



# Educational Microscopes

## Upright Biological Microscopes

These upright biological microscopes are an ideal way to introduce students to the world of microscopy. The high quality optics, made out of 100% optically coated glass, ensure a crisp and clear image. You can choose between the innovative cordless LED illumination, which produces no heat, or the standard tungsten lighting system. The complete metal construction guarantees long-term use in a classroom.

### Technical Specification

<b>Model</b>	Tungsten versions 15234878, 15374398 and LED versions 15244878, 15384398
<b>Optical system</b>	Finite optical system, 160mm
<b>Observation tube</b>	Monocular
<b>Inclination</b>	45° inclined, 360° rotating
<b>Eyepiece(s)</b>	WF10X/18mm with pointer, lockable
<b>Nosepiece</b>	Triple revolving nosepiece with click stops
<b>Objective classification</b>	Achromatic, DIN
<b>Objective information</b>	4X/0.10, 10X/0.25, 40X/0.65/S
<b>Objective mounting thread</b>	W 4/5" x 1/36" (RMS standard)
<b>Stage</b>	Plain stage with sample clips
<b>Stage size, mm</b>	120 x 110
<b>Upper limit stop</b>	Upper limit stop preset but adjustable
<b>Condenser</b>	Built-in 0.65 N.A. condenser with iris diaphragm and filter holder (15234878, 15374398) Built-in 0.65 N.A. condenser with iris diaphragm (LED versions 15244878, 15384398)
<b>Focus mechanism</b>	Coarse and fine focusing system with tension adjustment
<b>Z-axis movement, mm</b>	8.7
<b>Illumination</b>	20W tungsten illumination (15234878, 15374398) Cordless LED illumination with intensity control (LED versions 15244878, 15384398)
<b>Transformer</b>	Internal
<b>Power supply</b>	220-240V (CE) (15234878, 15374398) 100-240V (CE) (LED versions 15244878, 15384398)
<b>Accessories included</b>	Blue filter and dust cover (15234878, 15374398) Dust cover, charger and batteries (LED versions 15244878, 15384398)
<b>Dimensions (l x w x h), mm</b>	175 x 135 x 360
<b>Weight, kg</b>	2.8kg



Cat. No	Model	Head	Eyepieces	Objectives	Stage	Illumination
15234878	SFC-100FL, EU plug	Monocular	18mm	Achromat DIN 4x, 10x, 40x	Plain stage with sample clips	20W Tungsten illumination
15374398	SFC-100FL UK plug	Monocular	18mm	Achromatic DIN 4x, 10x, 40x	Plain stage with sample clips	20W Tungsten illumination
15244878	SFC-100FLED Cordless, EU plug	Monocular	18mm	Achromatic DIN 4x, 10x, 40x	Plain stage with sample clips	3W LED
15384398	SFC-100FLED Cordless, UK plug	Monocular	18mm	Achromatic DIN 4x, 10x, 40x	Plain stage with sample clips	3W LED



**Fisherbrand™**  
QUALITY. RELIABILITY. VALUE.

## Microscopes

*A series of microscopes for education & research*

# Educational Microscope

## Stereo Microscopes

These stereo microscopes are specially designed and developed for the learning environment. You can choose between the innovative cordless LED illumination, making your images brighter and sharper with 'cool' light, or the conventional tungsten lighting system.

### Technical Specification

<b>Model</b>	Tungsten version 11702656 and LED version 15254878
<b>Optical system</b>	Greenough
<b>Observation tube</b>	Binocular head
<b>Interpupillary distance, mm</b>	51 to 79
<b>Diopter adjustment</b>	On the left eyepiece, +/- 5 diopter (11702656) On the left tube, +/- 5 diopter (LED version 15254878)
<b>Inclination</b>	45° inclined
<b>Eyepieces</b>	WF10X/20mm
<b>Objectives system</b>	Turret changer
<b>Objectives magnification</b>	2X to 4X
<b>Working distance, mm</b>	47
<b>Stand</b>	Pole type stand with transmitted illumination
<b>Base, mm</b>	190 x 115
<b>Column/arm</b>	130mm high
<b>Head holder</b>	For Ø13mm column with incident illumination
<b>Focus mechanism</b>	Coarse focusing system with tension adjustment
<b>Focusing stroke, mm</b>	42
<b>Incident illumination</b>	Tungsten 12V/10W (11702656) LED 3.1V/60mA each (LED version 15254878)
<b>Transmitted illumination</b>	Tungsten 12V/10W (11702656) LED 3.1V/60mA (LED version 15254878)
<b>Transformer</b>	Internal (11702656) External (LED version 15254878)
<b>Power supply</b>	220V (11702656) Charger 100-240V or rechargeable batteries (LED version 15254878)
<b>Accessories included</b>	Black, white and frosted stage plates, dust cover (11702656) Black, white and frosted stage plates, dust cover, charger and batteries (LED version 15254878)
<b>Dimensions (l x w x h), mm</b>	190 x 115 x 285
<b>Weight, kg</b>	2.7



