About Swift

For over fifty years, Swift Optical Instruments has been a global leader in the manufacture and production of quality microscopes. Recently, Swift Optical introduced a new line of digital imaging products designed to meet the ever-increasing, challenging needs of teachers and students.

In the pages that follow, you will find the details of our wide-range of microscopes and digital cameras. Our constant commitment to enduring quality and technical excellence ensures that you are getting the best product for your budget and application.

Each instrument is inspected for quality assurance. Our limited lifetime warranty guarantees that every product is free of defects in materials or workmanship.

We have also included some information that we hope you will find helpful to select the right microscope or digital product for your particular need.

Please contact us for the name of your nearest Swift dealer.

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M2250 Series Compound Microscopes

The M2250 Series is ideal for a wide variety of educational applications and built to withstand student use. This series has locked-on eyepieces, objectives and stage clips, and a “slip-clutch” focusing system to protect gears from over-focusing. The M2250 Series is offered with several illumination options; standard 120V, 20W tungsten; cordless and, corded LED for efficient, cool, white light that lasts up to 50 times longer than traditional tungsten bulbs.

Features:
- Designed to fit every budget
- Durable design with limited lifetime warranty
- Choice of illumination

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepiece</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M2251B</td>
<td>Monocular</td>
<td>W10XD, 18mm w/ pointer</td>
<td>4X, 10X, 40X</td>
<td>Stage Clips</td>
<td>Built-in, NA 0.65</td>
<td>Corded, Tungsten</td>
</tr>
<tr>
<td>M2251C</td>
<td>Monocular</td>
<td>W10XD, 18mm w/ pointer</td>
<td>4X, 10X, 40X</td>
<td>Stage Clips</td>
<td>Built-in, NA 0.65 with iris</td>
<td>Cordless, LED</td>
</tr>
</tbody>
</table>

M3600 Series Compound Microscopes

Introducing our flagship model of the Swift Optical education line. Available in cordless and corded versions, this series features a built-in carry handle, built-in mechanical stage (M3602 models only) and variable LED illumination. Ideal for high schools and advanced grades.

Now designed with built-in camera port! Go digital with optional Moticam camera and MA15604 video C-Mount adapter.

Features:
- Built-in camera port
- Student friendly design
- Energy-efficient LED illumination
- “One-touch” spring loaded stage clips

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepiece</th>
<th>Objective</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
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</thead>
<tbody>
<tr>
<td>M3601</td>
<td>Monocular w/ Camera Port</td>
<td>W10XD, 18mm w/ Pointer</td>
<td>4X, 10X, 40X</td>
<td>Stage Clips</td>
<td>Built-in N.A. 0.65 with iris</td>
<td>Variable, Corded, LED</td>
</tr>
<tr>
<td>M3601-3</td>
<td>Monocular w/ Camera Port</td>
<td>W10XD, 18mm w/ Pointer</td>
<td>4X, 10X, 40X</td>
<td>Stage Clips</td>
<td>Built-in, low-drive mechanical</td>
<td>Abbe 1.25 spiral</td>
</tr>
<tr>
<td>M3601-4</td>
<td>Monocular w/ Camera Port</td>
<td>W10XD, 18mm w/ Pointer</td>
<td>4X, 10X, 40X</td>
<td>Stage Clips</td>
<td>Built-in, low-drive mechanical</td>
<td>Abbe 1.25 spiral</td>
</tr>
<tr>
<td>M3601C</td>
<td>Monocular w/ Camera Port</td>
<td>W10XD, 18mm w/ Pointer</td>
<td>4X, 10X, 40X</td>
<td>Stage Clips</td>
<td>Built-in N.A. 0.65 with iris</td>
<td>Variable, Cordless, LED</td>
</tr>
<tr>
<td>M3602C-3</td>
<td>Monocular w/ Camera Port</td>
<td>W10XD, 18mm w/ Pointer</td>
<td>4X, 10X, 40X</td>
<td>Stage Clips</td>
<td>Built-in, low-drive mechanical</td>
<td>Abbe 1.25 spiral</td>
</tr>
<tr>
<td>M3602C-4</td>
<td>Monocular w/ Camera Port</td>
<td>W10XD, 18mm w/ Pointer</td>
<td>4X, 10X, 40X</td>
<td>Stage Clips</td>
<td>Built-in, low-drive mechanical</td>
<td>Abbe 1.25 spiral</td>
</tr>
</tbody>
</table>

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M3700 Series Compound Microscopes

Packed with standard research features, the M3700 Series is ideal for advanced high school biology, college and budget-minded veterinary and medical applications. Combining a new design with a built-in handle that encourages proper handling, and semi-plan objectives (4X, 10XD, sealed 40XRD, and 100XRD) this microscope fits the needs of taxing clinical and student environments.

