ZEISS Stemi 355

Compact Size, Big Impact: Your Stereo Microscope
for Work, Study, and Discovery

zeiss.com/stemi-355

Seeing beyond

Compact Size, Big Impact: Your Stereo Microscope for Work, Study, and Discovery

ZEISS Stemi 355 is your compact stereo microscope – equally at home in the biology classroom, research lab or on the industrial shop floor.

Whether you dissect samples, study coins, minerals, insects, flowers, circuit boards or other biological samples or simply look for a proper microscope for your hobby – predefined microscope sets will offer the optimal configuration for your applications. ZEISS Stemi 355 lets you observe samples as they really are: three-dimensional and crisp in contrast – no preparation needed.

Enjoy all the advantages of an easy-to-use microscope with integrated LED illumination for reflected and transmitted light – plus fast, easy-to-use documentation. This Greenough microscope will give you crisp 3D impressions, versatile object illumination and easily acquired images to share, whenever you want.

Simpler. More Intelligent. More Integrated.

As easy as A-B-C, yet powerful in performance.
It's compact and it's fun. Yet Stemi 355 integrates everything you need into a single Greenough stereo microscope. Just plug it in and switch it on – that's the installation done, with no extra accessory boxes or cables to clutter up your space. Then all you have to do is illuminate your object, focus and start snapping images. You will be impressed by the image quality, this compact stereo microscope delivers.

Illumination. Crisp for Any Application.
Depending on your application, Stemi 355's integrated illumination is variable to contrast every specimen at its best. Simply press a button to select and combine up to two reflected light contrasts and transmitted light. While each zoom body is equipped with near-vertical light to illuminate deepenings in the sample, the second reflected light and transmitted light units are interchangeable. This enables predefined microscope sets for education, laboratory or industrial use to optimize contrast in your application range. White LEDs in your Stemi 355 generate the bright-light of daylight color so each image appears crisp and clear.

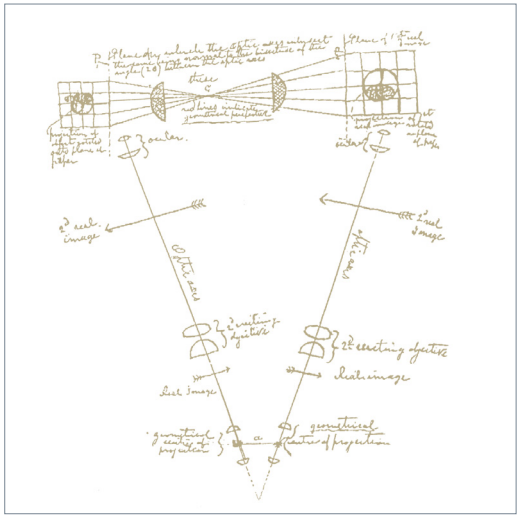
Documentation. On demand.
Documentation is important for lab work, essential for industrial inspection. In the classroom your ability to acquire and share images is a key resource for vivid, exciting science courses. Stemi 355 comes with an optional phototube for access to any ZEISS Axiocam microscope camera. Create your own virtual classroom by using Labscope, to stream live images from several microscopes to all connected mobile devices. It's easy to share, compare and discuss the work of all the students. Fun, too.

Your Insight into the Technology Behind It

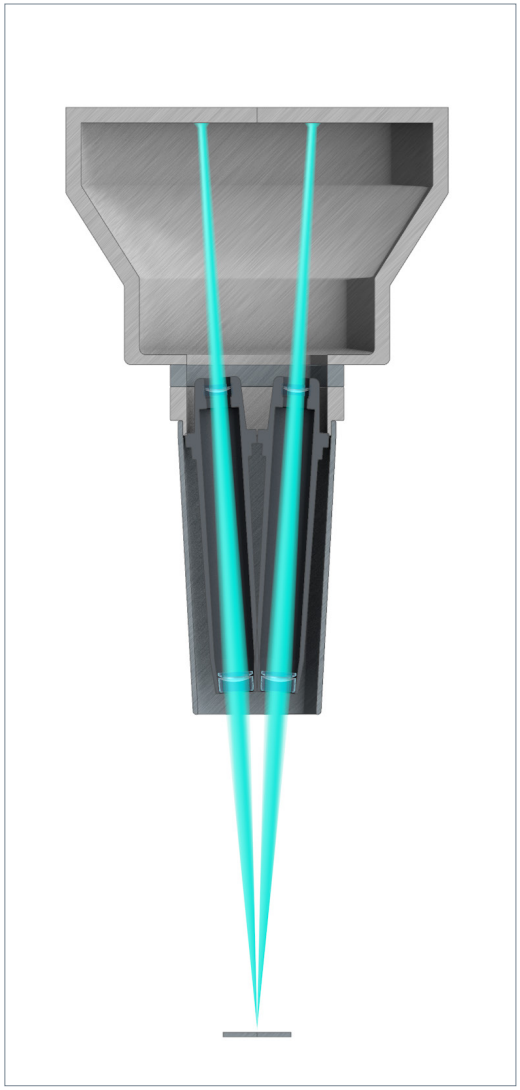
Greenough Stereoscopic Design

The basic idea behind a stereoscopic microscope is simple. It was formulated in 1896 by the biologist Horatio S. Greenough, who wanted to see small biologic samples magnified, but with the same quality as with unaided eyes. In other words, in three dimensions and with all the depth information he needed to understand the irregular shape of his specimen intuitively. He reckoned you could build a microscope with two separate beam paths facing the object from two directions, exactly as human eyes do when observing a small object at a distance of 250 mm. The brain would fuse the two images together and produce a spatial image of the object with a high degree of depth perception. This thinking led to the first factory-produced stereo microscope being developed by ZEISS.

Stemi 355 is a Greenough-type stereo microscope, combined with a continuous 5.5 : 1 zoom. It uses long working distances for easy specimen handling and large fields of view. It's compact, rugged, easy to use and easy to maintain, making it especially well-suited for intensive use in applications such as classrooms, where users frequently change, or by three-shift industrial inspection teams.



Hand drawing by Horatio S. Greenough (1896), leading to the world's first industrially-manufactured stereo microscope.



