



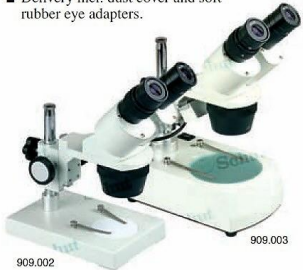
**Stereo zoom microscopes SSM-3/5**

Stereo zoom microscopes with a sharp erect image and a large field of view. Equipped with a double objective (2x/4x is used most; also available 1x/2x and 1x/3x), so that the magnification can be changed with a simple rotary motion. The magnification of the eyepieces is 10x (optionally 5x, 15x and 20x). See for all accessories the pages "SSM stereo microscope accessories".

- SSM-3: stand with round column. SSM-5: fixed stand.
- Microscope head: 360° rotatable (only SSM-5).
- Viewing angle: 45°.
- Interpupillary distance: adjustable (55-75 mm).
- Left eyepiece with diopter adjustment: ±5 dpt.
- Stage plate: black/white (two-sided).
- Delivery incl. dust cover and soft rubber eye adapters.

Item No.	Type	Magnification
909.002	SSM-3A	20x/40x
909.042	SSM-3A	10x/20x
909.032	SSM-3A	10x/30x
909.003	SSM-3C	20x/40x
909.043	SSM-3C	10x/20x
909.033	SSM-3C	10x/30x
909.034	SSM-5AW	20x/40x
909.044	SSM-5AW	10x/20x
909.004	SSM-5AW	10x/30x
909.005	SSM-5CW	20x/40x
909.045	SSM-5CW	10x/20x
909.035	SSM-5CW	10x/30x

See for accessories the pages "SSM stereo microscope accessories".



**Illumination: incident light and backlight**  
Models SSM-3C/5CW are equipped with incident light and backlight (switchable incident light or backlight).

- Stage plate: opal glass. Delivery incl. black/white stage plate. Dark field condenser optional.
- Power supply: 230 Vac (50 Hz).

Type	SSM-3A	SSM-3C	SSM-5AW	SSM-5CW
Eyeiece	M	10x	10x	10x
Objective	M	2x/4x, 1x/2x or 1x/3x	2x/4x, 1x/2x or 1x/3x	2x/4x, 1x/2x or 1x/3x
Total range*	M	10-80x, 5-40x or 5-60x	10-80x, 5-40x or 5-60x	10-80x, 5-40x or 5-60x
Illumination	no	yes	no	yes
Working distance	mm	57	57	70
Max. object height	mm	60	70	20
Travel of rack	mm	40	40	30
Stage plate	ø/mm	60	95	60
Dimensions l/x/w/d/mm	220x115x250	220x115x290	220x115x280	220x115x320
Weight	kg	1.7	2.6	1.7

\*The magnification range of the microscope in combination with the optional eyepieces 5-20x.

**Stereo zoom microscopes with auxiliary lenses SSM-10/20**

Stereo zoom microscopes with a sharp erect image and a large field of view. Equipped with a double objective (2x/4x is used most; also available 1x/2x and 1x/3x), so that the magnification can be changed with a simple rotary motion. The magnification of the eyepieces is 10x (optionally 5x, 15x and 20x). The magnification can be adjusted to your application even more with an optional auxiliary lens (0.5x, 0.75x, 1.5x or 2x). See for all accessories the pages "SSM stereo microscope accessories".

- SSM-10/20C2: stand with round (flattened) column and anti drop facility. SSM-20W: fixed stand.
- Microscope head: 360° rotatable.
- Viewing angle: 45°.
- Interpupillary distance: adjustable (55-75 mm).
- Left eyepiece with diopter adjustment: ±5 dpt.
- Working distance (without aux. lens): 72 mm.
- Stage plate: black/white (two-sided).
- Delivery incl. dust cover and soft rubber eye adapters.

Item No.	Type	Magnification
909.006	SSM-10	20x/40x
909.046	SSM-10	10x/20x
909.036	SSM-10	10x/30x
909.007 <sup>1</sup>	SSM-20C2	20x/40x
909.047 <sup>1</sup>	SSM-20C2	10x/20x
909.037 <sup>1</sup>	SSM-20C2	10x/30x
909.008	SSM-20W	20x/40x
909.048	SSM-20W	10x/20x
909.038	SSM-20W	10x/30x

<sup>1</sup>With LED illumination. See for accessories the pages "SSM stereo microscope accessories".



