

MICROSCOPES CATALOG



Microscopes that make everyday lab work and teaching easier.

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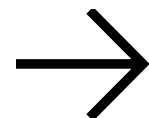
ABOUT SCHNEIDER GEMMOLOGIE GMBH



Schneider Gemmologie GmbH, acquired by the Schmidt & Bender Group in 2023 as a daughter company, carries forward its 75-year legacy from Idar-Oberstein, the historic world capital of gemstones and precision cutting. Our robust instruments deliver reliable performance for gem evaluation, including Various microscopes, diamond loupes and other optical tools used by educational units, Quality departments , jewellers, gem traders and testing labs worldwide.

Founded in 1949 at Dietzenstraße 41, we began producing in-house stereo microscopes and built on Idar-Oberstein's centuries of gemmological craftsmanship, including key 1960s–70s collaborations with partners like Carl Zeiss for advanced optics. The 2023 integration into the Schmidt & Bender Group , were we deal with high-end optical systems, now amplifies our expertise with their renowned engineering resources and global reach.

Supported by Schmidt & Bender Group investment, we're actively expanding operations by introducing several new microscope models tailored for analysis and detailed microscopy in Idar-Oberstein. Together with Schmidt & Bender, we are expanding our product range and international reach to better support customers in related precision inspection fields.





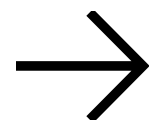
Schmidt & Bender Hungária Optikai Kft. specializes in high-precision optical components including lenses, aspheres, prisms, filters, thin-film coatings and fibre-optic assemblies. Based in Budapest as a subsidiary of the renowned German Schmidt & Bender riflescope manufacturer, we blend German engineering precision with Hungarian optical craftsmanship to serve demanding sectors like hunting, sports optics, defence, medical devices and industrial instrumentation.

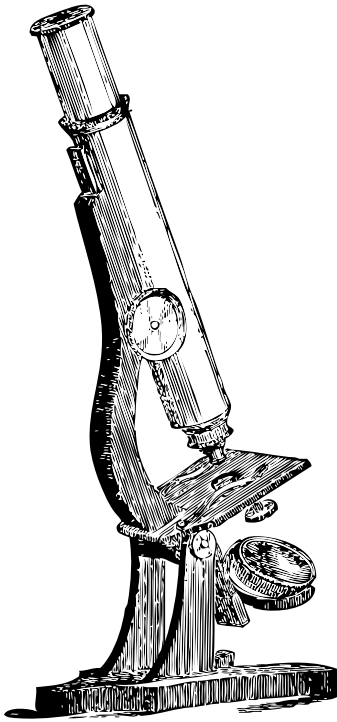
Budapest History

Founded in 1990 at Fehér út 10 in Budapest's historic optics district, our facility began by acquiring precision optics and fibre-optics production lines from the privatized Hungarian Optical Works (MOM). Over three decades, we've evolved into a stable team of 80+ skilled specialists with ISO 9001 certification, becoming a trusted partner for leading European manufacturers of medical, dental and precision industrial equipment.

Tenk Production Unit

To meet rising global demand, we're establishing a dedicated production unit in Tenk, 115 km east of Budapest, with a HUF 350 million investment. This new facility expands our "Made in Hungary" manufacturing footprint, creates local jobs and positions us to deliver complete high-end riflescopes directly to European customers from two strategic sites.





Stereo Microscopes

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LIST OF MICROSCOPES

SG Stereo View Digital Microscope (SSG001-2026)

SG Zoom Master Stereo Microscope(SSG002-2026)

SG Stereo Max Professional Microscope (SSG003-2026)

SG Stereo Digital Microscope with Touch pad (SSG004-2026)

SG ZOOMSTER TRINOCULAR STEREO MICROSCOPE (SSG005-2026)

SG STEREO VIEW DIGITAL MICROSCOPE (SSG001-2026)

Digital Stereo Precision with Integrated Imaging



Standard Configuration

- Viewing Head
 - Inclined binocular head, 360° rotatable
 - Built-in CMOS camera (1.3 Megapixel)
- Eyepiece
 - HWF 10× / FN22
- Objective System
 - Zoom magnification range: 0.67× – 4.5×
- Focusing
 - Coarse adjustment
- Illumination (Adjustable brightness)
 - Incident (Top) Light : 12V / 10W halogen lamp
 - Transmitted (Bottom) Light : 12V / 10W halogen lamp

Optional Accessories

- Additional Eyepieces
 - WF5× / FN16 , WF15× / FN15, WF20× / FN10

SG ZOOM MASTER STEREO MICROSCOPE (SSG002-2026)

Precision 0.8–8× zoom with ergonomic tilting head - perfect for inspection, assembly and quality control.



Specifications

- Viewing head: Tilting binocular head, 0–30° inclination
- Zoom system: 0.8×–8× continuous zoom; zoom ratio 1:10
- Eyepieces (standard): WF10×/ FN22, diopter adjustable
- Objective (standard): 1× plan objective
- Field of view (with auxiliary lens): 1.8–55 mm
- Working distance: 78 mm standard; 123 mm with 0.5× auxiliary lens
- Total magnification (with auxiliary lens): 24×–240×

Stand options (Mechanical)

- Track stand (without light source): (Standard)
 - Base: 12.8" (H) × 9.3" (W) × 11.2" (L)
 - E-arm Focus mount : 76 mm (standard)
 - Vertical range base → E-arm: 6" to 10"

- Pole stand (Optional):
 - Base: 12.8" (H) × 9.3" (W) × 11.2" (L)
 - E-arm Focus mount : 76 mm (standard)
 - E-arm focusing vertical travel: ±1"
 - Vertical range base → E-arm: 3.75" to 11.25"
 - Total Weight : 8 lbs

Optical Technical data (auxiliary lens)

Plain 1× auxiliary lens

- Working distance: 78 mm
- 10× Eyepiece (FN22): Magnification 8×–80× | FOV 25.7–8 mm
- 15× Eyepiece (FN16): Magnification 12×–120× | FOV 20–2.0 mm
- 20× Eyepiece (FN12.5): Magnification 16×–160× | FOV 15.6–1.6 mm

Achro 0.5× auxiliary lens

- Working distance: 123 mm
- 10× Eyepiece (FN22): Magnification 4×–40× | FOV 55.5–5.5 mm
- 15× Eyepiece (FN16): Magnification 6×–60× | FOV 40–4.0 mm
- 20× Eyepiece (FN12.5): Magnification 8×–80× | FOV 31.2–3.2 mm

Optional accessories

- Eyepieces: WF15× / FN16 , WF20× / FN12.5
- Objective / auxiliary optics: Achro 0.5× WD = 220 mm
- Imaging: One-way photo port , 0.4× CCD/C-mount adapter

SG STEREO MAX PROFESSIONAL MICROSCOPE (SSG003-2026)

Precision Stereo Imaging with Ultra-Long Working Distance



The SG Stereo Max is ideal for PCB inspection, precision assembly, and industrial quality control. It is also well suited for material surface analysis, biological specimen observation, and gemstone examination.

