

# Stemi 305 and Stemi 508 – your compact stereo microscopes

**MICROSCOPY + METROLOGY SERVICES**  
Suisse made

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Wir machen Qualität sichtbar  
Nous rendons la qualité visible  
Making quality visible

[www.ryfag.ch](http://www.ryfag.ch)

## Target markets. Jobs-To-Be-Done.

- **Biological Education**
  - Study, determine, dissect. Share.
  - Insects, plants, animals...
- **Routine Work in Bio Labs**
  - Sort, observe, manipulate. Document.
  - Embryos, eggs, larvae ...
- **Industrial Production & Quality Control**
  - Assemble, repair, inspect. Archive.
  - PCBs, micro mechanics, tools...



# Stemi 305 series – Easy. Versatile. Imaging integrated.

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## Easy. All-in-one device.

- Easy to install
- Easy to operate
- Easy to transport
  
- Integrated LED illumination
- Integrated PSU
- Integrated Camera (option)
  
- Pre-configured sets for main applications:  
EDU, LAB and MAT microscope sets



# Stemi 305 series – Easy. Versatile. Imaging integrated.

## Versatile. Modular illumination.

- Changeable reflected light modules:  
ring light, spot, double spot  
→ Optimized light for your application
- Near vertical illumination always integrated
- Two transmitted light units:  
Flat BF-DF unit in „stand K Edu“  
Tilttable mirror unit in „stand K Lab“
- Longlife high brightness LEDs,  
maintenance free



# Stemi 305 series – Easy. Versatile. Imaging integrated.

## Imaging integrated. Wireless.

- Easy and affordable documentation.

„Stemi 305 cam“: Wifi camera integrated.

- Use of Labscope / Matscope Apps
- Suited for Networks in digital classroom

„Stemi 305 trino“ :

- Photo tube with 50/50 split
- Integrated 0,5x camera adapter, c-mount
- Suited for Axiocams up to 2/3“



# Stemi 305 series – LED illumination to stands K

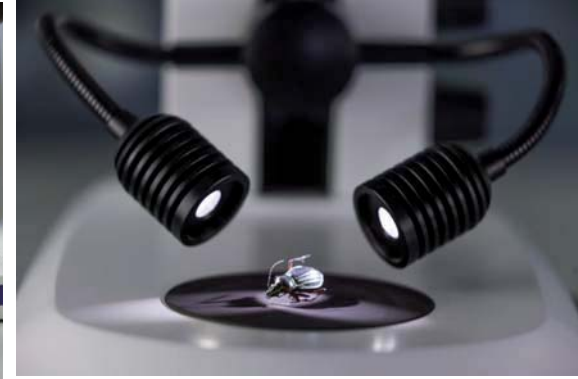
- Integrated vertical illumination



- Spot illumination



- Double arm gooseneck



- Ring light, segmentable



- Contrast TL base



- Flat TL unit BF/DF



# Stemi 305 series – Microscope sets

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## Stemi 305 Edu microscope set

- Stemi 305 bino incl eyepieces
- Integrated vertical illumination
- Spot illuminator K for BF/DF
- flat transmitted light unit BF/DF
- Price:



## Stemi 305 Lab microscope set

- Stemi 305 bino incl eyepieces
- Integrated vertical illumination
- Double arm gooseneck
- tiltable mirror TL base
- Price:



## Stemi 305 Mat microscope set

- Stemi 305 ESD incl eyepieces
- Integrated vertical illumination
- Segmentable LED ring light
- ESD functionality, ESD
- Price

# Stemi 508 series – Quality optics. Precise mechanics. Flexible.

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## Quality optics. Apochromatic.

- Large zoom range 8:1
- Large overview, zoom starts at 0.63x
- Largest field 121 mm (with front optics 0.3x)
  
- Apochromatic corrected zoom optics.
- Range of Apochromatic front optics
- Image free of color fringes
  
- High contrast stereo image
- Excellent stray light reduction
- Distortion free for relaxed viewing



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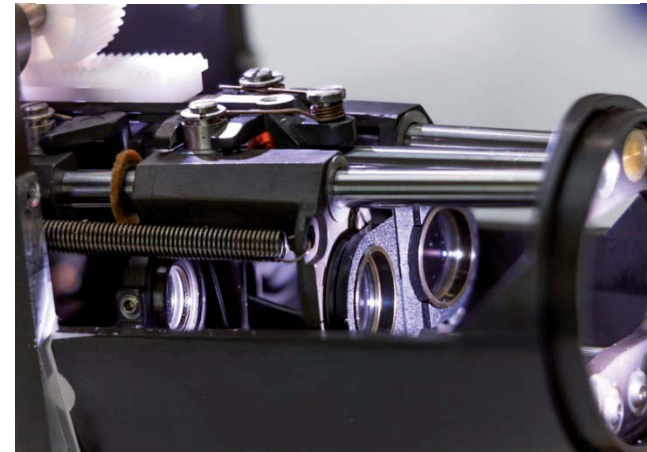


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## Precise mechanics. For long-term use.