Beam path of a Greenough type stereo microscope

Your Flexible Choice of Components

Three stands, two tubes – predefined configurations fits together like a puzzle to deliver the perfect result for your application. Choose between set-ups for education, laboratory or industry. Opt for the additional phototube, if you need to document your findings. And you're ready to start.

Education

- Binocular tube
- Integrated near vertical illumination
- LED spot, zoomable and height-adjustable, for oblique and grazing light illumination with strong shadow
- Flat transmitted light base for brightfield and darkfield illumination
- ECO-mode to easily switch into stand-by and back
- Type-C input and output
- Optional: polarization equipment for spot and transmitted light
- Order number: 435066-9520-000

Laboratory

- Binocular tube
- Integrated near vertical illumination
- Double arm gooseneck, self-carrying, for variable oblique light illumination with distinct shadow effect
- Tiltable mirror base for brightfield, darkfield and oblique light illumination
- ECO-mode to easily switch into stand-by and back
- Type-C input and output
- Optional: ergonomic hand rest, polarization equipment for spots and transmitted light
- Order number: 435066-9530-000

Industry

- Binocular tube with ESD
- Integrated near vertical illumination
- LED segmentable ring light for shadow free ring illumination and oblique light segment illumination: half circle, quarter circle, two-spot
- Rotating illuminating segments
- ESD properties: antistatic materials for the whole microscope and ESD interface from the stand
- ECO-mode to easily switch into stand-by and back
- Type-C input and output
- Optional: polarization equipment for ring light illuminator
- Order number: 435066-9510-000

Your Flexible Choice of Components

ZEISS Stemi 355 for Education
Easy to Transport. Easy to Install.
Easy to Use.

In an academic environment you often have to stow away your systems and just as often set them up again. Storage space is limited. And you work with untrained or changing users. That's why you need a compact stereo microscope that's quick to (de)install and easy to shift – ideally, without extra boxes to cart around or accessories to lose. And of course the microscope must be reliable, robust and easy to use, even if the manual is long gone – and also feature quality optics and those all-important illumination contrasts.

That's a tall order, and precisely why you need the Stemi 355 education set. It has a small footprint and comes with a flat stand base and carrying handle. LED illuminations and power supply are integrated. It's easy to select and combine two reflected light illuminations and transmitted light. Stemi 355 education set provides a near-vertical illuminator to observe holes and cavities, and an oblique light spot. Just plug Stemi 355 in and play.

Compact and optimized for education use.

Easily switch between vertical illumination, oblique spot or mixed light by the push of a button – and adjust their intensities.

Change height of the spot and zoom in to create distinct shadows for a strong 3D impression. In the lowest position it delivers a grazing light that enhances fine structures on flat surfaces via hard shadows.

Use the flat transmitted light unit to contrast colored transparent specimens in bright- and darkfield. Add polarizer/analyzer equipment to observe, for example, birefringent crystals or tensions in glass or plastics.

Your Flexible Choice of Components

ZEISS Stemi 355 for Laboratory Versatile Illumination for Sample Preparation

Workspace is always limited in a laboratory where you are observing, preparing or dissecting model organisms and other bio specimens. You may be looking at oocytes or embryos, larvae or adult animals, or at plant components such as roots and leaves. For all these reasons you need variable contrasting methods in transmitted light, but also reflected light. Use the mirror-based transmitted light unit of stand C Lab to observe and manipulate even uncolored transparent specimens. With stand C Lab reflected and transmitted light can be selected easily or combined.
To document your results choose Stemi 355 trino with stand C Lab, double spot C and ergonomic hand rest.

Compact, versatile and well prepared for laboratory work.

The tiltable and shiftable mirror features brightfield, one-sided darkfield and oblique light – plus polarization contrast as an option. Rotate to frosted and plain mirror side, then decide between crisp and diffuse brightfield contrast.

For sample preparations in reflected light, the double spot illumination with self-carrying goosenecks is optimal. It creates half-shadow effects that lead to a good 3D impression without overly dark shadows. During dissections the specimen stays illuminated even if the manipulating hand covers one of the spots.

For extended work add the ergonomic hand rest to keep your hands relaxed, even during long preparations.

Your Flexible Choice of Components

ZEISS Stemi 355 for Industry
Segmentable Ringlight for
Quick Inspections

Stereo microscopes are essential to everyday routines in your production line or quality department: inspecting, assembling or repairing electronic or optoelectronic components, small mechanical parts, sensors or measuring devices. And if you work in electronic industries your microscopes operate in electrostatic protected areas (EPAs). Choose Stemi 355 Mat for visual inspection or small parts assembly. It provides stand C Mat with reflected light LED controls and anti-static surface resistance to enable use in EPAs. It also includes two reflected light illuminations: the integrated vertical illuminator to look at holes, threads and cavities – and the segmentable ringlight C LED. Simply press the dimming button at the side of the focus column to switch quickly between vertical spot, ring illumination and mixed light. To document or archive your results use Stemi 355 trino with stand C Mat and segmentable ringlight C.

Compact, easy to use and suited for electrostatic protected areas.

Stemi 355 is equipped with an integrated near-vertical LED spot to illuminate holes and indentations – even through front optics.

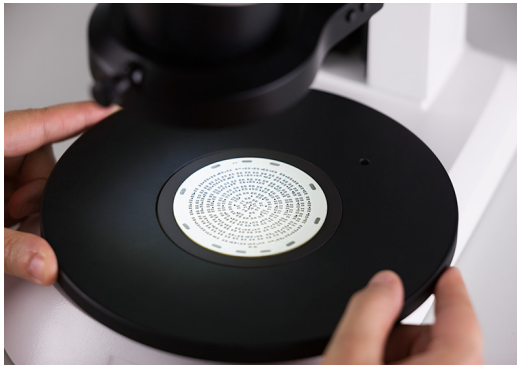
The shadow-free ringlight features four different segment modes: full-, half- and quarter-circle and 2-opposite quarter-circle. Set the segment illumination, then turn the light direction manually in 90° steps to quickly inspect for scratches, defects or residues without moving your specimen. Or use auto rotating mode to get a spatial impression of the object surface just by changing shadows.