Optical system

- Infinity-corrected apochromatic optical system
- Zoom ratio: 7.5:1
- Zoom range: 0.67X – 5X
- Total magnification: 6.7X – 50X (with 10X eyepieces)
- Working distance: 125 mm
- Eyepiece: 10X / Φ 23

Viewing head

- Trinocular viewing head
- Interpupillary distance: 50–76 mm
- 360° rotatable head
- Observation Methods : Brightfield, Darkfield, Simple polarization, Oblique illumination

Imaging Performance

- High-resolution stereo imaging
- Excellent color fidelity
- Enhanced contrast and edge definition
- Smooth transition from macro to micro observation

Mechanical & Ergonomics

- Ultra-long 125 mm working distance
- Spacious sample operation area
- Stable zoom control system
- Comfortable viewing posture for extended use

Optional accessories

- 15X, 20X, 30X eyepieces
- Ring light illumination
- Fiber optic illuminator
- Heating stage
- High-precision platform
- Various stand configurations

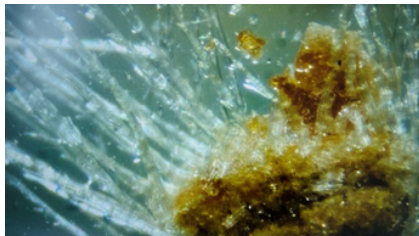
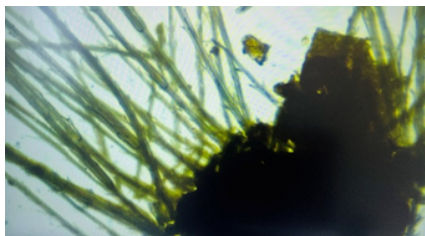
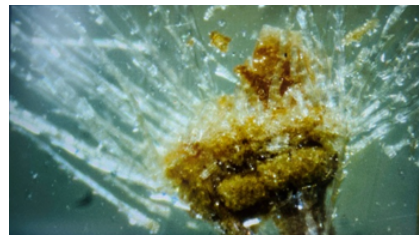
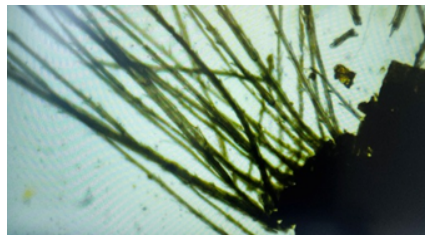
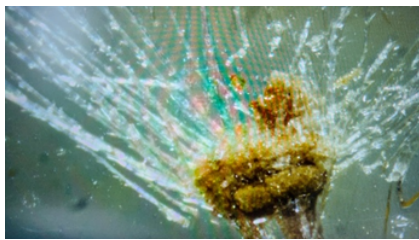
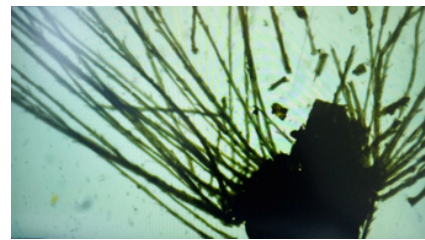
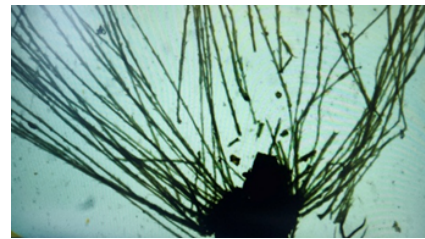
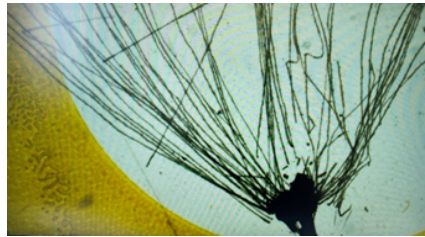
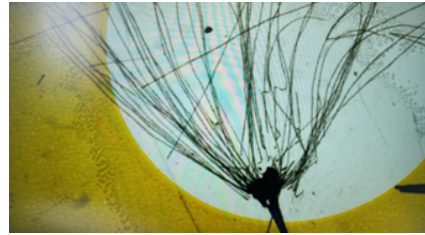


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Magnification

Transmitted light / Darkfield

Reflected light / Brightfield



SG STEREO DIGITAL MICROSCOPE WITH TOUCH PAD (SSG004-2026)

Clear imaging. Effortless control.



Main Body

- Zoom Range: 0.7X – 5X
- Built-in HDR camera with OSD manual control, Sensor: 1/3" CMOS, 4.0 Megapixels
- 16GB internal memory, SD Card slot for additional storage
- Output Interfaces: HDMI, USB 2.0, Mini USB 2.0, SD Card
- Supports wireless keyboard and mouse
- 10-inch touchscreen monitor with adjustable viewing angle (-5° to 15°)
- Large stable base, Vertical lifting range: 225 mm

Illumination

- LED Ring Lamp with 56 LEDs (Adjustable brightness)
- Dual ring lighting design with independent brightness control for each ring
- Color Temperature: 5000–5500K for clear and natural illumination

Optional accessories

- Auxiliary Lenses
 - 1X Main Objective Lens – Working Distance: 105 mm
 - 1.4X Main Objective Lens – Working Distance: 100 mm
 - 0.5X Main Objective Lens – Working Distance: 170 mm

SG ZOOMSTER TRINOCULAR STEREO MICROSCOPE (SSG005-2026)

Wide-field stereo observation with trinocular imaging capability.



