

# Carolina<sup>®</sup> Microscopes

Visit  
[Carolina.com/scopeguide](http://Carolina.com/scopeguide)  
for help selecting the  
right microscope.

2018

Carolina.com  
800.334.5551

CAROLINA<sup>®</sup>



## A Guide to Microscopes

Carolina offers a full range of compound microscopes and stereomicroscopes spanning virtually all grade levels and applications. We're sure you'll find the right one for your application. If you're a first-time buyer and a bit overwhelmed by the selection, the guide below can help you focus your search.

### There are 2 types of microscopes: compound microscopes and stereomicroscopes.



#### Choose a compound microscope to:

- View slide-mounted, micro-sized specimens that are thin enough to allow light to pass through them
- Examine premounted slides and pond water specimens such as algae and protozoans
- Provide high-power magnification (40× to 1,000×), a narrow field of view, and a short working distance



#### Choose a stereomicroscope to:

- Observe unmounted, macro-sized specimens that are too thick to allow light to pass through them
- View insects, plants, rocks, coins, and more
- Provide low-power magnification (10× to 40×), a wide field of view, and a long working distance

### Why buy a digital microscope or camera?

A digital microscope is basically a standard microscope with a digital camera built into the head. It has USB outputs that connect to your computer and comes with scientific software that allows students to capture images, produce video clips, measure specimens, label body parts, and more. You can make a quality microscope digital by adding a specially designed camera that connects to the eyepiece of your microscope. The camera also comes with the scientific software.

#### Features to consider:

- Image resolution or pixel count—the higher the count, the better the image quality
- Images can be displayed on a computer monitor or projected on a large screen—we recommend a camera or microscope with 1.3 megapixels or higher if using a projector

### Most microscopes use one of these types of illumination:

#### Tungsten

- Yellowish light—can distort the colors of viewed specimens
- Hot light—preferred for illuminating nonliving specimens
- Least expensive to purchase and most common

#### Fluorescent

- White light—gives specimens a more natural appearance
- Cool light—preferred for illuminating living specimens
- More expensive than tungsten to purchase, but less expensive to operate

#### Halogen

- Very bright white light—gives specimens a more natural appearance
- Hot, concentrated light—preferred for use with binocular compound microscopes and for illuminating nonliving specimens
- Commonly found in research-level microscopes

#### LED

- White light—gives specimens a more natural appearance
- Cool light—preferred for illuminating living specimens
- Energy efficient and a popular choice for cordless microscopes

#### • Repair, Parts, and Service

Our commitment to customer satisfaction extends to our complete microscope service facility, providing top-of-the-line repair and reconditioning. We offer expert repair at a reasonable cost, in-stock parts, estimates upon request, and guaranteed satisfaction.

#### • Quantity Discounts

Discounts are available on special quotations. Call our Quotations Department at 800.227.1150, ext 6300, for details.

#### • Special Requests

Our products are backed by a comprehensive inventory of in-stock parts and accessories. We can also custom configure many of our microscopes to suit your needs. When your requirements involve the Wolfe®, Swift®, Motic®, Ken-A-Vision®, National, or Leica product lines—microscopes, accessories, repair, or bid requests—please contact us even if you don't find what you need here.

## Basic Compound Microscopes



### Introductory Student Microscopes

Grades 3–8.

This series offers compact, economical instruments incorporating the most wanted features in a student microscope. Separate coarse and fine adjustments allow for faster, more accurate focusing, especially at higher magnifications. Two eye tube designs are available—the more economical vertical eyetube or the 45° inclined head for ease of viewing when seated.

- 10× widefield eyepiece with pointer locked in and rotatable
- 360° rotatable head (item #591180)
- Achromatic, color-coded 4×, 10×, 40×R objectives provide 40×, 100×, and 400× magnification
- Rack-and-pinion coarse and fine adjustments with slip clutch to protect focusing mechanism
- Upper and lower travel stops prevent damage to slide or objective
- Reagent-resistant stage (88 × 82 mm) with locked-on stage clips and disc diaphragm
- Substage illuminator with 15-W lamp
- Sturdy, all-metal stand with stain-resistant, baked-on finish
- Dust cover and Styrofoam® case
- Wolfe® 5-year limited warranty (excluding bulb and cord)
- Size, 11½" H × 4½" W × 6½" D; wt, about 3½ lb

**591178** Vertical Microscope Each **\$135.00**

**591180** 45° Inclined Microscope Each **\$158.00**

### Replacement Lamp

Tungsten; 120 V, 15 W, bayonet mount.