The M3702C-3 and M3702C-4 are now designed with built-in camera port! Go digital with optional Moticam camera and MA15604 video C-mount adapter.

Features:

• Built-in camera port available on monocular models
• Ergonomic Siedentopf binocular head
• Energy-efficient, cordless LED illumination
• Built-in mechanical stage
• Coaxial focusing

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepiece</th>
<th>Objective</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
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</thead>
<tbody>
<tr>
<td>M3702C-3</td>
<td>Monocular w/ Camera Port</td>
<td>W10XD, 18mm</td>
<td>40X, 10X, 40XRD</td>
<td>Built-in, low-drive mechanical</td>
<td>Abbe 1.25, Spiral</td>
<td>Rechargeable, cordless LED</td>
</tr>
<tr>
<td>M3702C-4</td>
<td>Monocular w/ Camera Port</td>
<td>W10XD, 18mm</td>
<td>40X, 10X, 40XRD, 100XRD Semi-Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>Abbe 1.25, Spiral</td>
<td>Rechargeable, cordless LED</td>
</tr>
<tr>
<td>M3702C-8-3</td>
<td>Binocular</td>
<td>W10XD, 18mm</td>
<td>40X, 10X, 40XRD</td>
<td>Built-in, low-drive mechanical</td>
<td>Abbe 1.25, Spiral</td>
<td>Rechargeable, cordless LED</td>
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<tr>
<td>M3702C-8-4</td>
<td>Binocular</td>
<td>W10XD, 18mm</td>
<td>40X, 10X, 40XRD, 100XRD Semi-Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>Abbe 1.25, Spiral</td>
<td>Rechargeable, cordless LED</td>
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</tbody>
</table>

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M10 Series Non-Digital Compound Microscopes

Taking design cues from the popular M10L Series, the non-digital M10 compound microscope series expands your options. Ideal for high school, advanced studies and professional applications. Available with binocular or trinocular heads and choice of semi-plan, plan and multi-phase objectives. C-Mount adapter included with M10T models.

Features:

• Ergonomic Siedentopf head
• Coaxial focusing
• Integrated carry handle
• Built-in low-drive mechanical stage
• Variable, corded, energy-efficient LED illumination
• Sealed 40X and 100X objective lenses

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepieces</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M10B-5</td>
<td>Binocular</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Semi-Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25-Abbe, Rack and Pinion, Hs</td>
<td>Variable, Corded 3W LED</td>
</tr>
<tr>
<td>M10B-5</td>
<td>Binocular</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25-Abbe, Rack and Pinion, Hs</td>
<td>Variable, Corded 3W LED</td>
</tr>
<tr>
<td>M10B-MP</td>
<td>Binocular</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>Multi-phase 1.25, Rack and Pinion</td>
<td>Variable, Corded 3W LED</td>
</tr>
<tr>
<td>M10T-S*</td>
<td>Trinocular</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Semi-Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25-Abbe, Rack and Pinion, Hs</td>
<td>Variable, Corded 3W LED</td>
</tr>
<tr>
<td>M10T-P*</td>
<td>Trinocular</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25-Abbe, Rack and Pinion, Hs</td>
<td>Variable, Corded 3W LED</td>
</tr>
<tr>
<td>M10T-MP*</td>
<td>Trinocular</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>Multi-phase 1.25, Rack and Pinion</td>
<td>Variable, Corded 3W LED</td>
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</table>

*Tablet option - see pages 14-15. For complete details, accessories and specifications, visit our website at www.swiftoptical.com
M15 Series Infinity Corrected Non-Digital Compound Microscopes
The M15 compound microscope series features infinity corrected optics. Ideal for college laboratories, veterinary and medical applications. Available with either binocular or trinocular heads, this research level microscope also incorporates a very bright Halogen illumination system and wide field 20mm eyepieces for a very crisp image. C-Mount adapter included with M15T-P.