Standard Configuration (Included)

- Optical & Viewing System
 - Trinocular viewing head
 - 45° inclined head for comfortable viewing
 - Diopter adjustment for precise focus
- Eyepieces
 - Extra wide-field eyepieces EW10X / 20 mm
- Zoom Objective
 - Continuous zoom magnification 1X – 4.5X
 - Zoom ratio 1 : 4.5
- Working Distance
 - 97 mm standard working distance for convenient specimen handling
- Illumination
 - LED reflected illumination
 - LED transmitted illumination

- Optical Performance
 - High resolution imaging
 - Wide field of view up to Ø20 mm
- Optical Parameters (Magnification varies depending on eyepiece selection)

Auxiliary Objective	Working distance	Magnification range (WF10X)
Fixed	97 mm	7x - 30x
0.75x	120 mm	5.25x - 22.5x
2x	30 mm	14x - 60x

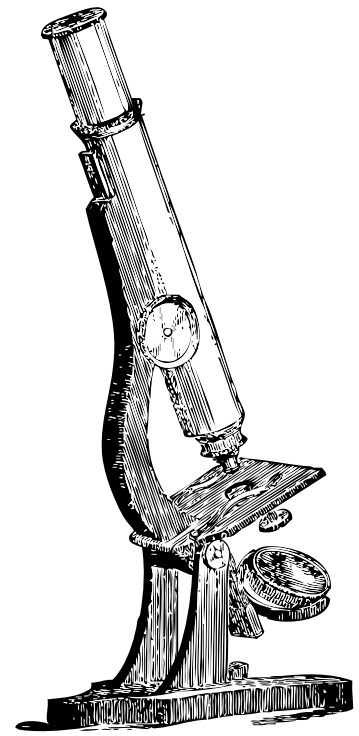
Optional accessories

- Eyepieces : WF15X, WF20X, WF10X / 20 with crosshair
- Auxiliary Objectives
 - 0.5× (WD 180 mm)
 - 0.63× (WD 137 mm)
 - 0.75× (WD 120 mm)
 - 2× (WD 30 mm)
- Camera Adapters
 - C-mount 0.5×, C-mount 1×



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Biological Microscopes



LIST OF MICROSCOPES

**SG Invert Scope 100 Biological Inverted Microscope
(ISG001-2026)**

**SG Bio Pro 1000 Trinocular Compound Microscope
(BSG002-2026)**

**SG Bio Vision 2000 Trinocular Laboratory Microscope
(BSG003-2026)**

**SG BioPhase 1000 Infinity Phase Contrast Microscope
(BSG004-2026)**

**SG Compound Elementary Binocular Microscope
(BSG005-2026)**

**SG EDUVIEW STUDENT MONOCULAR MICROSCOPE
(BSG006-2026)**

SG INVERT SCOPE BIOLOGICAL MICROSCOPE (ISG001-2026)

Optimized for Live Cell Observation with Long Working Distance Precision



Standard Configuration

- Viewing Head
 - Model ISG001-2026T (Trinocular version)
 - Trinocular head, 30° inclined
 - Interpupillary distance: 48–75 mm
 - Binocular tube rotatable 360°
 - Model ISG001-2026B (Binocular version)
 - Tilting binocular head (5°–35°)
 - Interpupillary distance: 48–75 mm
 - Binocular tube rotatable 360°
- Eyepiece : High-Eye-Point Extra Wide Field EWF10× / FN22
- Objectives (Infinity Plan LWD):
 - 4× / 0.10 NA, WD 18 mm
 - 40× / 0.60 NA, WD 2.6 mm (Cover Glass 1.2 mm)
- Phase Contrast Objectives (Infinity Plan):
 - PH10× / 0.25 NA, WD 10 mm
 - PH20× / 0.40 NA, WD 5.1 mm

- Nosepiece : Quintuple nosepiece
- Condenser
 - ELWD Condenser NA 0.3, LWD 72 mm
 - Without condenser LWD 150 mm
- Phase Annulus Plate
 - 10×–20× and 40× phase annulus plate
- Stage
 - Plain stage 160 × 250 mm, Glass insert
- Focusing System
 - Coaxial coarse and fine focusing
 - Vertical objective movement
 - Coarse range: 37.7 mm per rotation
 - Fine focus division: 0.2 mm per rotation
- Illumination
 - 6V / 30W halogen lamp (Adjustable brightness)
- Filters
 - Blue filter
 - Green filter
 - Ground glass filter (Φ45 mm)

Optional accessories

- Infinity Plan LWD Objectives
 - 10× / 0.25 NA, WD = 10 mm
 - 20× / 0.4 NA, WD = 5.1 mm
- Infinity Plan Phase Contrast Objective
 - PH40× / 0.6 NA, WD = 0.35 mm (cover glass 1.2 mm)
- Centering Telescope, tube Φ30 mm
- Phase Annulus Plate
 - Center adjustable phase annulus plate for PH 10×, 20×, 40×
- Stage Holders
 - Auxiliary stage 70 × 180 mm
 - Optional attachable mechanical stage, X–Y coaxial control, Movement range: 120 × 78 mm
 - Φ38 mm petri dish holder
 - Φ54 mm slide glass holder
- Video Adapters
 - 1× C-mount adapter , 0.5× C-mount adapter

SG BIO PRO TRINOCULAR COMPOUND MICROSCOPE (BSG002-2026)

Infinity Plan optics with turret phase contrast

Standard Configuration (Included)



Standard Configuration

- Optical & Viewing System
 - Compensation-free trinocular head
 - 30° inclined viewing angle
 - Interpupillary distance: 55–75 mm
 - Eyepiece: WF10X/18 (Ø23.2 mm)
- Objectives (Standard Achromatic Set) :
 - 4X, 10X, 40X (Spring), 100X (Spring, Oil)
- Nosepiece
 - Quadruple revolving nosepiece
- Stage
 - Double-layer mechanical stage, Size: 180 × 150 mm, Travel range: 75 mm × 50 mm
- Focusing System
 - Coaxial coarse & fine focusing
 - Rack and pinion mechanism
 - Fine focus precision: 0.002 mm
- Condenser
 - ABBE condenser N.A. 1.25
 - Iris diaphragm with filter holder

- Illumination
 - High-brightness Köhler illumination
 - 12V / 20W halogen lamp
 - AC 85–230V power input
 - Adjustable brightness control
- Packaging : Gross weight: 10 kg per set

Optional accessories

- Eyepieces : WF16X, WF20X , P16X
- Additional Objectives
- Achromatic 20X, 60X (Spring)
- Semi-plan: 4X, 10X, 20X, 40X(S), 60X(S), 100X(S)
- Plan: 4X, 10X, 20X, 40X(S), 60X(S), 100X(S)
- Infinity Plan Objective 4X



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SG BIO VISION TRINOCULAR LABORATORY MICROSCOPE (BSG003-2026)

Infinity Clarity. Limitless Capability.