Both models are supplied with universal power adapter

Cat. No	Model	Head	Eyepieces	Objectives
11702656	ST-30C-2LOO Tungsten	Binocular	WF10X/20mm	2X-4X
15254878	ST-30C-6LED Cordless	Binocular	WF10X/20mm	2X-4X



# Research Microscopes

Ideal for university and research laboratory use

With the choice of three optical objectives and three optical heads, this series of Fisherbrand research microscopes with 'cool light' LED illumination are designed to meet your everyday microscopy needs in the lab

- Choice of optical objectives, with a wide range of magnification: 4x, 10x, 40x, 100x:  
**Achromat • Super high contrast • Plan achromat**
- Choice of optical heads:  
**Monocular • Binocular • Trinocular (permits attachment of a digital camera)**
- Ergonomically designed; professional frame with low position coaxial focusing allows one handed operation, making extended use comfortable
- Adjustable 3W LED illumination with intensity control
- Built-in low drive mechanical stage with extended post for X and Y control (135mm x 140mm)
- 18mm eyepieces with rubber eyeshields
- 30° inclined ergonomic Siedentopf viewing head
- **Two year warranty for electrical parts (except bulbs, cords and fuses), five year warranty for optical and mechanical parts**



## Technical Specification

<b>Models</b>	15388824, 15398824, 15308834, 15318834, 15328834, 15338834, 15348834, 15358834, 15378834
<b>Optical system</b>	Standard DIN
<b>Optical heads</b>	15388824, 15318834, 15348834: Monocular head 15398824, 15328834, 15358834: Binocular head, Siedentopf 15308834, 15338834, 15378834: Trinocular head, Siedentopf
<b>Interpupillary distance, mm</b>	55 to 75
<b>Inclination</b>	30° inclined
<b>Eyepieces</b>	WF 10X/18mm
<b>Revolving nosepiece</b>	4 positions
<b>Objective classification</b>	DIN EA Achromatic (15388824, 15398824, 15308834) DIN ASC/Semi-plan (15318834, 15328834, 15338834) DIN Plan (15348834, 15358834, 15378834)
<b>Objectives :</b>	4X (0.10), 10X (0.25), 40X (0.65), 100X oil immersion (1.25) Achromat (15388824, 15398824, 15308834) 4X (0.10), 10X (0.25), 40X (0.65), 100X oil immersion (1.25) Super high contrast (15318834, 15328834, 15338834) 4X (0.10), 10X (0.25), 40X (0.65), 100X oil immersion (1.25) Plan (15348834, 15358834, 15378834)
<b>Objective mounting thread</b>	W4/5" x 1/36" (RMS Standard)
<b>Stage</b>	Mechanical
<b>Stage size, mm</b>	135 x 140
<b>Mechanical X-Y range, mm</b>	76 x 50
<b>Condenser</b>	Abbe condenser N.A. 1.25 with iris diaphragm
<b>Focus mechanism</b>	Coaxial coarse and fine focusing system with tension adjustment
<b>Fine focus precision</b>	1µm increment
<b>Z axis movement, mm</b>	17
<b>Illumination</b>	3W LED illumination with intensity control
<b>Transformer</b>	Internal
<b>Power supply</b>	IEC 110V / 220V (UL / CSA)
<b>Accessories included</b>	IEC power cord, built in cord hanger, dustcover, allen key
<b>Dimensions (l x w x h), mm</b>	340 x 180 x 390
<b>Weight, kg</b>	6.5