Features:
- Ergonomic Siedentopf head
- Coaxial focusing
- “Feather-touch” sensitivity for extremely precise focusing
- Integrated carry handle
- Built-in low-drive mechanical stage
- Variable, corded, energy-efficient Halogen illumination

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepieces</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M15B-P</td>
<td>Binocular</td>
<td>10X, 20mm</td>
<td>4X, 10X, 40X, 100X</td>
<td>Built-in, low-drive</td>
<td>1.25 Abbe, Rack</td>
<td>Variable, Corded 6V-20W Halogen</td>
</tr>
<tr>
<td>M15T-P</td>
<td>Trinocular</td>
<td>10X, 20mm</td>
<td>4X, 10X, 40X, 100X</td>
<td>Built-in, low-drive</td>
<td>1.25 Abbe, Rack</td>
<td>Variable, Corded 6V-20W Halogen</td>
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M2252DGL Series Digital Compound Microscopes
With a built-in 3.0MP digital camera, this monocular digital microscope comes standard with 4X, 10X and sealed 40XRD achromat objectives. (Sealed 100XRD objective is optional), 18mm eyepieces, separate coarse and fine focusing, built-in mechanical stage, substage 1.25 Abbe condenser, and variable LED illumination. Capture digital images through your microscope and export them to your computer or laptop using Motic Images Plus software. Calibration slides included. Windows 7 and above, and Mac OSX compatible.

Features:
- 3.0MP built-in digital camera
- Energy-efficient, variable LED illumination
- 2048 x 1536 pixel live image
- Capture still pictures or live video clips
- Software allows for annotation, measuring, and editing.

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Digital Camera</th>
<th>Eyepiece</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
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</thead>
<tbody>
<tr>
<td>M2252DGL</td>
<td>Digital</td>
<td>3.0MP</td>
<td>18mm</td>
<td>4X, 10X, 40X, 100X</td>
<td>Built-in, low-drive</td>
<td>Built-in NA-1.25 with Iris</td>
<td>Variable, LED</td>
</tr>
<tr>
<td>M2252DGL-4</td>
<td>Digital</td>
<td>3.0MP</td>
<td>18mm</td>
<td>4X, 10X, 40X, 100X</td>
<td>Built-in, low-drive</td>
<td>Built-in NA-1.25 with Iris</td>
<td>Variable, LED</td>
</tr>
</tbody>
</table>

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M3600DGL Series Digital Compound Microscope

Go to the head of the class with the Swift M3600 series! The M3600DGL model features a new look and a 3.0MP built-in digital camera. Energy-efficient, variable, cordless LED illumination provides a white light with virtually no heat, ideal for capturing images and protecting live specimens. Each model comes complete with Motic Images Plus software. Windows 7 and above, and Mac OS X compatible. Calibration slides included.

Features:
- Sealed 40XRD and 100XRD objectives
- Energy-efficient, cordless, variable LED illumination
- 3.0MP built-in digital camera
- 2048 X 1536 pixel live image

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head Digital Camera</th>
<th>Eyepiece</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M3602C-3DGL</td>
<td>Digital Monocular</td>
<td>3.0MP</td>
<td>4XD, 10X, 40X, 100X</td>
<td>Achromat</td>
<td>Built-in, low-drive mechanical</td>
<td>Variable Cordless, LED</td>
</tr>
<tr>
<td>M3602C-4DGL</td>
<td>Digital Monocular</td>
<td>3.0MP</td>
<td>4XD, 10X, 40X, 100X</td>
<td>Achromat</td>
<td>Built-in, low-drive mechanical</td>
<td>Variable Cordless, LED</td>
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</table>

M3700 WiFi Series Digital Compound Microscope

The M3700 WiFi Series is the industry’s first WiFi microscope series. A built-in high-resolution streaming WiFi camera sets this microscope apart from the rest. By creating its own wireless network, simply log on with your iOS or Android device and view, capture, and edit live images from your microscope with the free MotiConnect app.

Features:
- Built-in mechanical stage with coaxial controls
- Energy-efficient, cordless, variable LED illumination
- Built-in 1.3 MP WiFi camera
- Generates own WiFi signal

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head Digital Camera</th>
<th>Eyepiece</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M3702C-3DGL</td>
<td>Digital Monocular</td>
<td>1.3MP</td>
<td>4XD, 10X, 40X</td>
<td>Semi-Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>Variable Cordless, LED</td>
</tr>
<tr>
<td>M3702C-4DGL</td>
<td>Digital Monocular</td>
<td>1.3MP</td>
<td>4XD, 10X, 40X, 100X</td>
<td>Semi-Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>Variable Cordless, LED</td>
</tr>
</tbody>
</table>

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M10D Series High Resolution Digital Compound Microscopes

The M10D line of advanced digital compound microscopes feature a high resolution 3MP digital camera which is great for displaying or capturing live images of up to 2048 x 1536. Available with a choice of semi-plan, plan or multi-phase objectives. Sealed 40XRD and 100XRD objectives. Comes complete with Motic Images Plus software, which allows one to capture, store, manipulate, measure and annotate images. Software is Windows 7 and above, and Mac OSX compatible. Calibration slides included.