**Illumination: incident light and backlight**  
Models SSM-20C2/20W are equipped with incident light and backlight, and the luminous intensity is adjustable.

- Models SSM-20C2 are equipped with LED illumination.
- Stage plate: opal glass. Delivery incl. black/white stage plate. Dark field condenser optional.
- Power supply: 230 Vac (50 Hz).

Type	SSM-10	SSM-20C2	SSM-20W
Eyeiece	M	10x	10x
Objective	M	2x/4x, 1x/2x or 1x/3x	2x/4x, 1x/2x or 1x/3x
Total range*	M	5-160x, 2½-80x or 2½-120x	5-160x, 2½-80x or 2½-120x
Illumination	no	yes	yes
Max. object height	mm	100	100
Travel of rack	mm	60	60
Stage plate	ø/mm	75	95
Dimensions l/x/w/d/mm	260x170x290	270x235x330	255x145x330
Weight	kg	3.0	4.3

\*The magnification range of the microscope in combination with the optional eyepieces 5-20x and auxiliary lenses 0.5-2x.

**Stereo microscopes with stepless zoom SSM-E**

Stereo zoom microscopes with a sharp erect image and a large field of view. The special microscope head is equipped with stepless zoom; in combination with the standard 10x eyepieces (optionally 20x) you can smoothly zoom in from 10x to 40x magnification. The magnification can be adjusted to your application even more with an optional auxiliary lens (0.5x, 0.75x, 1.5x or 2x). See for all accessories the pages "SSM stereo microscope accessories".

- SSM-EW: fixed stand. SSM-EC2/3EC2: stand with round (flattened) column and anti drop facility.
- Microscope head: 360° rotatable.
- Viewing angle: 45°.
- Interpupillary distance: adjustable (55-75 mm).
- Both eyepieces with diopter adjustment: ±5 dpt.
- Working distance (without aux. lens): 85 mm.
- Equipped with incident light and backlight, and the luminous intensity is adjustable.
- Stage plate: opal glass.
- Delivery incl. dust cover, soft rubber eye adapters and black/white stage plate. Dark field condenser optional.
- Models SSM-EC2/3EC2 are equipped with LED illumination.
- Power supply: 230 Vac (50 Hz).

Item No.	Type	Magnification
909.009	SSM-EW	10-40x
909.010 <sup>1</sup>	SSM-EC2	10-40x
909.011	SSM-3E	10-40x
908.998 <sup>1</sup>	SSM-3EC2	10-40x

<sup>1</sup>With LED illumination. See for accessories the pages "SSM stereo microscope accessories".



Type	SSM-EW	SSM-EC2	SSM-3E	SSM-3EC2
Eyeiece	M	10x	10x	10x
Objective	M	1-4x	1-4x	1-4x
Total range*	M	5-160x	5-160x	5-160x
Illumination	yes	yes	yes	yes
Max. object height	mm	50	110	110
Travel of rack	mm	60	60	60
Stage plate	ø/mm	95	95	95
Dimensions l/x/w/d/mm	310x150x360	330x235x360	330x150x395	330x235x395
Weight	kg	4.5	4.8	5.1

\*The magnification range of the microscope in combination with the 10x eyepieces, the optional 20x eyepieces and the optional auxiliary lenses 0.5-2x.

**Camera connection**

Models SSM-3E and 3EC2 are equipped with camera connection. See the accessories page for the total magnification range with camera.

**SSM stereo microscope accessories**

**USB microscope cameras**

For viewing and saving images. They fit in the ocular (ø30 mm) of an SSM microscope and/or the adapter bushing (ø23 mm) of the models SSM-3E/3EC2.

- Field of view: see table.
- Resolution: 1.3 Mpx or 5 Mpx.
- Suitable for Windows and Mac OS X.
- Measuring of distances, radii and angles.



**Auxiliary lenses**

The magnification can be adjusted to your application even more with an optional auxiliary lens. Note concerning stereo microscopes with a fixed stand: auxiliary lenses 0.5x is not suitable, and with auxiliary lenses 1.5x and 2x focusing on the stage plate is not possible (the product needs to be positioned higher).