Standard Configuration

- Optical & Viewing System
 - Trinocular head, 30° inclined, 360° rotatable
 - Interpupillary distance: 52–75 mm
 - Diopter adjustment: +5 to -5
 - Eyepiece: WF10X / FN20, high eye-point up to 21 mm
 - Filter :Blue filter
- Objectives (Infinity Plan)
 - Infinity Plan 4X / 0.1 NA, WD = 13.21 mm
 - Infinity Plan 10X / 0.25 NA, WD = 5.03 mm
 - Infinity Plan 40X / 0.65 NA, WD = 0.72 mm
 - Infinity Plan 100X / 1.25 NA, WD = 0.17 mm
- Nosepiece : Backward quadruple nosepiece
- Focusing System
 - Low-position coaxial coarse & fine focus
 - Coarse adjustment: 14 mm per rotation
 - Fine adjustment: 0.1 mm per rotation
 - Fine focus division: 0.001 mm

- Stage
 - Double-layer mechanical stage, 156×138 mm
 - Moving range: 76 × 54 mm
 - Low-position X–Y coaxial control knob
 - Holds two specimen slides
- Condenser
 - Abbe N.A. 1.25 with aperture iris diaphragm
 - Slot for phase contrast slide
 - Center adjustable
 - Color-coded diaphragm scale markings
- Illumination & Power
 - 6V / 20W halogen lamp
 - Köhler illumination with field diaphragm
 - Easy bulb replacement
 - Power : 100–240V wide voltage range
- Weight : approx 12 kg
- Certification : ISO9001, ISO14001, ISO13485, CE Certified

Optional Accessories

- Viewing Heads
 - Binocular head (30° inclined, 360° rotatable, IPD 48–75 mm)
 - Trinocular head (30° inclined, 360° rotatable, IPD 48–75 mm)
- Eyepieces
 - WF10× / FN22 (High-Eye-Point 21 mm)
 - WF16× / FN13 (High-Eye-Point 21 mm)
 - WF10× / FN20 Reticle Eyepiece
 - WF10× / FN22 Reticle Eyepiece
- Additional Objectives
 - Infinity Plan 20X / 0.4 / 0.17, WD 2.71 mm
 - Infinity Plan 60X / 0.80 / 0.17, WD 0.35 mm (Spring)
- Nosepiece Upgrade
 - Quintuple reversed nosepiece
- Illumination Upgrade
 - LED 3W
 - Reflection mirror
- Optional Mechanical Stage:
 - Rackless design, 185 × 177 mm platform, 75 × 50 mm travel range, ergonomic low-position X–Y coaxial controls, supports two slides.

- Filters
 - Green filter
 - Yellow filter
 - Frosted glass
- Polarization
 - Analyzer + Polarizer
- Dark Field
 - Dry dark field condenser (4X, 10X, 40X, 100X)
- Centering Telescope
- Phase Contrast
 - Phase contrast condenser NA 1.25 (10X–100X)
 - Infinity Plan Phase Contrast Objectives (Positive): 10X, 20X, 40X, 60X, 100X
 - Infinity Plan Phase Contrast Objectives (Negative): 10X, 20X, 40X, 60X, 100X
 - Phase contrast slider for Infinity Plan Phase Contrast Objectives : 10X, 20X, 40X, 60X, 100X
- Fluorescence Attachment
 - Fluorescence Set 100W
 - UV / V / B / G excitation filters
- Adapters
 - CCD 1.0X
 - CCD 0.5X
 - CCD 0.25X
 - Canon EOS digital adapter



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SG BIOPHASE INFINITY PHASE CONTRAST MICROSCOPE (BSG004-2026)

Infinity Plan optics with turret phase contrast



Standard Configuration (Included)

- Centering system: Integrated centering telescope
- Filter: Blue filter
- Illumination: 6V 20W halogen lamp, Köhler illumination with field diaphragm, easy bulb replacement
- Camera interface: 1× CCD adapter
- Power supply: Wide-range input 100–240V
- Packing details: Gross weight: 12 kg

Standard Optical Specifications

- Viewing Head: Trinocular viewing tube, interpupillary distance 52–75 mm, 30° inclined, trinocular light split 20:80, high-quality prism, diopter adjustment +5 to -5
- Eyepiece: WF10×/20 mm, high eye-point up to 21 mm, diopter adjustment ±5
- Nosepiece: Quadruple reversed nosepiece
- Focusing system: Coaxial coarse and fine focus, low-position design
- Coarse focus: Adjustable tension, 14 mm per rotation
- Fine focus: 0.1 mm per rotation, minimum reading 1 micron (left-side fine knob)

- Stage: Double-layer mechanical stage, size 156 × 138 mm, travel range 76 × 54 mm
- Stage control: Low-position X–Y coaxial controls, holds up to two specimen slides
- Condenser: Abbe condenser NA 1.25 with iris diaphragm and phase contrast slot
- Condenser features: Center-adjustable, color-coded phase rings matched to objective magnifications