Features:
- High-resolution built-in 3MP camera
- 2048 X 1536 pixel live image
- Capture still images or video clips
- Mac and Windows compatible
- Energy-efficient variable LED illumination

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Camera</th>
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<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
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<tbody>
<tr>
<td>M10D-S</td>
<td>Digital</td>
<td>3MP</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Semi-Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25 Abbe, Rack and Pinion, Iris</td>
<td>Variable-corded 3W LED</td>
</tr>
<tr>
<td>M10D-P</td>
<td>Digital</td>
<td>3MP</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25 Abbe, Rack and Pinion, Iris</td>
<td>Variable-corded 3W LED</td>
</tr>
<tr>
<td>M10D-MP</td>
<td>Digital</td>
<td>3MP</td>
<td>W10X, 20mm</td>
<td>10X, 40X, 40XRD Ph, 100XRD Ph</td>
<td>Multi-Phase 1.25 Rack and Pinion</td>
<td>Variable-corded 3W LED</td>
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</table>

M10T-HD Series Advanced Microscopes with Integrated HD Camera

Ideal for higher education and professional applications, the M10T-HD Series expands your options. Available with semi-plan, plan, or multi-phase objective lenses. Included Moticam 1080L turns your microscope into an instant multimedia learning platform.

HD Camera Specifications:
- HDMI Output: 1080P
- 1920 x 1080 captured images and video
- 60 FPS (Full HD)
- On-board software for control and capture
- SD card slot (32GB max)
- USB mouse support

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepieces</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
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</thead>
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<tr>
<td>M10T-HD-S</td>
<td>Trinocular</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Semi-Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25 Abbe, Rack and Pinion, Iris</td>
<td>Variable-corded 3W LED</td>
</tr>
<tr>
<td>M10T-HD-P</td>
<td>Trinocular</td>
<td>W10X, 20mm</td>
<td>40X, 10X, 40XRD, 100XRD Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25 Abbe, Rack and Pinion, Iris</td>
<td>Variable-corded 3W LED</td>
</tr>
<tr>
<td>M10T-HD-MP</td>
<td>Trinocular</td>
<td>W10X, 20mm</td>
<td>10X, 40X, 40XRD Ph, 100XRD Plan Phase</td>
<td>Built-in, low-drive mechanical</td>
<td>Multi-Phase 1.25 Rack and Pinion</td>
<td>Variable-corded 3W LED</td>
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</tbody>
</table>

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Microscopes with Integrated Tablet

Swift is proud to introduce our first digital tablet microscope series featuring integrated 8” LCD tablet. The BTW Series represents the latest in educational technology. Like the Moticam X, this WiFi digital tablet transmits live images to iOS or Android devices. Android-based tablet includes preloaded Motic apps.

Tablet Specifications:
- **Screen Size:** 8” (BTW1 Models)
- **Screen Size:** 10” (BTW2 Models)
- **Screen Resolution:** 800x1280 pixels
- **Camera Resolution:** 5.0 MP
- **WiFi:** 802.11 b/g/n
- **Ports:** CD 5V Power Input, Mini HDMI, Micro SD Card Slot, 3.5mm Audio
- **HDMI Output:** 1080
- **Battery:** Rechargeable

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepieces</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M10T-BTW1-S</td>
<td>Trinocular</td>
<td>W10XD, 20mm</td>
<td>4XD, 10XD, 40XRD, 100XRD Semi-Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25 Abbe, Rack and Pinion, Iris</td>
<td>Variable, Corded 3W LED</td>
</tr>
<tr>
<td>M10T-BTW1-P</td>
<td>Trinocular</td>
<td>W10XD, 20mm</td>
<td>4XD, 10XD, 40XRD, 100XRD Plan</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25 Abbe, Rack and Pinion, Iris</td>
<td>Variable, Corded 3W LED</td>
</tr>
<tr>
<td>M10T-BTW1-MP</td>
<td>Trinocular</td>
<td>W10XD, 20mm</td>
<td>4XD, 10XD, 40XRD, 100XRD Plan Phase</td>
<td>Built-in, low-drive mechanical</td>
<td>Multi-Phase 1.25 Rack and Pinion, Iris</td>
<td>Variable, Corded 3W LED</td>
</tr>
<tr>
<td>M3-F-BTW1</td>
<td>Trinocular</td>
<td>W10XD, 18mm</td>
<td>4XD, 10XD, 40XRD micro and 1X macro</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25 Abbe, Rack and Pinion, Iris</td>
<td>Variable, Corded 4V-20W Halogen</td>
</tr>
<tr>
<td>M3-F-BTW2</td>
<td>Trinocular</td>
<td>W10XD, 18mm</td>
<td>4XD, 10XD, 40XRD, 100XRD Plan Phase</td>
<td>Built-in, low-drive mechanical</td>
<td>Multi-Phase 1.25 Rack and Pinion, Iris</td>
<td>Variable, Corded 4V-20W Halogen</td>
</tr>
<tr>
<td>M29TZ-SM99CL-BTW1</td>
<td>Trinocular</td>
<td>W10XD, 23mm</td>
<td>1X-4X Zoom</td>
<td>Built-in, low-drive mechanical</td>
<td>1.25 Abbe, Rack and Pinion, Iris</td>
<td>Variable, Corded 6V-20W Halogen</td>
</tr>
</tbody>
</table>