**Item No. Description**

**Pairs of eyepieces for SSM-2/3/5/10/20:**  
909.050 M=5x  
909.051 M=10x  
909.052 M=15x  
909.053 M=20x

**Pairs of eyepieces for SSM-E:**  
909.055 M=10x  
909.057 M=20x

**Eyepieces with crosshair for SSM-E:**  
909.095 M=10x (per piece)  
909.096 M=20x (per piece)

**Auxiliary lenses (for SSM-10/20/E):**  
909.018 M=0.5x  
909.019 M=0.75x  
909.020 M=1.5x  
909.021 M=2x

**USB microscope cameras:**  
774.145 1.3 Mpx, ø23 mm  
774.146 1.3 Mpx, ø23/30/30.5 mm  
774.147\* 5 Mpx, ø23 mm  
774.148\* 5 Mpx, ø30/30.5 mm

\*For displaying the 5 Mpx resolution a Motion JPEG codec is required.

Magnification objective	Microscope magnification / Field of view/mm			
	Eyeiece 5x	Eyeiece 10x	Eyeiece 15x	Eyeiece 20x
<b>Stereo microscope SSM-2:</b>				
2x	10x / ø10.0	20x / ø10.0	30x / ø7.5	40x / ø6.5
<b>Stereo zoom microscope SSM-3/5:</b>				
1x	5x / ø20.0	10x / ø20.0	15x / ø15.0	20x / ø9.5
2x	10x / ø10.0	20x / ø10.0	30x / ø7.5	40x / ø4.6
3x	15x / ø7.0	30x / ø6.7	45x / ø5.0	60x / ø3.1
4x	20x / ø5.0	40x / ø5.0	60x / ø3.7	80x / ø2.3
<b>Stereo zoom microscope SSM-10/20 (without auxiliary lens):</b>				
1x	5x / ø20.0	10x / ø20.0	15x / ø15.0	20x / ø10.0
2x	10x / ø10.0	20x / ø10.0	30x / ø7.5	40x / ø4.9
3x	15x / ø7.0	30x / ø7.0	45x / ø5.0	60x / ø3.2
4x	20x / ø5.0	40x / ø5.0	60x / ø3.8	80x / ø2.5

**Pairs of eyepieces**



**Soft rubber eye adapters**

Item No. Description

909.089 Per pair



Magnification objective	Magnification / Field of view/mm			Field of view camera/mm		
	Eyeiece 10x	Eyeiece 20x	774.145	774.146	774.147	774.148
<b>Stereo microscope with stepless zoom SSM-E (without auxiliary lens):</b>						
from 1x to 4x	10x / ø23.0 40x / ø5.5	20x / ø10.5 80x / ø3.0	4.5x 3.3 <sup>1</sup> 1.2x 0.8 <sup>2</sup>	6.8x 5.0 <sup>1</sup> 1.4x 1.0 <sup>2</sup>	4.5x 3.3 <sup>1</sup> 1.2x 0.9 <sup>2</sup>	4.9 x 3.5 <sup>1</sup> 1.25x 0.9 <sup>2</sup>

<sup>1</sup>Camera intake in adapter bushing. <sup>2</sup>Camera intake in ocular.



## SSM stereo microscope accessories (continued)

### Halogen optical fiber illumination



### Halogen optical fiber ring light<sup>1,2</sup>

Suitable for stereo microscopes SSM-10/20/E.  
Note: not for use in combination with auxiliary lenses.



### Ring lights<sup>1,2</sup>

Suitable for SSM-10/20/E (909.085) or SSM-3/5/10/20/E (909.024).

### Dark field condenser

The contrast of transparent objects is enhanced. Suitable for all SSM stereo microscopes with backlight.

- Diameter: 94 mm.
- Stage: ø27 mm.



### XY measuring table

- Range: X, Y: 25 mm.
- Intake microscope: ø94 mm.
- Turnable object plate with degree indication.
- Excl. two analog micrometer heads (intake ø 12 mm; 906.072 measuring range 25 mm).



### Item No. Description

**Halogen optical fiber illumination:**  
909.027 Light source 24 V, 150 W  
909.030 Single flexible arm  
909.028 Dual flexible arm  
909.029 Optical fiber ring light<sup>1,2</sup>  
909.113 Spare bulb for 909.027

**Ring lights<sup>1,2</sup>:**  
909.024 Circular fluoresce. tube 10 W  
909.059 Spare bulb for 909.024  
909.085 Ring light 60 LEDs

**Spare bulbs (standard illumination):**  
499.377 For SSM-2/3/5  
498.157 For SSM-20W/EW, and for transmitted light SSM-20C2/EC2/3E  
499.379 For incident light SSM-20C2/EC2/3E  
438.211 Fuse F 0.5 A, 250 V

**Other options:**  
909.022 Dark field condenser  
908.999 XY measuring table  
960.255 Dial indicator holder  
635.222 Field of view qualifier

<sup>1</sup> Delivery incl. adapter ring.