Optional accessories

- Phase contrast condenser: Multi-purpose phase contrast condenser with dark field opening for PH10×–20×–40×
- Phase contrast objectives (positive): Infinity Plan Phase Contrast Objectives: 10×, 20×, 40×, 100×
- Dark field: Dry dark field condenser for objectives 4×, 10×, 40×, 100×
- Viewing heads: Binocular or trinocular head, 30° inclined, 360° rotatable, interpupillary distance 48–75 mm
- Additional eyepieces: WF10×/22 mm (high eye-point 21 mm); WF16×/13 mm (high eye-point 21 mm); Reticle eyepiece WF10×/20 mm
- Objectives: Infinity Plan objectives: 4×, 10×, 20×, 40×, 60×, 100×
- Mechanical stage upgrade: 185 × 177 mm stage, travel range 75 × 50 mm, low-position left/right hand X–Y controls, two-slide holder
- Illumination upgrade: LED illumination module, 3W
- Filters: Green filter; Yellow filter; Frosted glass
- Polarization kit: Analyzer + polarizer set
- Phase contrast objective (positive): 60×
- Phase contrast objectives (negative): 10×, 20×, 40×, 80×, 100×
- Imaging adapters: CCD adapter 0.5×; CCD adapter 0.25×; Canon EOS digital camera adapter

SG COMPOUND ELEMENTARY BINOCULAR MICROSCOPE (BSG005-2026)

Reliable Clarity for Everyday Laboratory Use



Standard Configuration (Included)

- Viewing Head
 - Compensation-free binocular head
 - 30° inclined viewing angle
 - Interpupillary distance: 55–75 mm
- Eyepiece
 - WF10X / 18 mm wide-field eyepiece
- Objectives
 - Achromatic 4X
 - Achromatic 10X
 - Achromatic 40X (spring-loaded)
 - Achromatic 100X (spring-loaded)
- Nosepiece
 - Quadruple revolving nosepiece for quick objective switching
- Stage
 - Double-layer mechanical stage for precise slide positioning

- Focusing System
 - Coaxial coarse and fine focusing
 - Fine focus scale value: 0.002 mm
- Condenser
 - Abbe condenser N.A. 1.25
 - Equipped with iris diaphragm and filter holder
- Light Source
 - Incandescent lamp
 - 220V / 20W or 110V / 20W

Optional accessories

- Eyepieces
 - WF16X wide-field eyepiece
 - WF20X wide-field eyepiece
- Objectives
 - Achromatic 20X
 - Achromatic 60X (spring-loaded)
- Lighting
 - LED illumination upgrade



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SG EDUVIEW STUDENT MONOCULAR MICROSCOPE (BSG006-2026)

Reliable microscopy designed for classroom and teaching laboratories.



Standard Configuration (Included)

- Optical & Viewing System
 - Monocular viewing head
 - 45° inclined head with 360° rotation
- Eyepiece
 - WF10X wide-field eyepiece
- Objectives (Standard Achromatic Set)
 - 4X
 - 10X
 - 40X (Spring-loaded)
- Nosepiece
 - Triple revolving nosepiece
- Stage
 - Plain stage with attachable mechanical stage
 - Stage size: 110 × 120 mm
 - Slide movement range: 60 mm × 30 mm

- Focusing System
 - Coaxial coarse and fine focusing adjustment
- Condenser
 - Single lens condenser NA 0.65
 - Iris diaphragm
- Illumination
 - Incandescent lamp 110V / 220V – 20W
- Accessories Included
 - Dust cover
 - Spare bulb

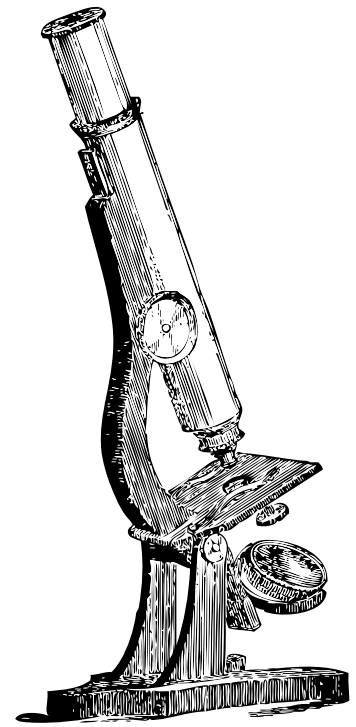
Optional accessories

- Eyepieces: WF5X, WF16X
- Objectives: Achromatic 20X, 60X (Spring)
- Illumination Options:
 - 6V 20W halogen lamp with adjustable brightness
 - Concave mirror
 - 1W LED illumination



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Metallurgical Microscopes



LIST OF MICROSCOPES

**SG MetallPro Inverted Metallurgical Microscope
(MSG001-2026)**

**SG DIC Vision Trinocular Metallurgical Microscope
(MSG002-2026)**

SG METAL PRO INVERTED METALLURGICAL MICROSCOPE (MSG001-2026)

Precision Focus for Advanced Metallography.



Standard Configuration

- Viewing System
 - Compensation-free trinocular head
 - 45° inclined viewing angle
- Eyepieces
 - Wide field WF10X / 18 mm
 - Wide field WF10X / 18 mm with 0.1 mm crosshair
- DIN Plan Metallurgical Objectives
 - 4X / 0.1, WD 25 mm
 - 10X / 0.25, WD 11 mm
 - 20X / 0.4, WD 9 mm
 - 40X / 0.6, WD 3.8 mm
- Filters
 - Flashboard filters: Blue, Green, Yellow
- Focusing System
 - Coaxial coarse and fine focusing
 - Rack and pinion mechanism
 - Fine focusing scale value: 0.002 mm

- Nosepiece
 - Quadruple revolving nosepiece
- Stage
 - Double-layer mechanical stage
 - Stage size: 172 × 142 mm
 - Moving range: 30 mm × 30 mm
- Illumination (EPI)
 - Aperture iris diaphragm
 - Field iris diaphragm
- Light Source
 - 12V / 20W halogen lamp
 - AC 85–230V power input
 - Adjustable brightness
- Polarizing System
 - Analyzer rotatable 360°
 - Polarizer and analyzer movable in/out of optical path
- Measuring Tool : 0.01 mm micrometer

Optional Accessories

- Additional DIN Plan Metallurgical Objectives : 50X, 80X, 100X
- Software : Professional Metallurgical Image Analysis Software
- Adapters
 - CCD adapters: 0.5X, 0.57X, 0.75X, Photo adapter
 - Dark Field: Simple Dark Field Kit

SG DIC VISION TRINOCULAR METALLURGICAL MICROSCOPE (MSG002-2026)

Advanced DIC Precision for Metallurgical Excellence



Standard Configuration (Included)