For more information about specific products, consult our website or contact your Swift Dealer. For complete details, accessories and specifications, visit our website at www.swiftoptical.com

Microscopes with Integrated Tablet

The BTW Series features high-speed, full-resolution imaging technology built into one of our most popular microscopes. Use it as a conventional microscope, or share live images with your colleagues using WiFi tablets, wireless laptops, and HD-ready LCD monitors and projectors through HDMI.
M3 Series Macro/Micro/Field Microscopes

The M3 series combines 3 microscopes in one! The M3 allows you to view both microscopic specimens, by using the compound objectives (4X, 10X, and 40X), and macroscopic specimens, by using the 1X macro objective. It is cordless, using energy-efficient, rechargeable LED illumination, and compact so it is ideal for both classroom and field work applications. Switching from compound to macro use is easy to accomplish by changing the objectives and adjusting the stage’s position. All metal construction makes it durable for use in any environment. The unique tripod base keeps it sturdy even on rugged outdoor surfaces.

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepiece</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M3-B</td>
<td>Binocular</td>
<td>W10XD, 18mm</td>
<td>4X, 10X, 40X micro and 1X macro</td>
<td>Stage, specimen cup, contrast plate</td>
<td>Built-in NA 0.65 with iris</td>
<td>Cordless, LED</td>
</tr>
</tbody>
</table>

Features:

- Unique Micro-Macro design
- Cordless and rechargeable
- Ideal for classroom or field use
- Variable, energy-efficient LED illumination

M3-F Comparison/Forensic Microscope

Use the M3-F’s revolutionary technology to compare images in both micro and macro environments. The M3-F’s dedicated macro lens, with a large working distance, allows you to view not only bullets but also larger more bulky, “evidence” items. Swift’s powerful optical system allows for images to be seen either 100% from the left microscope, 100% from the right, side-by-side, or overlapping. The M3-F is the first comparison microscope at this price level that you can achieve overlapping of images. C-Mount adapter included with M3-F.

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepiece</th>
<th>Objectives</th>
<th>Stage</th>
<th>Condenser</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M3-F</td>
<td>Trinocular</td>
<td>W10XD, 18mm</td>
<td>4X, 10X, 40X micro and 1X macro</td>
<td>Stage, specimen cup, contrast plate</td>
<td>Built-in NA 0.65 with iris</td>
<td>Cordless, Top and Bottom LED</td>
</tr>
</tbody>
</table>

Features:

- Unique design for comparison and forensic studies
- Included C-Mount adapter
- Energy-efficient LED illumination
- 3 year limited warranty

For more information about specific products, consult our website or contact your Swift Dealer. For complete details, accessories and specifications, visit our website at www.swiftoptical.com.
SM100 Stereo Series Microscopes

The SM100 Series offers six models from which to choose. The SM101 features fixed magnifications of 10X and 30X. The SM102 features fixed magnifications of 20X and 40X. The SM105 features a variable zoom magnification range of 10X-30X, offering added versatility. Each model is available in either corded or cordless versions. All models include energy-efficient variable LED illumination with 5 light setting combinations, “one-touch” spring loaded stage clips, and right eyepiece dipter focusing adjustment. Ideal for high school classrooms and up.

Features:
- Energy-efficient variable illumination
- Choice of magnifications
- Cordless or Corded options
- Unique cord holder (corded models only)