All models are supplied with universal power adapter

Cat. No	Model	Head	Eyepieces	Objectives	Stage	Condenser	Illumination
15388824	AX-501A	Monocular	18mm	Achromat DIN 4x, 10x, 40x, 100x	Mechanical	Abbe/Iris	3W LED
15398824	AX-502A	Binocular	18mm	Achromat DIN 4x, 10x, 40x, 100x	Mechanical	Abbe/Iris	3W LED
15308834	AX-503A	Trinocular	18mm	Achromat DIN 4x, 10x, 40x, 100x	Mechanical	Abbe/Iris	3W LED
15318834	AX-501ASC	Monocular	18mm	Super high contrast DIN 4x, 10x, 40x, 100x	Mechanical	Abbe/Iris	3W LED
15328834	AX-502ASC	Binocular	18mm	Super high contrast DIN 4x, 10x, 40x, 100x	Mechanical	Abbe/Iris	3W LED
15338834	AX-503ASC	Trinocular	18mm	Super high contrast DIN 4x, 10x, 40x, 100x	Mechanical	Abbe/Iris	3W LED
15348834	AX-501PL	Monocular	18mm	Plan achromat DIN 4x, 10x, 40x, 100x	Mechanical	Abbe/Iris	3W LED
15358834	AX-502PL	Binocular	18mm	Plan achromat DIN 4x, 10x, 40x, 100x	Mechanical	Abbe/Iris	3W LED
15378834	AX-503PL	Trinocular	18mm	Plan achromat DIN 4x, 10x, 40x, 100x	Mechanical	Abbe/Iris	3W LED

## Imaging Accessories



Additional accessories are listed below (not supplied as standard)

1	Cat. No	Description
	13523900	Moticam X digital microscope camera (delivered without tablet)
	15170056	Camera Moticam 580 5MP
	12684257	Moticam 1 digital microscope camera
	13243769	Moticam 2 digital microscope camera
	11893400	C-mount adapter 2/3"
	11843400	Ocular micrometer
	11847724	Halogene light bulb
	11803410	TV adapter 1/2"



## Essential Accessories

Focus on Fisherbrand for your complete microscopy needs

### Microscope slides

- Wrapped in cellophane for improved cleanliness
- Glass 76mm x 26mm
- Washed and polished 90° on all four sides
- Available plain or twin frosted

Cat. No	Thickness, mm	Pack qty
<b>Plain</b>		
12373118	0.8 to 1	50
12383118	1.0 to 1.2	50
12393118	1.2 to 1.5	50
<b>Twin frost</b>		
11562203	0.8 to 1	50
11572203	1.0 to 1.2	50



### Coverslips

- Clear white borosilicate glass, packed in plastic boxes
- No. 1: 0.13mm to 0.17mm thick
- No. 1½: 0.16mm to 0.19mm thick

Cat. No	Dimensions, mm (*Diameter)	Pack qty
<b>No. 1</b>		
12323128	18 x 18	200
12333128	22 x 22	200
12343128	22 x 26	200
12353128	22 x 32	100
12363128	22 x 40	100
12373128	22 x 50	100
11338503	24 x 24	200
12393128	24 x 32	100
11348503	24 x 40	100
<b>No. 1 Circles</b>		
12313138	16*	200
12323138	19*	200
12333138	22*	200
<b>No. 1½</b>		
12343138	18 x 18	200
12353138	20 x 20	200
12363138	22 x 22	200
12383138	22 x 50	100
12393138	24 x 24	200
<b>No. 1½ Circles</b>		
12323148	16*	100
11507323	22*	100





## Microscope slide staining tray

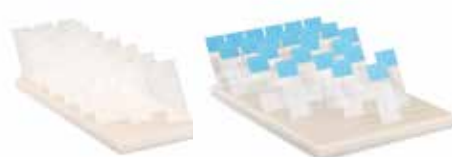
- Stain, rinse and dry slides on a single working tray.
- Disposable microscope slide staining trays and lid (pack includes 4 base trays and 1 lid)
- Each tray holds up to eight slides and the deep well holds up to 38ml
- Compact size and recessed handles for easy transport
- Dark lid protects slides for light sensitive applications
- Disposable