- Optical System
 - Infinite optical system, Extra wide field eyepiece EW10×/22
- Objectives (Infinite Plan Achromatic)
 - 10× / 0.25 / ∞ / – (BF/DF), WD 10.0 mm
 - 20× / 0.4 / ∞ / 0 (BF/DF), WD 4.30 mm
 - 40× / 0.65 / ∞ / 0.17, WD 0.54 mm
 - 100× / 1.25 / ∞ / 0.17, WD 0.13 mm
 - 5× / 0.12 / ∞ / – (BF/DF), WD 12 mm
 - 40× / 0.6 / ∞ / 0 (BF/DF), WD 2.90 mm
 - 50× / 0.75 / ∞ / 0 (BF/DF), WD 0.32 mm
 - 100× / 0.8 / ∞ / 0 (BF/DF), WD 2 mm
- DIC System : DIC capability: 20× and 100×
- Mechanical Specifications
 - Maximum specimen height: 30 mm , Sample height capacity: 50 mm
 - Backward quintuple nosepiece
 - Coaxial coarse and fine focusing , Fine focusing precision: 1 μm

- Viewing Head
- Siedentopf trinocular viewing head
- 30° inclined
- Interpupillary distance: 48–75 mm

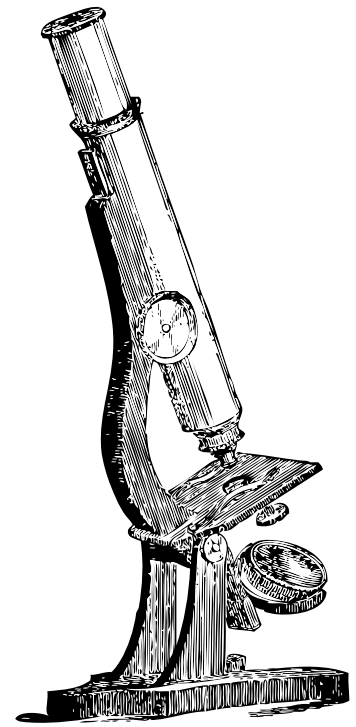
Illumination System

- Incident (Reflected) Light
 - 24V / 100W halogen lamp with adjustable brightness
 - Köhler illumination with aspherical condenser
 - Polarizer and analyzer included
 - Integrated device for polarizer and analyzer
 - Filters: Blue, Green, Yellow, Ground glass
- Transmitted Light
 - Swing-out condenser NA 0.9 / 0.25
 - 24V / 100W halogen light with aspherical condenser
 - Blue filter
- Filters : ND25, ND6
- Stage
 - Double-layer mechanical stage 186 × 138 mm
 - Travel range: 74 mm × 50 mm
 - Glass specimen preparation plate
 - Specimen preparation plate
 - Slide glass
- Attachments & Interfaces
 - Specimen presser
 - Photo attachment
 - Video attachment: C-Mount 1× and 0.5×

Optional Accessories

- Infinity Plan Achromatic Objective 40× / 0.6 / ∞ / 0 (BF/DF)
- ND25 filter
- ND6 filter
- DIC 20×
- DIC 100×
- Polarizer & Analyzer
- Integrated device for polarizer and analyzer
- C-Mount 1× , C-Mount 0.5×
- Specimen presser

Video Microscopes



LIST OF MICROSCOPES

**SG HD View Video Microscope
(VSG001-2026)**

SG HD VIEW VIDEO MICROSCOPE (VSG001-2026)

Real-Time HD Video Microscopy for Precision Inspection

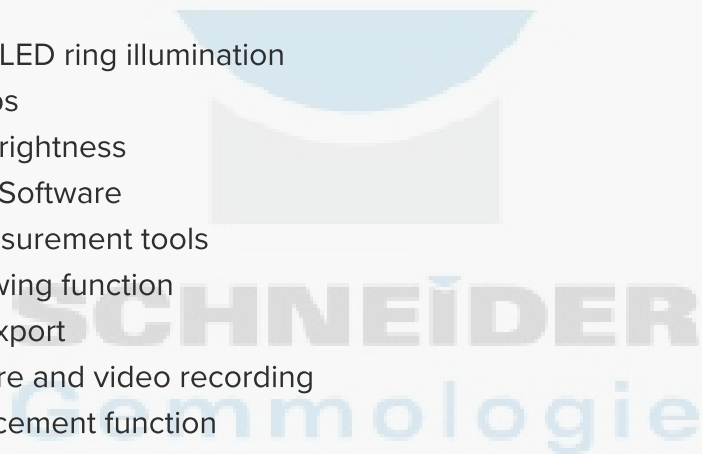


The SG HDView Video Microscope is an intelligent all-in-one digital inspection system designed for industrial analysis, precision measurement, electronics repair, quality control, and laboratory applications. Featuring a large HD display, high-resolution imaging, LED illumination, and integrated measurement tools, it delivers sharp, real-time visual inspection with advanced functionality.

Standard Configuration

- Optical System
 - Magnification: 12X–78X (Zoom)
 - Optional magnification range: 9X–220X
 - Built-in 0.35X video coupler
 - Standard 1X objective lens
 - Optional lenses: 0.75X, 1.5X, 2X
 - Working distance: 100 mm (max 198 mm optional)
 - Field of view: 23 mm – 3 mm


- Camera System
 - 2.0 MP HD camera
 - Resolution: 1920 × 1080 (Full HD)
 - Frame rate: 60 fps @ 1920×1080
 - Sensor: 1/2" SONY sensor
 - Pixel size: 2.75 × 2.75 μm , SNR: 65 dB
 - Manual exposure control , Manual focus control
- Display
 - 12" HD LCD monitor
 - 1080P resolution
 - Wide screen
 - Multi-angle adjustment
 - HDMI/VGA output port
 - External HDMI display support
- Illumination
 - High-quality LED ring illumination
 - 144 LED bulbs
 - Adjustable brightness
- Measurement & Software
 - Graphic measurement tools
 - Camera drawing function
 - Excel data export
 - Image capture and video recording
 - Edge enhancement function
 - HDR depth of field adjustment
- Crosshair overlay
 - 14 measurement tools available
 - Save images and measurement data to USB Stick
- Operation
 - Mouse operation or manual control
 - USB storage support
 - Frame selection area drawing
 - Freeze frame function
 - Image comparison function
 - Mirror image (horizontal/vertical)
 - Color / black & white mode
 - Electric frequency adjustment
 - Color temperature adjustment



