.

Dioptric adjustment: On both eyepieces.

**Eyepieces:** WF 10x/20 mm, secured by screw.

**Objective:** Achromatic 1x-3x with anti-fungus treatment.

**Stand:** Fixed stand with focus and handle.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 1W LED, transmitted: 1W LED. Touch brightness control. With rechargeable batteries.

Color temperature: 6,300 K.

### **SFX-51**













Binocular stereomicroscope equipped with turnable objective (2x-4x), 360° rotating head, fixed arm with handle, and incredibly bright and led uniform illumination (transmitted and incident), settable through the exclusive touch control. Powered by rechargeable batteries.

Observation mode: Brightfield.

Head: Binocular head, 45° inclined, 360° rotating.

Interpupillary distance: Adjustable.

**Dioptric adjustment:** On both eyepieces.

**Eyepieces:** WF 10x/20 mm, secured by screw.

**Objective:** Achromatic 2x-4x with anti-fungus treatment.

Stand: Fixed stand with focus and handle.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 1W LED, transmitted: 1W LED. Touch brightness control. With rechargeable batteries.

Color temperature: 6,300 K.

Multi-plug 100-240Vac/5Vdc external power supply.

### **SFX-52**













Binocular stereomicroscope equipped with turnable objective (1x-3x), 360° rotating head, fixed arm with handle, and incredibly bright and uniform led illumination (transmitted and incident), settable through the exclusive touch control. Powered by rechargeable batteries.

**Observation mode:** Brightfield.

**Head:** Binocular head, 45° inclined, 360° rotating.

Interpupillary distance: Adjustable.

Dioptric adjustment: On both eyepieces.

**Eyepieces:** WF 10x/20 mm, secured by screw.

**Objective:** Achromatic 1x-3x with anti-fungus treatment.

**Stand:** Fixed stand with focus and handle.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 1W LED, transmitted: 1W LED. Touch brightness control. With rechargeable batteries.

Color temperature: 6,300 K.

### **SFX-91**



Binocular stereomicroscope equipped with turnable objective with 3 magnifications (1x-2x-4x), precision fixed arm with handle, and incredibly bright and uniform led illumination (transmitted and incident), settable through the exclusive touch control. Powered by rechargeable batteries.

Observation mode: Brightfield.

Head: Binocular head, 45° inclined.

Interpupillary distance: Adjustable.

**Dioptric adjustment:** On both eyepieces.

Eyepieces: WF 10x/20 mm, secured by screw.

**Objective:** Achromatic 1x-2x-4x with anti-fungus treatment.

**Stand:** High-grade fixed stand with focus and handle.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 1W LED, transmitted: 1W LED. Touch brightness control. With rechargeable batteries.

Color temperature: 6,300 K.

### SFX-91D



Digital binocular stereomicroscope equipped with with 3 magnifications turnable objective (1x-2x-4x), precision fixed arm with handle, and incredibly bright and uniform led illumination (transmitted and incident), settable through the exclusive touch control. Powered by rechargeable batteries.

**Observation mode:** Brightfield.

Head: Binocular head, 45° inclined, with built-in 3Mp USB digital camera.

**Interpupillary distance:** Adjustable.

**Dioptric adjustment:** On both eyepieces.

**Eyepieces:** WF 10x/20 mm, secured by screw.

**Objective:** Achromatic 1x-2x-4x with anti-fungus treatment.

**Stand:** High-grade fixed stand with focus and handle.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 1W LED, transmitted: 1W LED. Touch brightness control. With rechargeable batteries.

Color temperature: 6,300 K.

Multi-plug 100-240Vac/5Vdc external power supply.

### ST-50Led











Binocular stereomicroscope equipped with fixed objective (2x), swiveling LED incident illumination on an overhanging, flexible arm. Ideal for long working distance (119 mm with standard 2x objective, 165 mm with ST-025, 124 mm with ST-026).

**Observation mode:** Brightfield.

**Heads:** Binocular head, 45° inclined.

Interpupillary distance: Adjustable.

**Dioptric adjustment:** On the left eyepiece.

**Eyepieces:** WF 10x/20 mm, secured by screw.

**Objective:** Achromatic 2x with anti-fungus treatment.

**Stand:** Overhanging stand with focus.

**Focusing:** Rack and pinion controlled by a pair of knobs placed on both sides of the stand.

**Illumination:** Incident: 1W LED on flexible arm.

Color temperature: 6,300 K.

Multi-plug 100-240Vac/6Vdc external power supply.