Cat. No	Description	Colour	Dimensions [l x w x h], mm	Pack qty
11968004	Eight slide tray set	Black	305 x 127 x 29.5	4

## Microscope slide holders

- Microscope slide holders for standard slides (76mm x 26mm)
- The 40 and 78 slide holders are ideal for drying slides and are made of chemically resistant polyethylene
- Strong, solid construction with rubber feet for bench top stability



Cat. No	Description	Dimensions [l x w x h], mm	Pack qty
11937984	40 slide holder	105 x 24 x 31	1
11947984	78 slide holder	299 x 178 x 21	1

## Microscope slide boxes

- Constructed of durable polypropylene, slide boxes hold 25 to 100 standard slides
- Feet to maximise stability
- Range of durable plastic microscope slide boxes ideal for storage or transport
- Stackable

Cat. No	Description	Lining	Capacity, slides	Colour	Pack qty
11314135	Push-fit lid	Cork	25	Blue	1
11324135	Push-fit lid	Cork	25	Green	1
11334135	Push-fit lid	Cork	25	Red	1
11354135	Push-fit lid	Cork	25	White	1
11731486	Thumb latch lock	Cork	50	Blue	1
11771486	Thumb latch lock	Cork	50	Red	1
11781486	Thumb latch lock	Cork	50	White	1
11314145	Nickel plated clasp	Cork	100	Blue	1
11324145	Nickel plated clasp	Cork	100	Green	1
11334145	Nickel plated clasp	Cork	100	Red	1
11344145	Nickel plated clasp	Cork	100	Yellow	1
11354145	Nickel plated clasp	Cork	100	White	1
11364145	Nickel plated clasp	Cork	100	Grey	1
11374145	Nickel plated clasp	Cork	100	Black	1
11741476	Hinged lid	Unlined	25	Blue	1
11751476	Hinged lid	Unlined	25	Red	1
11761476	Hinged lid	Unlined	25	White	1
11771476	Hinged lid	Unlined	100	Blue	1
11781476	Hinged lid	Unlined	100	Red	1
11791476	Hinged lid	Unlined	100	White	1
11701486	Nickel plated clasp	Foam lined	100	Blue	1
11517533	Nickel plated clasp	Foam lined	100	Green	1
11711486	Nickel plated clasp	Foam lined	100	Red	1
11394135	Nickel plated clasp	Foam lined	100	Yellow	1
11721486	Nickel plated clasp	Foam lined	100	White	1







## Storage tray rack, microscope slide folders

- Unique rack allows the easy storage and retrieval of five 20 place slide folders (11703217)
- Stackable with folder identification clasps for reference and quick retrieval
- Ideal for room temperature or refrigerator storage of samples
- Temperature range: -10°C to 90°C
- Dimensions (l x w x h), mm 226 x 340 x 125

Cat. No	Description
11720594	Storage tray rack for microscope slide folders



## Microscope slide mailer, polypropylene, two place

- Polypropylene protectors hold two standard slides securely
- Large, easy to secure snaps, provide safe storage for valuable slides
- Variety of colours for coding
- Disposable

Cat. No	Description	Dimensions (l x w x h)	Pack qty
11745088	Two place slide mailer, assorted colours (red, yellow, blue, purple, orange)	93 x 68 x 5	25
11755088	Two place slider mailer, natural	81 x 19 x 31	25



## Microscope slide mailers, polypropylene, five place

- Polypropylene protectors hold five standard slides securely
- Inside wall features slotted channels to keep slides separated and to make removal easier
- Disposable

	Cat. No	Description	Dimensions, mm	Pack qty
1	11714316	Five place slide mailer, natural, side open	43 x 24 x 88	25
2	11725515	Five place side mailer, natural, end opening	43 x 24 x 88	25