Expand Your Possibilities

Choose from a range of interchangeable front optics and eyepieces – and get access to all magnifications between 3.6× and 200×, double resolution of your Stemi 355 or maximize free working distance and object field.

For demanding samples such as dark specimens, special contrast techniques or critical color evaluations, you will need the separate cold light source CL6000 LED. Enjoy the benefits of its high color rendering index 90 and a large range of fiber optic light guides and accessories. For stands without LED electronics chose between compact stand C/L or large stand N.

To observe big specimens or to cover a large area of interest, choose from our range of boom stands: stand B with its single extension arm, ball-bearing boom stand SDA for extra stability and easy movement, or tilting arm stand U, well balanced in height to cover large specimen volume. Add the front lens 0.5× to profit from 185 mm working distance.



To position your specimen precisely, use a ball-and-socket, gliding or rotating polarization stage.

Use stand C (version without electronics) and adapt articulating arms to finely adjust light guides.

Use the memory function of stand L LED to store and recall your illumination settings for different samples.

Tailored Precisely to Your Applications

Typical Applications, Typical Samples	Task	ZEISS Stemi 355 Offers
Education Lab Courses and Advanced Training in:	Study and identify various kinds of unprepared specimen during academic lessons and lab courses.	■ Compact education microscope set including Stemi 355 stereo microscope, compact stand and integrated illumination for reflected and transmitted light. ■ All-in-one design, easy to carry, easy to install and easy to use. ■ Various illumination techniques integrated: Reflected light spot for oblique light. Near vertical spot to illuminate deepenings. Flat transmitted light unit for brightfield and darkfield. ■ Optional equipment for qualitative transmitted light polarization.
■ **Botany**	Investigate the morphology of plant organs.	
■ **Zoology**	Study the anatomy of small animals such as worms, snails, spiders, frogs, mice.	
■ **Mineralogy**	Study composition and structure of minerals and rocks.	
■ **Geology**	Collect and identify micro fossils, such as foraminifera.	
Live Demonstrations	Teach sample preparation or dissection on large screen while the whole class is observing your work.	■ Using Stemi 355 trino with Educam 105 you simultaneously work under the stereo microscope while the live window is displayed with Labscope. ■ Use free Labscope to display all live images on each mobile devices like iPad in the net.
Digital Classroom	Connect all microscopes in the classroom and share their live images. Snap, edit and discuss your results easily.	
Laboratory Routine Laboratory Work in Bio Labs	Screen, sort and prepare your plants, animals, embryos, eggs or larvae. Observe, manipulate and dissect model organisms such as *Drosophila*, *C Elegans*, *Xenopus* or zebrafish. Document your results easily.	■ Stemi 355 laboratory microscope set with mirror based transmitted light unit delivers crisp or homogeneous brightfield, darkfield and oblique light contrast. The latter is needed to contrast uncolored specimen such as *C. Elegans*. For dissections in reflected light, a double spot gooseneck is integrated. ■ Document highly resolved images using Stemi 355 trino with a ZEISS Axiocam microscope camera.
Veterinary Medicine	Look for and identify parasites such as mites, ticks, fleas, and lice, as well as their eggs and larvae. Carry out small animal surgery. Collect and classify horse or cattle embryos for subsequent transfer or for deep freezing for breeding purposes.	■ Use Stemi 355 with front lens 0.5× to get a long working distance and flexible tilting arm stand U. The near vertical based illumination of Stemi 355 is shadow free and homogeneous – and always correctly adjusted to the object field. ■ Stand C Lab delivers the oblique light contrast required to evaluate the embryos.

Tailored Precisely to Your Applications

Typical Applications, Typical Samples	Task	ZEISS Stemi 355 Offers
Industry	Use Stemi 355 for assembly, visual inspection, and repair of various 3D shaped industrial work pieces.	■ Compact Stemi 355 Mat microscope set includes integrated vertical illumination to illuminate holes and deepenings, and a shadow free ringlight. ■ ESD safe by using antistatic materials, usable in electrostatic protected areas. ■ The ringlight is segmentable for distinct shadow effects. Quickly change the light direction to find scratches and defects without moving the specimen. ■ To investigate structures of flat surfaces set double arm gooseneck to a low position to create grazing light. To reduce reflections from shiny parts add optional polarization equipment. ■ For large part inspection use cost effective boom stand B in combination with front lens 0.5×. Benefit from the integrated vertical illumination of Stemi 355. ■ To document with highly resolved images use Stemi 355 trino with Axiocam microscope camera.
■ **PCB Electronics**	Visual inspection for damage to circuit boards, e.g. oxidation, stress corrosion, inaccurate drill holes.	
■ **Entertainment Electronics**	Inspection of the quality of soldered connections, e.g. for improper wiring or for damaged or missing components.	
■ **Micro Technology**	Manufacturing, inspection and repair of thick film or hybrid circuits.	
■ **Car Industry**	Inspection of injection nozzles, air bags ABS systems.	
	Inspection of large parts, motor or chassis components.	
■ **Dental Laboratory**	Finish all-ceramic crowns accurately and reliably, identify and remove casting beads precisely in the framework.	■ Use Stemi 355 flexible tilting arm stand U to share your microscope with two or three work places. The integrated vertical illumination of Stemi 355 is shadow free and homogeneous – and always correctly adjusted to the object field.