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepieces</th>
<th>Objectives</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM101</td>
<td>Binocular</td>
<td>W10X, 25mm</td>
<td>1X and 3X</td>
<td>Turret variable, 5 x 0.06W LED, Top variable, 0.05W LED, Bottom 0.05W LED, Corded</td>
</tr>
<tr>
<td>SM102</td>
<td>Binocular</td>
<td>W10X, 25mm</td>
<td>2X and 4X</td>
<td>Turret variable, 5 x 0.06W LED, Top variable, 0.05W LED, Bottom 0.05W LED, Corded</td>
</tr>
<tr>
<td>SM105</td>
<td>Binocular</td>
<td>W10X, 25mm</td>
<td>1X to 3X</td>
<td>Turret variable, 5 x 0.06W LED, Top variable, 0.05W LED, Bottom 0.05W LED, Corded</td>
</tr>
<tr>
<td>SM101-C</td>
<td>Binocular</td>
<td>W10X, 25mm</td>
<td>1X and 3X</td>
<td>Turret variable, 5 x 0.06W LED, Top variable, 0.05W LED, Bottom 0.05W LED, Cordless</td>
</tr>
<tr>
<td>SM102-C</td>
<td>Binocular</td>
<td>W10X, 25mm</td>
<td>2X and 4X</td>
<td>Turret variable, 5 x 0.06W LED, Top variable, 0.05W LED, Bottom 0.05W LED, Cordless</td>
</tr>
<tr>
<td>SM105-C</td>
<td>Binocular</td>
<td>W10X, 25mm</td>
<td>1X to 3X</td>
<td>Turret variable, 5 x 0.06W LED, Top variable, 0.05W LED, Bottom 0.05W LED, Cordless</td>
</tr>
<tr>
<td>SM105T-C</td>
<td>Trinocular</td>
<td>W10X, 25mm</td>
<td>1X to 3X</td>
<td>Turret variable, 5 x 0.06W LED, Top variable, 0.05W LED, Bottom 0.05W LED, Cordless</td>
</tr>
</tbody>
</table>

SM90 Series Stereo Microscopes

The flagship of the Swift Stereo microscope line, the SM90 Series provides maximum versatility for the classroom. Ideal for high school classrooms and up. The modular design allows you to use the stereo stand with other Swift modular heads. Built to withstand student use, this series comes with locked-on eyepieces, spring-loaded stage clips, “slip-clutch” focusing system and Swift’s unique “C-wrench” tool that allows teachers to control focusing tension. Corded LED base with dual illumination switches for three light setting options.

Features:
- Energy-efficient top and bottom LED illumination base
- Left eye dipter adjustment
- Extra large 90mm diameter stage plate
- Ergonomic viewing

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepieces</th>
<th>Objectives</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM98-SM90CL</td>
<td>Binocular</td>
<td>W10X, 23mm</td>
<td>2X and 4X</td>
<td>Variable LED (Top), LED (Bottom)</td>
</tr>
</tbody>
</table>

For more information about specific products, consult our website or contact your Swift Dealer. For complete details, accessories and specifications, visit our website at www.swiftoptical.com

SM98-SM90CL* Binocular, W10X, 23mm, 2X and 4X, Variable LED (Top), LED (Bottom)

*While supplies last. Limited stock available.
### M29TZ Series Advanced Stereo Zoom Microscope

The M29TZ-SM99CL is ideal for laboratory, industrial and educational use. This trinocular stereo microscope features zoom objectives with a continuous magnification range of 10X-40X, offering added versatility that is not an option with fixed power stereo microscopes. Corded energy-efficient LED stand with variable transbase illumination to control brightness and a top light that adjusts for optimal lighting angles.

**Features:**
- Magnification range: 10x-40X zoom
- High resolution optics
- LED Stand
- Left and right eye dioptr adjustment
- Long-working distance

![M29TZ-SM99CL](image)

**Specifications:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Head</th>
<th>Eyepieces</th>
<th>Objectives</th>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M29TZ-SM99CL*</td>
<td>Trinocular</td>
<td>W10X, 23mm</td>
<td>1X-4X Zoom</td>
<td>Variable LED (Top), LED (Bottom)</td>
</tr>
</tbody>
</table>

*Tablet option - see pages 14-15

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### Moticam 2, 3+, 5+, 10+

Use your own microscope to create still or moving images on your computer using our Moticam series. With the included Motic software, you can view, capture, enhance, label, measure, print, and store the images with one program. These lightweight digital cameras fit over virtually any eyepiece [stereo or compound] with supplied eyepiece adapters.