- Low tolerance mechanical parts enable exact zoom adjustment
- 10 precise zoom clickstops, detachable
- Dust protection glass included
- Durable and reliable mechanics
- Designed for heavy workload
- Accelerated lifetime tests for 10 yrs of use
- Quality as known from Stemi 2000



# Stemi 508 series – Quality optics. Precise mechanics. Flexible.

## Flexible. For your application.

- For easy documentation:  
0.5x camera adapter included (60N interface)
- For limited lab space :  
Stand K platform (as Stemi 305)
- For higher stand demands:  
Large Stand N with stemi carrier  
Stable boom stands A and SDA
- For brightest light and special contrasts:  
CL4500 LED , various light guides.  
True colors due to CRI 90



# Stemi 508 series – Large Stands and Fiberoptics

- Large stand N



- Double arm boom stand SDA



- CL 4500 LED with CRI 90



- Vertical illuminator S



# Stemi 305 and Stemi 508 Connectivity



ZEISS Labscope imaging App



ZEISS Labscope imaging App

**Stemi 305 cam:**  
„WLAN access point“ Mode



ZEISS Labscope imaging App



ZEISS Labscope imaging App

**Stemi 305 cam:**  
„Add to existing WLAN“ Mode



**Stemi 508 doc + ERc 5s +  
External WLAN router**

# Stemi 305 series – Zoom bodies with documentation

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- Stemi 305 cam



- Stemi 305 trino



# Stemi 305 series – Accessories

- Range of Front optics 3



- M8 interface for holding arms



- Ergo hand rest



- Controller K for stand alone use



# Stemi 305 series – Technical specs

- Stemi 305 binocular
- Stemi 305 trino trinocular (50/50 split),  
with 1.2 MP wifi camera
- Stemi 305 cam
- Zoom range 5:1
- Viewing angle 45°
- Large field of vision 23 mm
- Basic system :
  - Magnification range 8x - 40x
  - Object field 5,8 mm - 29 mm
  - Working distance 110 mm
  - Resolution 200 Lp/mm
- Maximum values:
  - Magnification range 4x - 200x
  - Object field → 58 mm
  - Working distance → 185 mm
  - Resolution → 400 Lp/mm





# Stemi 508 series – Technical specs

- Stemi 508 binocular
- Stemi 508 doc trinocular (100% switch),
- Large zoom range 8:1
- Ergo viewing angle 35°
- Large field of vision 23 mm
- Basic system :
  - Magnification range 6.3x - 50x
  - Object field 4,6 mm - 36 mm
  - Working distance 92 mm
  - Resolution 210 Lp/mm
- Maximum values:
  - Magnification range 2x - 250x
  - Object field → 121 mm
  - Working distance → 287 mm
  - Resolution → 420 Lp/mm



# Stemi 508 series – Components

## 1 Microscopes

Stemi 305

binocular, incl. eyepieces 10x/23

Stemi 305 trino

trinocular (50/50), incl. eyepieces, 0,5x c-mount adapter

Stemi 305 cam

with 1.2 MP wifi camera, incl. eyepieces

Stemi 508

binocular incl. eyepieces

Stemi 508 doc

trinocular (0/100), inkl eyepieces, 0.5x 60N-cam adapter

## 2 Illumination

LED illuminations K (ring, spot, double spot, flat TL, contrast TL)

Fiberoptic cold light sources and light guides (spots, ring, line light, diffusor S, area light, etc)

Polarization equipment for reflected light and transmitted light

## 3 Stands

Table top stands K (4 versions: stand K, Stand K Edu, Stand K Lab, stand K Mat)

Large stand N with column 32, boom stands A and SDA, tilting arm stand U

## 4 Accessories

Eyepieces 10x, 16x, 25x, eyepiece reticles

Achromatic front optics 3 (only 305 series): 0.5x, 0.75x, 1.5x, 2x

Apochromatic front optics 5 (only 508 series): 0.63x, 1.5x, 2x, 0.3x, 0.4x, 0.3-0.5x VFO

adapters for photo and video cameras (only 508 series)

gliding, ball/socket and rotating pol stages

## 5 Recommended Cameras

AxioCam 105 color

cost effective. Fast due to USB 3

AxioCam ERc 5S, Rev 2

most flexible: USB, HDMI, LAN interfaces, SD card

AxioCam ICc 5

5 MPx CCD chip, 2/3" chip for large field of view