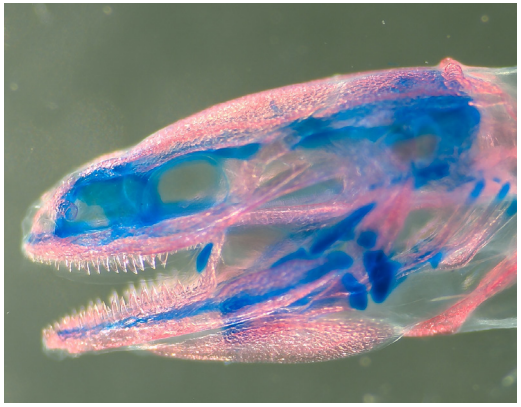
ZEISS Stemi 355 at Work

Wing of Chrisopidae; *transmitted light brightfield*

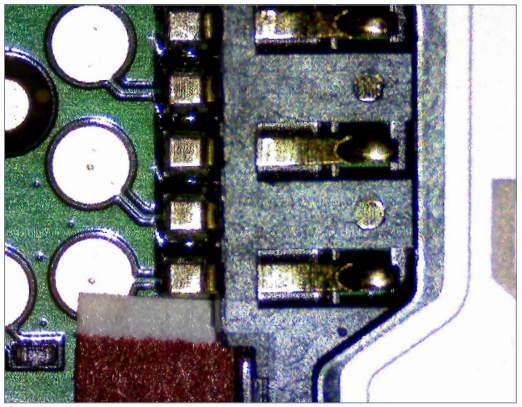
Bullet, reflected light brightfield

Grape ivi, appressoria; spot oblique light, zoom 1.2×

Wing of Chrisopidae; *transmitted light darkfield*

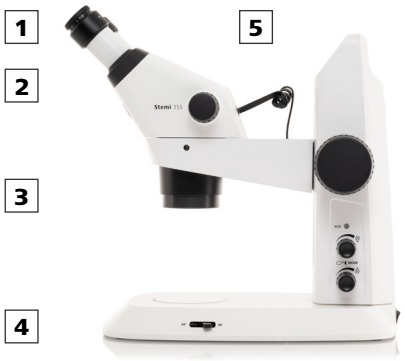


Erpetoichthys calabaricus *acquired with Stemi 355, sample courtesy of: Ralf Britz, Senckenberg Dresden*



Circuit board, reflected light brightfield

Your Flexible Choice of Components



1 Microscope

- Stemi 355 (binocular)
- Stemi 355 trino (phototube, 50/50 division to the left, integrated c-mount camera adapter 0.5×)
- Stemi 355 ESD (with antistatic material housing)

Microscope Sets

- Stemi 355 Edu
- Stemi 355 Lab
- Stemi 355 Mat

2 Interchangeable Optics

- Eyepieces: 10×/23 Br. Foc (included), 16×/14 Br. Foc, 25×/10 Foc
- Front optics: 0.5×, 0.75×, 1.5×, 2.0×

3 Illumination

- LED illuminators to stands C/L: spot, double spot gooseneck, segmentable ringlight, flat or mirror-based transmitted light stands
- Controller C – for controlling near vertical spot or ringlight
- Fiberoptic cold light sources CL6000 LED and CL1500 Hal with spot, annular ring, linear, vertical, diffuse and area illuminators, fiber optic transmitted light unit
- Polarization equipment for filters for spots, ringlights and transmitted light units

Illumination Techniques

- Reflected and transmitted light: brightfield; darkfield; polarization; oblique light

4 Stands

- Space saving table top stand C
- Stand C Edu with reflected light (=RL) LED electronics and flat transmitted light unit
- Stand C Lab with RL LED electronics and mirror-based transmitted light unit
- Stand C Mat with RL LED electronics and ESD features (antistatic)
- Large table top stand N
- Boom stands B and SDA, tilting arm stand U
- Stand L and Stand L LED with larger working space (and Stand L LED with optional mirror-based or flat transmitted light unit and LED electronics)

5 Accessories

- Eyepiece reticles, gliding, ball/socket and rotating stages, ergo hand rest for stand C Lab, foldable eyepiece eyecup

6 Software

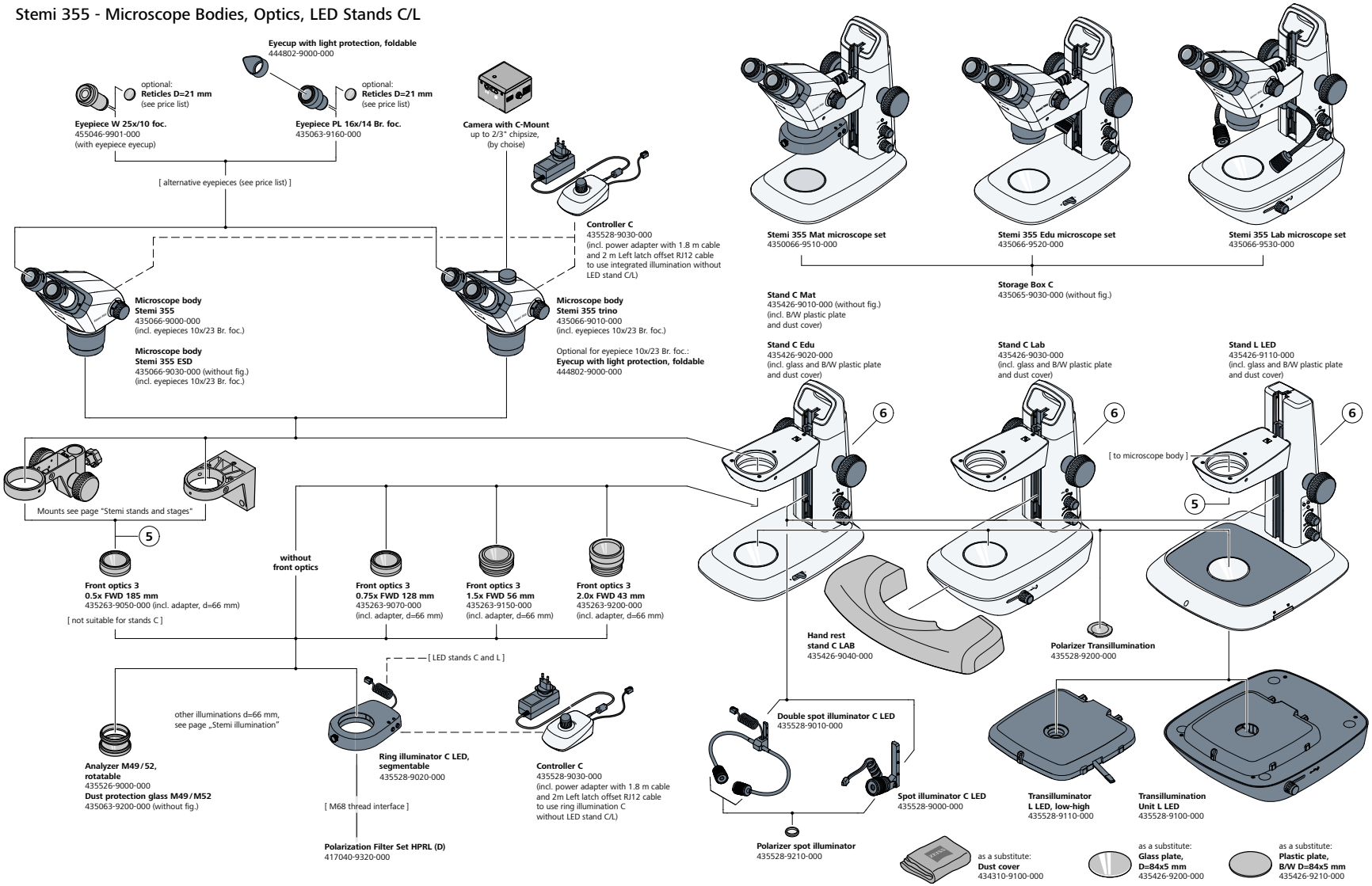
- ZEN lite imaging software
- Labscope imaging software