**Features:**
- Live, digital output
- Detachable USB cable
- Feature-packed Motic Images Plus software
- Makes any microscope digital

![Moticam 3+](image)

**Specifications:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Digital Interface</th>
<th>Max Resolution</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-Moticam 2</td>
<td>USB</td>
<td>2.0 MP / 1600 x 1200</td>
<td>Whiteboards, compound or stereo microscopes, independently, PC and MAC</td>
</tr>
<tr>
<td>D-Moticam 3+</td>
<td>USB 3.0</td>
<td>3.0 MP / 2048 x 1536</td>
<td>Ideal for live imaging, printed images, LCD projectors, live streaming video, PC and MAC</td>
</tr>
<tr>
<td>D-Moticam 5+</td>
<td>USB 3.0</td>
<td>5.0 MP</td>
<td>High-quality printed images, publishing and viewing on LCD screens, PC and MAC</td>
</tr>
<tr>
<td>D-Moticam 10+</td>
<td>USB 3.0</td>
<td>10.0 MP</td>
<td>High-resolution, documentation and publication camera, PC and MAC</td>
</tr>
</tbody>
</table>

For more information about specific products, consult our website or contact your Swift Dealer. For complete details, accessories and specifications, visit our website at www.swiftoptical.com
Moticam 1080
A multi-tasking microscopy camera, the Moticam 1080 features direct 1080 HDMI output to any HD ready monitor. In addition, images and videos can be captured directly onto an SD card. Whether used in an educational, industrial, or clinical area, the Moticam 1080 is a good fit.

Features:
- HDMI Output: 1080P
- 1920 x 1080 captured images and video
- 60 FPS (Full HD)
- On-board software for control and capture
- SD card slot (32GB max)
- USB mouse support

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Digital Interface</th>
<th>Max Resolution</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-Moticam 1080</td>
<td>HDMI and USB 2.0</td>
<td>1080 via HDMI, 1920 x 1080 captured images and video</td>
<td>For use with HDMI direct output or capture to SD card</td>
</tr>
</tbody>
</table>

Moticam X and Moticam X²
Unlock the power of your microscope with Moticam X and rechargeable Moticam X². These cameras have the capability to stream live images to your WiFi enabled tablet, cell phone, or computer, while connecting up to five devices without the need for a router. Download the free MotiConnect app from the App Store or the Google Play Store. With built-in RJ45 port, the Moticam X2 is a full classroom solution!

Features:
- Generates own WiFi signal
- Can be viewed on iOS and Android devices
- No additional router needed (Moticam X)
- 1.3 MP live resolution

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Digital Interface</th>
<th>Max Resolution</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-Moticam X</td>
<td>WIFI</td>
<td>1.3 MP</td>
<td>Stream live images to iOS and Android devices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1280 x 1024 (WIFI)</td>
<td></td>
</tr>
<tr>
<td>D-Moticam X²</td>
<td>WIFI, RJ45 Port</td>
<td>1.3 MP</td>
<td>Connect to wired network via network port, Rechargeable battery enables field use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1280 x 1024 (WIFI)</td>
<td></td>
</tr>
</tbody>
</table>

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Swift Weather Instruments

#478 Altimeter/Barometer:

Three instruments in one: a vehicle altimeter, a hiking altimeter, and an aneroid barometer with a dial calibrated in inches of mercury. Portable, versatile, and easy to adhere to a dashboard, this 2 1/16” x 1 15/16” compact instrument adapts to a variety of environments. Range: zero to 15,000 feet.

Software Applications for Use with Swift Digital Microscopes and Cameras

Motic Net

Model Number: D-MoticNet 1:24

Motic Net represents the next step in science classroom management. Designed for and inspired by the success of digital microscopes, Motic Net is a software program that allows digital microscopes to be linked together in a network so that one teacher can have full and instant access to any student at any time.

Imagine the possibilities that can happen in the classroom! Each student has the opportunity to explore and present findings to other students with keystroke guidance from the teacher.

Teachers can broadcast from their own computer workstation to an entire class through a simple click of a mouse, making this a truly interactive experience.

Swift offers the Motic Net suite in a 1:24 configuration. Other customized classrooms packages are available.

Motic Trace

Model Number: D-CD MoticTrace

Motic Trace is an affordable software application program that turns Swift digital microscopes into comparison scopes. This software gives a teacher the ability to connect two Swift digital microscopes or two Swift Digital cameras to a single computer and the result is immediate live comparison imaging!

Easy to install and use, Motic Trace is a powerful tool that teachers can also use to introduce students to the world of forensic science. Imagine the ability to overlay, resize, and rotate live images or compare with a captured image set. Handwriting, fingerprint or other forensic analysis comes alive!

Since this is a software solution, minimum hardware requirements apply.
### Digital Applications Chart

The following chart will help you select the best product for your particular use.