# MS/SFX Series - Comparison Chart

Model	Head	Eyepieces	Objective	Working Distance	Stand	Illumination
MS-1	-	WF 10x/15.5	10x fixed	6 mm	Fixed with focus	0.3 W LED penlight. Powered by AAA batteries (not included)
MS-2	Monocular, 45° inclined, 360° rotating	WF 10x/16	2x fixed	57 mm	Pillar with focus	-
STX	Binocular, vertical, fixed	WF 10x/16	2x fixed	67 mm	Fixed with focus	Incident: 0.1 W LED Powered by 2 AA batteries (not included)
ST-30FX	Binocular, 45° inclined, fixed	WF 10x/20	2x – 4x selectable	57 mm	Pillar with focus	Incident: 1 W LED Transmitted: 1 W LED
SFX-31	Binocular, 45° inclined, fixed	WF 10x/20	2x – 4x selectable	57 mm	Pillar with focus	Incident: 1 W LED Transmitted: 1 W LED Dial brightness control Rechargeable batteries
SFX-32	Binocular, 45° inclined, fixed	WF 10x/20	1x – 3x selectable	57 mm	Pillar with focus	Incident: 1 W LED Transmitted: 1 W LED Dial brightness control Rechargeable batteries
SFX-33	Binocular, 45° inclined, fixed	WF 10x/20	2x – 4x selectable	57 mm	Fixed with focus and handle	Incident: 1 W LED Transmitted: 1 W LED Touch brightness control Rechargeable batteries
SFX-34	Binocular, 45° inclined, fixed	WF 10x/20	1x – 3x selectable	57 mm	Fixed with focus and handle	Incident: 1 W LED Transmitted: 1 W LED Touch brightness control Rechargeable batteries
SFX-51	Binocular, 45° inclined, 360° rotating	WF 10x/20	2x – 4x selectable	76 mm	Fixed with focus and handle	Incident: 1 W LED Transmitted: 1 W LED Touch brightness control Rechargeable batteries
SFX-52	Binocular, 45° inclined, 360° rotating	WF 10x/20	1x – 3x selectable	76 mm	Fixed with focus and handle	Incident: 1 W LED Transmitted: 1 W LED Touch brightness control Rechargeable batteries
SFX-91	Binocular, 45° inclined, fixed	WF 10x/20	1x - 2x - 4x selectable	60 mm	High-grade fixed with focus and handle	Incident: 1 W LED Transmitted: 1 W LED Touch brightness control Rechargeable batteries
SFX-91D	Binocular, 45° inclined, 3 MP integrated camera	WF 10x/20	1x - 2x - 4x selectable	60 mm	High-grade fixed with focus and handle	Incident: 1 W LED Transmitted: 1 W LED Touch brightness control Rechargeable batteries
ST-50Led	Binocular, 45° inclined, fixed	WF 10x/20	2x fixed	119 mm	Overhanging with focus	Incident: 1 W LED on flexible arm









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# **MS/SFX** Series - Accessories

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DC-001 15104	Plastic dust cover, small 340(l)x400(h) mm. Cleaning kit
ST-001 ST-002 ST-003 ST-004 ST-005 ST-025 ST-026 M-113.1 M-113.2 ST-001.1 ST-032 ST-011 ST-012 ST-014 ST-015 M-114 M-115 M-118 M-173 DC-001	ACCESSORIES FOR OTHER MODELS OF SFX SERIES WF5x/22 eyepieces (pair), 30.5mm diameter. WF10x/20 eyepieces (pair). WF15x/15 eyepieces (pair). WF20x/13 eyepieces (pair). WF10x/20 eyepiece, with micrometric scale (10mm/100um). 1x objective for ST-50Led. 3.5x objective for ST-50Led. Ring adapter, 30mm. Ring adapter, 30.5mm (for ST-50Led). WF5x/22 eyepieces (pair), 30mm diameter (for ST-50Led). Eyecups (pair), flat. White/black object-plate, diameter 60 mm. White/black object-plate, diameter 95 mm (for ST-30FX). Glass stage, diameter 95 mm (for ST-30FX). Glass stage, diameter 60 mm. 0.5x C-Mount projection lens. 0.35x C-Mount projection lens. 0.75x C-Mount projection lens. Photo adapter for APS-C and Full Frame Reflex cameras. Plastic dust cover, small (for all, except ST-50Led).
DC-002	Plastic dust cover, medium (for ST-50Led).





M-005

15104

#### How to connect the cameras to our microscopes.

Please refer to the Adapter reference list on Digital section.

Micrometer slide for software calibration, 1mm/10um, 10mm/100um.

v 1.3.0 - OPTIKA reserves the right to make corrections, modifications, enhancements, improvements and other changes to its products at any time without notice.

#### **Headquarters and Manufacturing Facilities**

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