7 Recommended Cameras

- Axiocam 105 R2 color
- Educam 105
- Axiocam 212
- Axiocam 305 R2

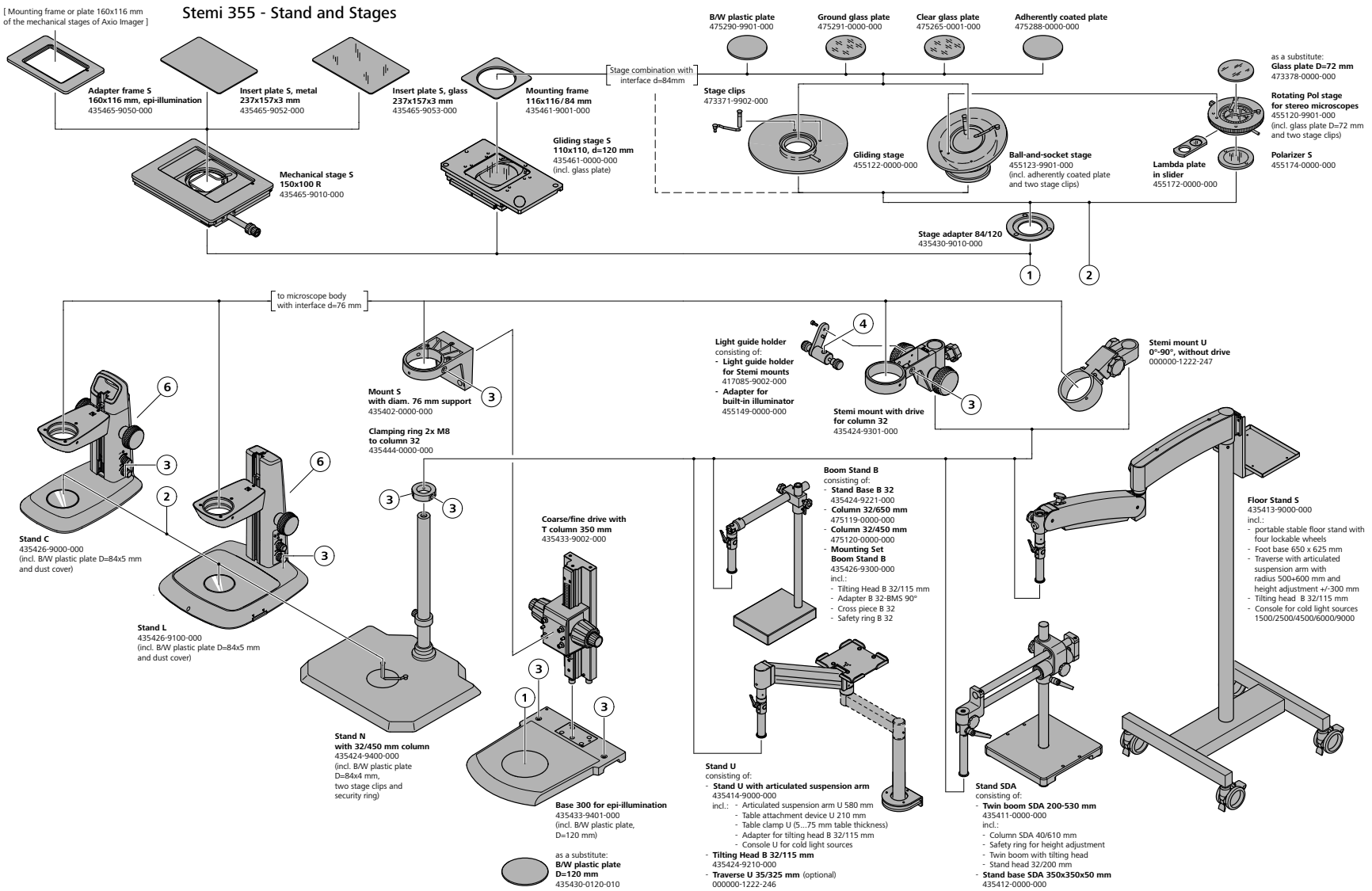
System Overview

Stemi 355 - Microscope Bodies, Optics, LED Stands C/L



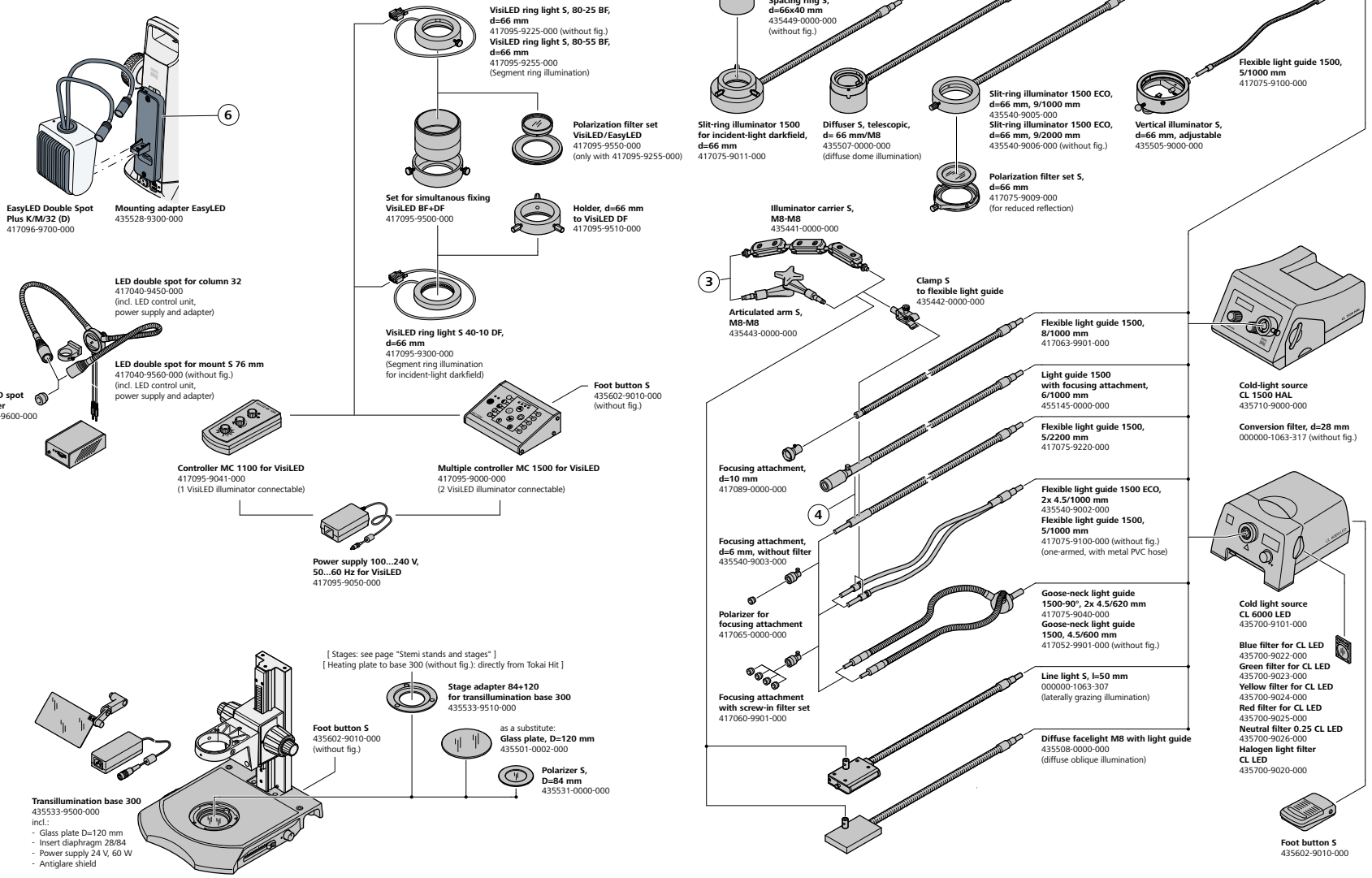
System Overview

Stemi 355 - Stand and Stages

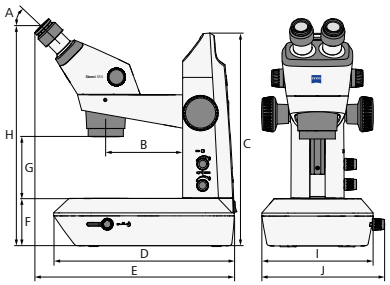


System Overview

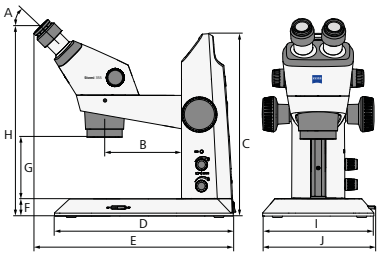
Stemi 355 - Illuminators



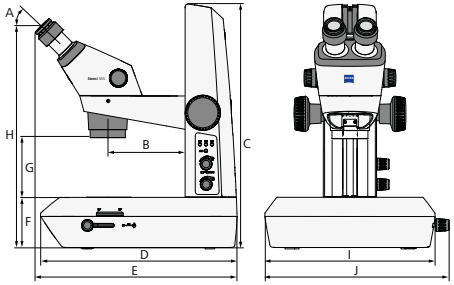
Technical Specifications



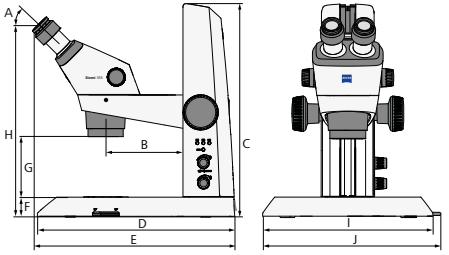
Stemi 355 Lab set



Stemi 355 Edu / Mat set



Stemi 355 in Stand L LED with transillumination unit



Stemi 355 in Stand L LED with transilluminator, lowheight

	Stemi 355 Lab set	Stemi 355 Edu / Mat set	Stemi 355 in Stand L LED with transillumination unit	Stemi 355 in Stand L LED with transilluminator, lowheight