<table>
<thead>
<tr>
<th>Series</th>
<th>Digital Output (PC)</th>
<th>HDMI Output</th>
<th>WiFi Output</th>
<th>Max resolution</th>
<th>Application or for use with</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>M225DGL</td>
<td>X</td>
<td>X</td>
<td>2048 X 1536 - 3.0MP</td>
<td>Capture images, live viewing on computer screen, whiteboards, PC/MAC</td>
<td>Built-in digital camera</td>
<td></td>
</tr>
<tr>
<td>M360DGL</td>
<td>X</td>
<td>X</td>
<td>2048 X 1536 - 3.0MP</td>
<td>Capture images, live viewing on computer screen, whiteboards, PC/MAC</td>
<td>Built-in digital camera</td>
<td></td>
</tr>
<tr>
<td>M10D</td>
<td>X</td>
<td>X</td>
<td>3048 x 1536 - 3.0MP</td>
<td>Capture images, live viewing on computer screen, whiteboards, PC/MAC</td>
<td>High-resolution built-in digital camera</td>
<td></td>
</tr>
<tr>
<td>M3700 WiFi</td>
<td>X</td>
<td>X</td>
<td>1280 x 1024 - 1.3MP</td>
<td>Capture/view digital images using a WiFi enabled device</td>
<td>Built-in WiFi digital camera</td>
<td></td>
</tr>
<tr>
<td>M10T-HD</td>
<td>X</td>
<td>X</td>
<td>1080P via HDMI</td>
<td>For use with HDMI direct output or capture to SD card</td>
<td>HDMI live imaging camera</td>
<td></td>
</tr>
<tr>
<td>Tablet Models</td>
<td>X</td>
<td>X</td>
<td>5.0MP / 1080 Live 1280 x 800 Screen</td>
<td>Stand-alone image viewing and sharing 4&quot; LCD viewing screen or 10&quot; LCD viewing screen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Available from National Optical, the following Next Generation Moticams, with included Motic Images Plus software, can be used with Swift Microscopes.

#### Moticam Model

- **Moticam 2**: 1600 x 1200 - 2.0MP. Whiteboards, compound or stereo microscopes, independently, PC/MAC. Features: Large display, crisp imaging.
- **Moticam 3+** (USB 3.0): 2048 x 1536 - 3.0MP. Ideal for live imaging, printed images, LCD projection, live images. Features: High speed live imaging.
- **Moticam 5+** (USB 3.0): 5.0MP. Higher-quality printed images, publishing, and viewing on LCD screens, whiteboards, PC/MAC. Features: High speed live imaging.
- **Moticam 10+** (USB 3.0): 10.0 MP. Higher-quality printed images, publishing, and viewing on LCD screens, whiteboards, PC/MAC. Features: High speed live imaging.
- **Moticam 1080**: 1080P via HDMI. HDMI live imaging camera. Features: Stand-alone HD recording.
- **Moticam X**: 1280 x 1024 - 1.3MP. Capture/view digital images using a WiFi enabled device. Features: WiFi digital camera.
- **Moticam X+**: 1280 x 1024 - 1.3MP. Capture/view digital images using a WiFi enabled device. Features: WiFi digital camera with included K45 port and rechargeable battery.

#### Ten Top Tips Towards Better Microscopy

1. A compound microscope gives a two-dimensional, flat image. Use a compound microscope for specimens to be examined using a slide preparation method (micro). There are monocular, dual-view, binocular and trinocular compound microscopes.
2. A stereo microscope has a binocular body and gives a three-dimensional image. Use a stereo microscope for specimens that have depth or are large in size and require a working distance (macro).
3. Start to focus using the lowest magnification. In a compound microscope, this is the 4X objective. Make sure the objective “clicks” into place. In a stereo microscope, start by using the 1X.
4. Always place the specimen to be viewed in the center of the stage or stage plate. When using a compound microscope make certain the slide is placed on the stage with the center over the light.
5. When viewing a slide, make sure that it is right-side-up. This is especially important when using a prepared slide. If upside down, it will not be in focus on high power (40X).
6. Focus first by using the coarse adjustment knob, then, the fine focus knob. You should be able to change from one objective [magnification] to another with just a minor fine focus adjustment. This means the microscope is parfocalled.
7. Adjust the illumination by using the intensity control and condenser or diaphragm.
8. Remember, when using higher magnifications, it is necessary to adjust the light source.
9. Teach your students the proper care and handling of the microscope. Always carry a microscope by using two hands; one hand around the arm of the microscope and the other under the base of the scope.
10. Keep your microscope clean. To clean the lenses, first remove any dust and dirt by using a camel hair brush or canned air. Moisten the end of a Q-tip with lens cleaning solution. Keep the other end dry. Clean the optical surface with the moist end of the Q-tip. Keep the other end dry. Clean the optical surface with the moist end of the Q-tip using a circular motion. Dry the surface with the dry end of the Q-tip using a circular motion. A solution of Windex with vinegar works well. Use a dust cover to store when not in use.

For more resources, visit www.swiftoptical.com/resources.