- Interfaces
 - USB port (U-Disk storage)
 - HDMI output
 - VGA output
 - Working voltage: 5V–12V
- Mechanical Specifications
 - Base size: 260 mm (X) × 320 mm (Y)
 - Height: 480 mm
 - Camera size: 280 × 180 × 67 mm
 - Weight (microscope): 5.5 kg
 - Display size: 280 × 180 × 16 mm
 - Display resolution: 1920 × 1080

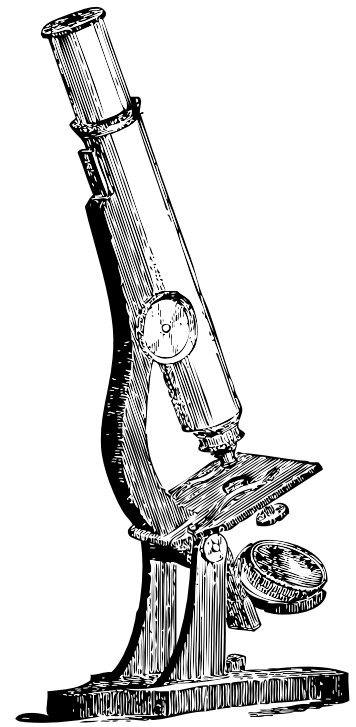
Key features

- All-in-one HD digital inspection system
- Real-time image comparison
- Excel output for measurement data
- Built-in reticle and cross-line functions
- USB storage integration
- External monitor connectivity
- High-definition industrial inspection performance

The logo for Schneider Gemmologie features a stylized blue and grey graphic above the company name. The name 'SCHNEIDER' is in a bold, grey, sans-serif font, and 'Gemmologie' is in a blue, sans-serif font below it.

SCHNEIDER
Gemmologie

Gemological Microscopes



LIST OF MICROSCOPES

**SG GEMPRO JEWELRY INSPECTION MICROSCOPE
(GSG001-2026)**

SG GEMPRO JEWELRY INSPECTION MICROSCOPE (GSG001-2026)

Precision microscope for professional gemstone inspection



A professional stereo microscope designed specifically for jewelry inspection and gemstone evaluation. The system provides clear imaging, multiple observation modes, and flexible illumination to meet the requirements of diamond grading, gemstone analysis, and jewelry quality control.

Standard Configuration

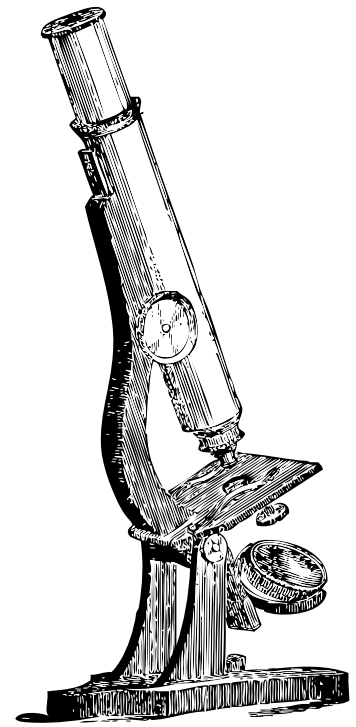
- Optical & Viewing System
 - Binocular viewing head
 - 45° inclined head with 360° rotation
 - ±5° diopter adjustment
 - Interpupillary distance 54 – 75 mm
- Zoom System
 - Continuous zoom magnification 0.67X – 4.5X
 - Zoom ratio 1 : 6.7
- Eyepieces
 - WF10X / 22 mm wide-field eyepieces with eyecups

- Total Magnification
 - 6.7X – 45X standard magnification
 - Up to 225X with auxiliary lenses
- Working Distance
 - 100 mm with standard 1X objective lens
 - Adjustable 26 – 287 mm with optional auxiliary lenses
- Observation Modes
 - Bright Field (Reflected & Transmitted)
 - Dark Field Observation
 - Polarized Observation
- Gemstone Holding System
 - Wire clamp for larger gemstones
 - Flat clamp for smaller samples
- Stand
 - Professional jewelry microscope stand
 - Rotating base with adjustable inclination
 - Built-in dark field and polarizing device
- Illumination
 - Upper illumination: 7W fluorescent lamp or 1W LED
 - Transmitted illumination: 6V / 30W halogen lamp
- Optical Performance
 - Fully coated optical system
 - High contrast, sharp and clear gemstone imaging

Optional accessories

- Eyepieces
 - WF10X / FN22 (high-eyepoint, diopter adjustable, micrometer compatible)
 - WF15X / FN16
 - WF20X / FN12
 - WF25X / FN9
- Auxiliary Objectives
 - 0.3X – Working distance 287 mm
 - 0.4X – Working distance 217 mm
 - 0.5X – Working distance 177 mm
 - 0.75X – Working distance 177 mm
 - 1.5X – Working distance 47 mm
 - 2.0X – Working distance 26 mm

Camera & Accessories



LIST OF MICROSCOPES

SG MicroVision CMOS Microscope Camera (CSG001-2026)

SG TouchView Android Microscope Camera (ASG001-2026)

SG DigiScope USB Microscope (DSG001-2026)

SG MICROVISION CMOS MICROSCOPE CAMERA (CSG001-2026)

From eyepiece to screen in one step.



Our SG MicroVision CMOS camera series offers four USB 2.0 models from 5.1 MP to 10 MP, all with color CMOS sensors, binning modes and multi-platform software support for still images and video. They share the same simple USB power and passive cooling concept, so you can choose resolution and performance without changing handling or system requirements.