Cat. No	Description	Quantity
<b>Fixatives</b>		
<b>10591873</b>	Formaldehyde, technical, solution, stabilised in methanol	2.5L
<b>10231622</b>	Formaldehyde, extra pure, solution 37-41%, SLR	1L
<b>10539190</b>	Formaldehyde, pure, solution, 10% v/v in 0.9% sodium chloride solution	5L
<b>10040170</b>	Formaldehyde solution saline, phosphate buffered pH7.3, pure	25L
<b>10010150</b>	Formaldehyde, solution, phosphate buffered	5L
<b>Embedding media</b>		
<b>10111630</b>	Paraffin wax, pure, melting point about 52°C, pastillated	450g
<b>10244250</b>	Paraffin wax, pure, melting point about 57°C, pastillated	450g
<b>10395900</b>	Paraffin wax, pure, melting point about 60°C, pastillated	450g
<b>10254250</b>	Paraffin wax, pure, clearing point about 65-71°C	450g
<b>Preparation and processing</b>		
<b>10131580</b>	Paraformaldehyde, extra pure, SLR	500g
<b>10122050</b>	Acetic acid, pure, 2M, (2N approx. 12%), ready to use	2.5L
<b>10263750</b>	Acetone, technical	2.5L
<b>10060120</b>	1,4-Dioxane, extra pure, SLR, stabilised with BHT	500mL
<b>10342652</b>	Ethanol absolute 99.8+%, Certified AR for analysis, meets analytical specification of Ph.Eur., BP,USP	1L
<b>10675872</b>	Glycerol, 98+%, extra pure, SLR	500mL
<b>10579570</b>	Glycerol, 99+%, Certified AR for analysis	500mL
<b>10366430</b>	Isopropanol, Certified AR for analysis	1L
<b>10141720</b>	Methanol, Certified AR for analysis	1L
<b>10559580</b>	Tetrahydrofuran, extra pure, SLR, stabilised with 0.025% BHT	500mL
<b>10376340</b>	Toluene, technical	2.5L
<b>10102740</b>	Toluene, Certified AR for analysis	1L
<b>10691373</b>	Xylene, technical	2.5L
<b>10467270</b>	Xylene, Certified AR for analysis	1L

Cat. No	Description	Quantity
<b>Stains and dyes</b>		
<b>10656822</b>	Aniline Blue, sodium salt, pure, water soluble, high purity biological stain	25g
<b>10195230</b>	Brilliant Green, pure, high purity biological stain	100g
<b>10194060</b>	Carmine, pure, high purity biol.stain, alum lake of carminic acid	5g
<b>10402041</b>	Crystal Violet, pure, high purity biological stain	100g
<b>10061830</b>	Eosin Y, pure, high purity biological stain	25g
<b>10031503</b>	Eosin Y disodium salt, ≥88%	25g
<b>10216430</b>	Acid Fuchsin, pure, high purity biological stain	25g
<b>10070160</b>	Fuchsin basic	25g
<b>10244530</b>	Giemsa stain, pure, Certified	25g
<b>10181710</b>	Hematoxylin, Pure	25g
<b>10052574</b>	Hematoxylin, Crystalline	25g
<b>10366040</b>	Indigo carmine, extra pure, SLR, C.I. 73015	25g
<b>10122150</b>	Leishman's stain, pure	10g
<b>10326240</b>	Malachite Green (oxalate), pure, C.I. 42000	25g
<b>10488600</b>	Methyl blue, pure, C.I. 42780	25g
<b>10539000</b>	Methylene blue, Biological stain, C.I. 52015	25g
<b>10439180</b>	Methylene blue, extra pure, SLR, C.I. 52015	100g
<b>10080290</b>	Neutral red, pure, indicator grade, C.I. 50040	5g
<b>10511641</b>	Nigrosine, pure, water soluble, high purity biological stain	25g
<b>10390934</b>	Pararosaniline chloride, pure, high purity biological stain	5g
<b>10133730</b>	Phloxine B, 85%, pure, high purity biological stain	5g
<b>10172490</b>	Rose Bengal, pure, C.I. 45440	25g
<b>10366050</b>	Safranin, pure, C.I. 50240	25g
<b>10033030</b>	Thionin acetate, pure, high purity biological stain	5g
<b>10606662</b>	Toluidine blue, pure, C.I. 52040	25g

For the full range of Fisherbrand products, visit:  
[www.eu.fishersci.com/go/fisherbrand](http://www.eu.fishersci.com/go/fisherbrand)