A (°)	45	45	45	45
B (mm)	140	140	140	140
C (mm)	392	338	448	390
D (mm)	331	331	360	360
E (mm)	375	375	375	375
F (mm)	89	35	95	37
G (mm)	110	110	110	110
H (mm)	425	371	431	373
I (mm)	204	204	311	312
J (mm)	225	208	332	326
Weight (kg)	6	5.7	10	7.8

ZEISS Stemi 355		PL 10×23 Br Foc				PL 16×14 Br Foc				PL 25×10 Foc			
Front Optics	FWD	Total Magnification		Object Field [mm]		Total Magnification		Object Field [mm]		Total Magnification		Object Field [mm]	
		Min. Zoom	Max. Zoom			Min. Zoom	Max. Zoom			Min. Zoom	Max. Zoom		
0.5	185	3.6	20	63.9	11.5	5.8	32	38.9	7.0	9.0	50	27.8	5.0
0.75	128	5.4	30	42.6	7.7	8.6	48	25.9	4.7	13.5	75	18.5	3.3
1× (without FO)	110	7.2	40	31.9	5.8	11.5	64	19.4	3.5	18.0	100	13.9	2.5
1.5	56	10.8	60	21.3	3.8	17.3	96	13.0	2.3	27.0	150	9.3	1.7
2.0	43	14.4	80	16.0	2.9	23.0	128	9.7	1.8	36.0	200	6.9	1.3