Additional Hardware Specs

- Spectral Range: 380–650 nm (with IR-cut filter); AR coating for monochromatic cameras
- White Balance: ROI-based or manual temperature/tint adjustment
- Color Processing: Ultra Fine Color Engine
- SDK Support: Multi-platform (Windows/Linux/macOS/Android) with Native C/C++, C#/VB.NET, Python, Java, DirectShow, TWAIN
- Recording: Still images and video
- Cooling: Passive natural convection

Standard Package Contents

- USB 2.0 digital camera , High-speed USB 2.0 cable

Technical specification				
Specification	SG MicroVision 10	SG MicroVision 9	SG MicroVision 8	SG MicroVision 5.1
Sensor & format	10 MP, IMX577 (C), 1/2.3" (5.56 × 4.26 mm)	9 MP, special (C), 1/2.4" (5.41 × 4.05 mm)	8 MP, special (C), 1/2.5" (5.06 × 3.79 mm)	5.1 MP, AR0521 (C), 1/2.5" (5.70 × 4.28 mm)
Pixel size	1.55 × 1.55 µm	1.55 × 1.55 µm	1.55 × 1.55 µm	2.2 × 2.2 µm
Sensitivity / dark signal	250 mV @ 1/30 s; 0.25 mV @ 1/30 s	250 mV @ 1/30 s; 0.25 mV @ 1/30 s	250 mV @ 1/30 s; 0.25 mV @ 1/30 s	18.8 ke ⁻ /lux; 73 dB DR; 40 dB SNR
Max resolution (fps)	3.3 fps @ 3584 × 2748	3.5 fps @ 3488 × 2616	4 fps @ 3264 × 2448	7.0 fps @ 2592 × 1944
Medium resolution (fps)	12 fps @ 1792 × 1374	13 fps @ 1744 × 1308	15 fps @ 1600 × 1200	27.7 fps @ 1296 × 972
Low resolution (fps)	53 fps @ 896 × 684	55 fps @ 872 × 654	62 fps @ 800 × 600	100.5 fps @ 648 × 486
Binning	1 × 1, 2 × 2, 4 × 4	1 × 1, 2 × 2, 4 × 4	1 × 1, 2 × 2, 4 × 4	1 × 1, 2 × 2, 4 × 4
Exposure time	0.4 ms – 2000 ms	0.4 ms – 2000 ms	0.4 ms – 2000 ms	0.2 ms – 2000 ms

Operating Environment

- Temperature:
 - Operating: –10°C to +50°C
 - Storage: –20°C to +60°C
- Humidity (non-condensing):
 - Operating: 30–80% RH
 - Storage: 10–60% RH

Power & Software

- Power: DC 5V via USB (PC-powered)
- OS Compatibility: Windows XP/Vista/7/8/10 (32/64-bit), macOS, Linux
- PC Requirements:
 - CPU: Intel Core 2 2.8 GHz or higher
 - RAM: 2 GB minimum
 - USB: High-speed USB 2.0 port
 - Display: 17-inch or larger , Drive: CD-ROM

SG TOUCHVIEW ANDROID MICROSCOPE CAMERA (ASG001-2026)

Android powered precision for Every Microscope



The SG Stereo Max is ideal for PCB inspection, precision assembly, and industrial quality control. It is also well suited for material surface analysis, biological specimen observation, and gemstone examination.

Device & Imaging

- Device type : Integrated HD digital camera tablet running Android 11
- Imaging sensor : 1/1.8" CMOS image sensor
- Resolution : 8 megapixels with 4K UHD output support
- Pixel size : 2.0 × 2.0 μm

Display & System

- Display: 10.5" high-definition capacitive touchscreen
- Operating system: Android 11

Connectivity & Interfaces

- Wireless LAN: Dual-band 2.4 GHz / 5 GHz with Wi-Fi 6 support
- Bluetooth: Version 5.0
- Interfaces: 2 × USB 3.0, 1 × USB 2.0, HDMI output, Gigabit Ethernet

Power & Media

- Power supply: 12V DC, 2A
- Image format: 8.0 MP JPEG still images
- Video output: Full HD 1080p

Image Control & Operation

- Image controls: Brightness, contrast, saturation, and color temperature adjustment
- Camera functions: Image mirroring, image flipping, freeze frame, monochrome mode
- User operation: Touchscreen control with mouse and keyboard support, Android interaction

Physical & Compatibility

- Dimensions: 237 × 169 × 10.5 mm
- Weight: Approximately 700 g
- Compatibility: Suitable for all trinocular microscopes

Image Control & Operation

- Data storage: Photo and video recording with image preview
- Annotation tools: Coordinate points, crosshair overlay, coordinate axes, text annotations
- Linear measurement: Straight lines, curved lines, folded paths, parallel distances, point-to-line measurement
- Geometric tools: Line segment length, fixed-radius circles, 2-point and 3-point circles, concentric circles
- Area measurement: Polygonal and rectangular area calculation
- Measurement software: Built-in S-Eye 2.0 system

SG DIGISCOPE USB MICROSCOPE (DSG001-2026)

5MP Precision Inspection — Compact, Clear, Connected.



Imaging System

- Image Sensor: 5 Mega Pixels (true resolution)
- Still Image Resolution: 5M, 3M, 1.3M, VGA, QVGA
- Video Resolution: 5M, 3M, 1.3M, VGA, QVGA
- Frame Rate: Maximum 30 fps under 600 Lux brightness
- Magnification Range: 20× – 200× (up to 300×)
- Focus Type: Manual focus ; Focus Range: 10 mm – 50 mm

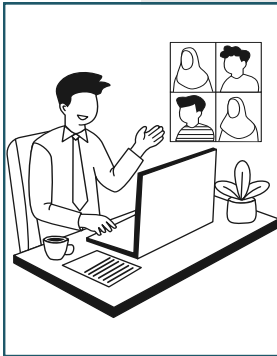
System & Software

- Video Format: AVI ; Photo Format: JPEG or BMP
- Light Source: 8 adjustable LEDs
- PC Interface: USB 2.0
- Windows Compatibility: Windows 7 / 10 / 11
- Mac Compatibility: Mac OS X 10.6 or above
- OSD Languages: English, German, Spanish, French, Russian
- Bundled Software: MicroCapture with measurement function

Physical Specifications

- Product Dimensions: 110 mm (L) × 33 mm (Diameter)
- Packing Weight: 900 g

OUR TEAM

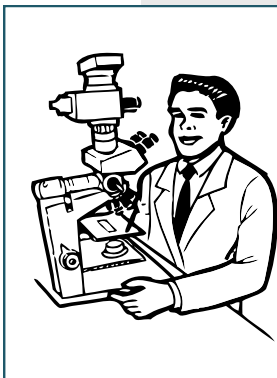


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