<sup>2</sup> Note: microscopes with standard provided incident light, this incident light must be removed before installing the ring light.

### Dial indicator holder

Suitable for stereo microscopes with round column from the series SSM-10/20/E, for height measurements. The accuracy increases with higher magnification.

- Excl. dial indicator.

■ The travel of the microscopes is 60 mm; see the dial indicators category for a suitable dial indicator with measuring range 50 or 60 mm.



### Field of view qualifier

- Accuracy: ±0.002 mm.

635.222

## SSM stereo microscope accessories (continued)

### Large stand

- Base: 255 x 255 mm.
- Column height: 390 mm.
- Arm length: 490 mm.
- Height adjustment: 60 mm.



### Stand with illumination

Equipped with LED incident light and backlight. The luminous intensity is adjustable.

- Column height: 185 mm.



### LCD microscope head

- Screen: 8" color.
- CCD: 1/3" color.
- Zoom lens: 0.65 - 5.5.
- Magnification: 10 - 85x.
- Working distance: 10.5 cm.
- Crosshair can be toggled on/off.
- Field of view: from 1.3 x 1.8 mm (M=85x) to 12 x 16 mm (M=10x).



### Microscope heads

- With or without camera connection.



909.405  
+909.406  
+870.006  
+334.695

### Item No. Description

**Microscope stands:**  
908.997 Large stand  
909.405 Stand with illumination  
870.006<sup>1</sup> Column 400 mm

**Microscope heads:**  
909.092 Microscope head  
909.093 Microscope head with camera connection  
909.406<sup>2</sup> LCD microscope head  
334.695 Mini AC adapter 12 Vdc, 1 A

<sup>1</sup> To be used with stand 909.405 for a larger Z axis range.

<sup>2</sup> Adapter 334.695 required.

## Dino-Lite USB video measuring microscopes

Very versatile and compact digital microscopes with measuring functions for various medical, industrial and educational applications. Optical product inspection can even be performed around your production machine; thanks to the stepless magnification and LED illumination you can display your products very sharply on the screen. Images can be saved as a picture or video file. Geometrical forms, such as distances, radius and angles can be measured.

- Magnification: stepless or fixed.
- Resolution: 1.3 Mpx (1280 x 1024 px) or 5 Mpx (2592 x 1944 px).
- Illumination: 8 LED white ring light.
- With software for Windows and Mac OS X (limited support under Mac OS X).
- Measuring and calibration function and edge detection.
- Plastic or aluminum housing.
- Dimensions: ø32 x 120 mm.
- Connection and power supply: USB 2.0 cable (1.8 m).

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774.228

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### Also available:

- models with magnification up to 900x or coaxial light.
- with PAL, VGA or DVI connection for live images on TV screen, monitor or beamer.
- with special illumination by near-UV, near-IR, fluorescent or stroboscopic LEDs.
- mobile models with portable 5" screen.
- WiFi Streamer for a wireless connection with a tablet or a smartphone.
- ESD-safe models available.
- USB 3.0 models with a higher frame rate.
- models with extra long working distance for a large field of view.

Item No.	774.081	774.129	774.088	774.106	774.024 <sup>1</sup>	774.028 <sup>1</sup>	774.216 <sup>1</sup>	774.228 <sup>1</sup>	774.229 <sup>1</sup>
Magnification (stepless)	10-70x	10-70x	10-70x	10-90x	10-140x	10-140x	10-140x	10-220x	10-140x
Magnification (fixed)	200x	200x	200x	–	–	–	–	–	–
Resolution px	1.3 M	5 M	1.3 M	1.3 M	1.3 M	1.3 M	5 M	5 M	5 M
FLC <sup>2</sup>	–	–	–	–	–	–	✓	✓	✓
EDOF/EDR <sup>3</sup>	–	–	–	–	–	–	✓	✓	✓
AMR <sup>4</sup>	–	–	–	–	–	–	–	✓	✓
Polarizer	–	–	✓	✓	✓	✓	✓	✓	✓
Long working distance	–	–	–	✓	✓	✓	✓	–	✓
Removable front	–	–	–	–	✓	✓	✓	–	✓
Aluminum housing	–	✓	–	✓	–	–	✓	✓	✓
Weight g	105	140	105	140	105	105	125	137	137

<sup>1</sup> New Edge generation with better optics and exchangeable front sides.