Technical Specifications

Overall	
Type of Microscope	Stereo microscope, Greenough design
Design Principle	Two zoom systems, tilted by the stereo angle
Stereoscopic View	Three-dimensional observation through eyepieces

Optical Data Basic System (Eyepieces 10×, No Front Optics)	
Magnification Range	7.2× – 40×
Free Working Distance	110 mm
Maximum Resolution	245 Lp/mm – 2.04 µm
Maximum Object Field Diameter	32 mm

Optical Data with Interchangeable Optics (Eyepieces, Front Optics)	
Accessible Magnification Range	3.6× – 200×
Free Working Distances	43 – 185 mm
Maximum Resolution	489 Lp/mm – 1.02 µm
Maximum Object Field Diameter	64 mm

Microscope Bodies	
Manual Zoom, Zoom Range	5.5:1 (0.72× – 4.0×)
Quality of Zoom Optics	Low distortion, crisp in contrast
Parfocality of Zoom Optics	Object remains focused while zooming
Viewing Angle	45°
Adjustment of Interocular Distance	55 – 75 mm
Zoom Click Stops	Five positions: 0.72×, 1×, 2×, 3×, 4×
Maximum Field Number	23 mm
Integrated near Vertical LED Illumination	Integrated in each Stemi 355 microscope body, powered by stands C Edu/Lab/Mat or controller C, illumination angle 11° towards optical axis
Documentation Features Stemi 355 trino	Photoport with 50/50 split to eyepiece, integrated camera adapter 0.5× in left channel, c-mount interface

Technical Specifications

Interfaces	
Front Optics and Polarization Analyzer	M52
Eyepieces	d = 30 mm
Stemi Mounts	d = 76 mm
Illuminators	d = 66 mm
Each Microscope Body incl. Eyepieces 10×/23 Br. Foc and Spiral Cable RJ12 with left latch offset	

Compact Stand C system	
Stand C	Mechanical stand for external illumination. With 2× M8 interface for light guide carriers. Central through-hole d = 38 mm
Stand C Mat	With interfaces/controls for reflected light illuminators C LED. Provides ESD features (antistatic surface resistance). Central through-hole d = 38 mm
Stand C Edu	With interfaces/controls for reflected light illuminators C LED and built-in flat transilluminator (brightfield/darkfield).
Stand C Lab	With interfaces/controls for reflected light illuminators C LED and built-in mirror based transillumination unit (brightfield/darkfield/oblique).
All stands incl. glass plate and/or BW plastic Plate D = 84×5 mm and dust cover. incl country specific power cable Euro C8 with delivery	

Stand Base W204×D331×H35 mm (C Lab: H89 mm)	
Working Surface	W160 × D209 mm
Mechanical Interfaces	Interface for stages d = 84 mm. Interface for TL Polarizer d = 46 mm.

Stand Column with Stemi Mount, Handle and Focus Drive (Friction adjustable)	
Height/Lifting range	303 mm/145 mm
Load capacity of Stemi mount	7 kg
Mechanical Interfaces	Interface for Stemi body d = 76 mm. Interface for Spot/Double Spot C LED

Electronic features of stands C Edu/Lab/Mat	
On/off Switch	
Control knob for transmitted light	Push: on/off. Rotate: dimming
Control knob for two reflected light illuminators	Push sequentially: illuminator A ⇨ illuminator B ⇨ mixed light A+B ⇨ off. Rotate: dimming
Two RJ12 sockets to retrofit reflected light illuminators	Integrated near vertical illuminator and Spot C LED or Double Spot C or segmentable ringlight C
ECO button	Switch into Stand-by and back
Type-C input port for whole microscope power supply	12V DC, max. 2A
Type-C output port for external device	5V DC, max. 1A
Integrated power supply, easily changeable:	12V DC 24W/100…240V AC/50…60Hz. With CE marking, UL/CB, FCC, BS, EEC and UKCA

Technical Specifications

LED Illuminators for Stands C/L	
Spot C LED	Height adjustable, tiltable, zoomable
Double Spot C LED	Height adjustable. Flexible positioning due to self carrying goosenecks.
Segmentable Ringlight C LED	Full/half/quarter circle, two opposing quarters. Segments rotatable in steps or continuous movement. Working distance typ 50 mm – 300 mm.
Integrated Flat transmitted light base/ Transilluminator L LED, low-height	Flat unit that doesn't add height to the stand. Quick switching between diffuse brightfield and all-sided darkfield.
Integrated tiltable mirror base/ Transillumination unit L LED	Variable contrasting by rotatable and slidable mirror: Diffuse and crisp brightfield, oblique and one-sided darkfield illumination.
POL contrast optional for all illuminators	

Optical specifications LED Illuminators C (for Stands C Edu/Mat/Lab)	
Color Temperature CCT [K]	Typ. 5700 K
Lifetime (Lumen Maintenance) [h]	Typ. 25000 h (operation time until the light intensity degraded to 70 % of initial value)
LED Spot C, max. brightness	Typ. 26000 lx (object field center, LED spot mounted to stands C series)
LED Double Spot C, max. brightness	Typ. 138000 lx (object field center, double spot mounted to stands C series)
Segmentable Ringlight C, max. brightness	Typ. 57000 lx (object field center, Full-circle, ringlight mounted to stands C series)
Integrated Flat transmitted light base, max. brightness	Typ. 57000 lx (object field center for Stand C Edu)
Integrated tiltable mirror base, max. brightness	Typ. 32000 lx (object field center for Stand C Lab)

Large Desktop stand L system	
Stand L	Mechanical stand for external illumination. With 2× M8 interface for light guide carriers. Central through-hole d = 39 mm
Stand L LED	Stand with integrated electronics for reflected/transmitted light LED illuminators C/L.
Both stands incl. glass plate and/or BW plastic Plate D = 84×5 mm and dust cover. incl country specific power cable Euro C8 with delivery	

Stand Base W312 × D360 × H37 mm (with Transillumination unit: H95 mm)	
Working Surface	W250 × D209 mm
Mechanical Interfaces	Interface for Stages d = 84 mm. Interface to retrofit Transillumination unit L LED or Transilluminator L LED, low-height
	Interface for transmitted light polarizer d = 46 mm. Central through-hole 39 mm.

