



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

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



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

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

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

| Cat. No | Description |
|-------------------|--|
| 1 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" |



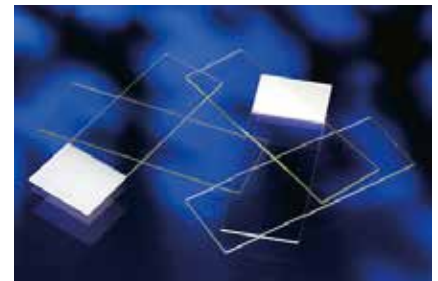
Essential Accessories

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 |
|-------------------|---------------|----------|
| Plain | | |
| 12373118 | 0.8 to 1 | 50 |
| 12383118 | 1.0 to 1.2 | 50 |
| 12393118 | 1.2 to 1.5 | 50 |
| Twin frost | | |
| 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 |
|-----------------------|----------------------------|----------|
| No. 1 | | |
| 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 |
| No. 1 Circles | | |
| 12313138 | 16* | 200 |
| 12323138 | 19* | 200 |
| 12333138 | 22* | 200 |
| No. 1½ | | |
| 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 |
| No. 1½ Circles | | |
| 12323148 | 16* | 100 |
| 11507323 | 22* | 100 |





Microscope slide staining tray

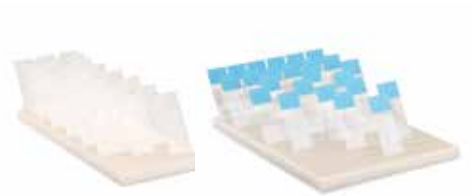
- Stain, rinse and dry slides on a single working tray.
- Disposable microscope slide staining trays and lid (pack includes 4 base trays and 1 lid)
- Each tray holds up to eight slides and the deep well holds up to 38ml
- Compact size and recessed handles for easy transport
- Dark lid protects slides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



Chemicals



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

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

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