<sup>2</sup> FLC: Flexible Light Control.

<sup>3</sup> EDof: Extended Depth of Field / EDR: Extended Dynamic Range.

<sup>4</sup> AMR: Auto-Magnification Read.

## Dino-Lite USB video measuring microscope accessories

Stable positioning is required for sharp pictures and accurate measurements. The measuring microscopes can be positioned stably with a microscope stand.



### Item No. Description

#### Microscope stands<sup>1</sup>:

774.108<sup>2</sup> Stand with height fine adjustment (15 mm) and flexible arm

774.116 Table clamp (span 3 cm) with flexible arm

774.095<sup>3</sup> Stand

774.093<sup>3</sup> Stand with pivoting arm

774.115 Flexible arm for 774.093/095

774.026 High precision aluminium stand

774.117 Heavy-duty stand with table clamp and jointed arm

774.118 Heavy-duty stand with base and jointed arm

774.144 Stand, small model

774.092

774.091

774.130

774.060

419.030

774.121

774.122

855.710

+996.390

+774.155

774.118

774.091

774.130

774.060

419.030

774.121

774.122

855.710

+996.390

+774.155

774.118

774.091

774.130

774.060

419.030

774.121

774.122

<sup>1</sup> All microscope stands are delivered with holder 774.155, except microscope stand 774.108.

<sup>2</sup> To use measuring microscope stand 774.108 in combination with measuring microscopes with polarizer the holder 774.155 shall be ordered separately.

<sup>3</sup> For mounting holder 774.155 on a dial indicator stand.

<sup>4</sup> For use with long working distance microscopes with removable front.

<sup>5</sup> More suitable in combination with the measuring microscopes with polarizer.

<sup>6</sup> ESD-safe models available.

## Stereo microscope SSM

- Magnification: 20x.
- Field of view:  $\varnothing$ 9.5 mm.
- Viewing angle: 90°.
- Interpupillary distance: adjustable (55-75 mm).
- Working distance: 70 mm.
- Max. object height: 30 mm.
- Incident light (LED).



- Stage plate: white plastic,  $\varnothing$ 50 mm.
- Dimensions *l x w x h*: 135 x 120 x 230 mm.
- Power supply: 2 batteries type AA.

Item No.	Type	Magnification
909.012	SSM	20x
<b>Option:</b>		
495.111	Spare battery (2 needed)	

## Stereo microscopes SSM-2

Stereo microscopes on a column stand, with a sharp erect image and a large field of view. The magnification is 20x (eyepiece: 10x, objective: 2x); eyepieces 5x, 15x and 20x are optionally available. See for all accessories the pages "SSM stereo microscope accessories".

- Viewing angle: 45°.
- Interpupillary distance: adjustable (55-75 mm).
- Left eyepiece with diopter adjustment:  $\pm 5$  dpt.
- Objective: with dovetail mounting.
- Stage plate: black/white (two-sided).
- Delivery incl. dust cover and soft rubber eye adapters.

Item No.	Type	Magnification
909.000	SSM-2A	20x
909.001	SSM-2C	20x

See for accessories the pages "SSM stereo microscope accessories".



Type	SSM-2A	SSM-2C
Eyepiece	M 10x	M 10x
Objective	M 2x	M 2x
"Total range"	M 10-40x	M 10-40x
Illumination	no	yes
Working distance	mm 70	mm 70
Max. object height	mm 60	mm 70
Travel of rack	mm 40	mm 40
Stage plate	$\varnothing$ /mm 60	95
Dimensions <i>l x w x h</i> /mm	220x115x250	220x115x290
Weight	kg 1.6	2.6

\*The magnification range of the microscope in combination with the optional eyepieces 5-20x.

- Illumination: incident light and backlight**  
Model SSM-2C is equipped with incident light and backlight (switchable incident light or backlight).
- Stage plate: opal glass. Delivery incl. black/white stage plate. Dark field condenser optional.
  - Power supply: 230 Vac (50 Hz).