Stand Column with Stemi Mount and Focus Drive (Friction adjustable)	
Height / Lifting range	353 mm / 180 mm
Load capacity of Stemi mount	7 kg
Mechanical Interfaces	Interface for Stemi body d = 76 mm. Interface for Spot / Double Spot C LED.

Technical Specifications

Electronic features of Stand L LED	
Sliding contacts for transmitted light illuminators	Cable-free adaption of LED Transillumination unit L LED or Transilluminator L LED, low-height
Memory section to store three mixed light scenarios	Store and recall "on/off and brightness" of all adapted illuminators C/L
On/off Switch	
Control knob for transmitted light	Push: on/off. Rotate: dimming
Control knob for two reflected light illuminators	Push sequentially: illuminator A ⇨ illuminator B ⇨ mixed light A+B ⇨ off. Rotate: dimming
Two RJ12 sockets to retrofit reflected light illuminators	Integrated near vertical illuminator and Spot C LED or Double Spot C or segmentable ringlight C
ECO button	Switch into Stand-by and back
Type-C input port for whole microscope power supply	12V DC, max. 2A
Type-C output port for external device	5V DC, max. 1A
Integrated power supply, easily changeable:	12V DC 24W/100...240V AC/50...60Hz. With CE marking, UL/CB, FCC, BS, EEC and UKCA

Optical specifications LED Illuminators C (for Stand L LED)	
Color Temperature CCT [K]	Typ. 5700 K
Lifetime (Lumen Maintenance) [h]	Typ. 25000 h (operation time until the light intensity degraded to 70 % of initial value)
LED Spot C, max. brightness	Typ. 26000 lx (object field center, LED spot mounted to Stand L LED)
LED Double Spot C, max. brightness	Typ. 138000 lx (object field center, double spot mounted to Stand L LED)
Segmentable Ringlight C, max. brightness	Typ. 57000 lx (object field center, Full-circle, ringlight mounted to Stand L LED)
Transilluminator L LED, low-height, max. brightness	Typ. 74000 lx (object field center for Stand L LED)
Transillumination unit L LED, max. brightness	Typ. 33000 lx (object field center for Stand L LED)

Ambient Conditions	
Storage (without Packaging)	
Permissible Ambient Temperature	+5 to +40 °C
Permissible Humidity	Max. 95 % to +40 °C
Transportation and Storage (in shipping Packaging)	
Permissible Ambient Temperature	–40 to +70 °C
Permissible Humidity	Max. 95 % to +40 °C
Operation	
Permissible Ambient Temperature	+5 to +40 °C
Permissible Humidity	Max. 95 % to +40 °C
Air Pressure	800 hPa to 1060 hPa
Degree of Pollution	2
Area of Use	Closed spaces
Max. Altitude	Max. 2000 m

Technical Specifications

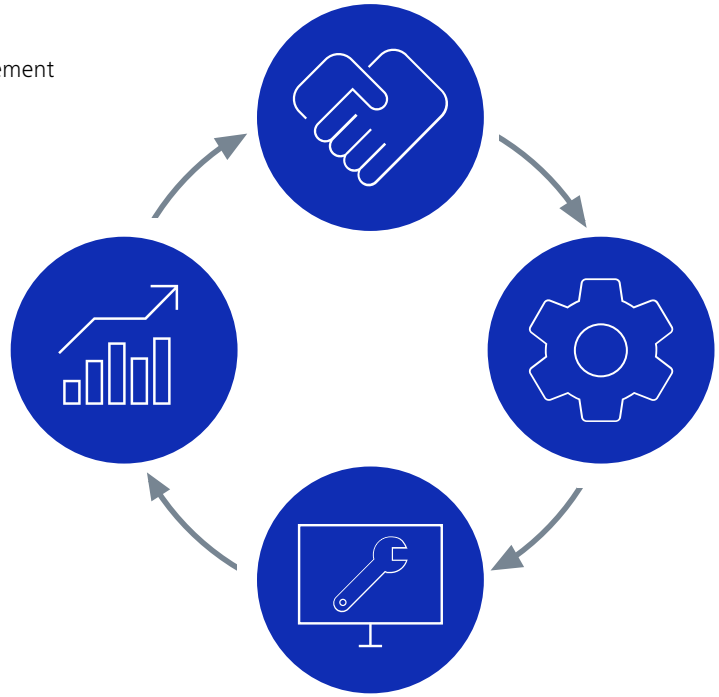
Operational Data – Power Supply unit for stand L LED, stands C Edu/Lab/Mat and Controller C	
Protection Class	IP 20
IEC earth class	Class II of IEC 61140
Degree of Pollution	2
Overvoltage Category	II
Power Supply	100 to 240 VAC ±10 %
Power Frequency	50 Hz/60 Hz
Power Consumption	Max. 60 VA
Nominal DC Voltage	12V DC
Nominal DC Current	max. 2 A
Max. current	0.58 A

ZEISS Service – Your Partner at All Times

Your microscope system from ZEISS is one of your most important tools. For over 175 years, the ZEISS brand and our experience have stood for reliable equipment with a long life in the field of microscopy. You can count on superior service and support – before and after installation. Our skilled ZEISS service team makes sure that your microscope is always ready for use.

Procurement

- Lab Planning & Construction Site Management
- Site Inspection & Environmental Analysis
- GMP-Qualification IQ/OQ
- Installation & Handover
- IT Integration Support
- Startup Training



Operation

- Predictive Service Remote Monitoring
- Inspection & Preventive Maintenance
- Software Maintenance Agreements
- Operation & Application Training
- Expert Phone & Remote Support
- Protect Service Agreements
- Metrological Calibration
- Instrument Relocation
- Consumables
- Repairs

New Investment

- Decommissioning
- Trade In

Retrofit

- Customized Engineering
- Upgrades & Modernization
- Customized Workflows via ZEISS arivis Cloud

Please note: Availability of services depends on product line and location

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