**597402** Each **\$9.25**



591178 Wolfe Introductory Vertical Student Microscope



591180 Wolfe Introductory 45° Inclined Student Microscope

### Carolina Teacher Tips

#### Helpful Hint

Magnification—more is better, right? Not necessarily. An increase in magnification results in decreases of field of view, working distance, and depth of field. Lighting becomes much more critical. The optimal image is found by working up to just the magnification level that reveals the desired aspects of the specimen.



Teacher's Choice



Carolina Exclusive



More Information Available Online

# Compound Microscopes

## Compound Microscopes



### LED Educational Microscopes

Grades 7–12.

#### Less heat, more value, and long-lasting durability

- Cool, variable-intensity LED illumination eliminates heat buildup that can affect live microorganisms.
- Separate coarse and fine adjustments give faster, more accurate focusing at high magnifications.
- Built-in mechanical stage on some models makes it easy to scan the entire specimen without using fingers to move the slide.

If you're looking for an educational microscope that's well designed, versatile, and durable, Carolina offers you an exceptional value with your choice of one of our quality Wolfe® LED Educational Microscopes.

**Exceptional performance**—These high school microscopes have LED illumination with rheostat control that radiates little or no heat compared with lower-priced models with tungsten illumination—a very important benefit when you're working with live microorganisms. LED illumination is also whiter and promotes far longer bulb life. The focus mechanism has separate coarse and fine adjustments, incorporating travel stops and a slip clutch to protect slide, objectives, and focus mechanism.

**Flexible options**—Choose between models with "one-touch" stage clips for ease of use and advanced models with a built-in mechanical stage for smoother slide positioning. A dual viewing model (item #590962) is an excellent choice for adding a second user or an accessory such as a digital camera.

**Exceptional value**—Get the features you need, including an inclined head, in-base LED illuminator, and iris diaphragm, at affordable prices. Quality DIN\*\* optics include a widefield 10× pointer eyepiece and 40× and 100× objectives that retract to prevent possible slide damage. Locked-on eyepiece and stage clips protect against loss and tampering. Five different configurations are available, and each comes with dust cover, foam case, and Wolfe® lifetime limited warranty (excluding bulb, cord, and fuse). Size, 14" H × 5" W × 6½" D; wt, about 7 lb.



590960 Wolfe LED Educational Microscope

Catalog No.	Name	Head Type	Objective Lens	Mechanical Stage	Diaphragm	Each
590960	Educational Microscope	Monocular	4×, 10×, 40×R	Optional	Adjustable Iris	<b>\$267.00</b>
590961	Educational Microscope with Mechanical Stage	Monocular	4×, 10×, 40×R	Built-In	Adjustable Iris	<b>\$317.00</b>
590962	Teaching Educational Microscope with Mechanical Stage	90° Dual View	4×, 10×, 40×R	Built-In	Adjustable Iris	<b>\$379.00</b>
590963	Advanced Educational Microscope with Mechanical Stage	Monocular	4×, 10×, 40×R, 100×R	Built-In	Adjustable Iris with Abbe Condenser	<b>\$437.00</b>
590964	Advanced Educational Microscope with Mechanical Stage	Siedentopf Binocular	4×, 10×, 40×R, 100×R	Built-In	Adjustable Iris with Abbe Condenser	<b>\$574.00</b>

\*\*DIN: Deutsche Industrie Normen, an industry standard.



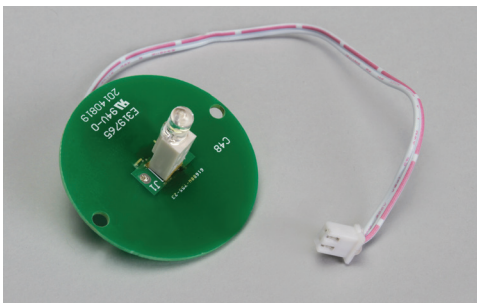
# Compound Microscopes



590962 Wolfe LED Teaching Educational Microscope with Mechanical Stage



590964 Wolfe LED Advanced Educational Microscope with Mechanical Stage

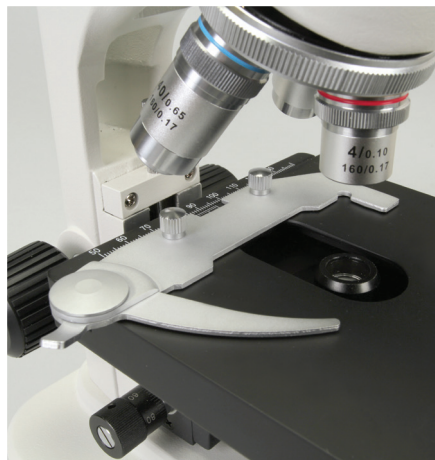


590979 Wolfe LED Series Replacement Lamp

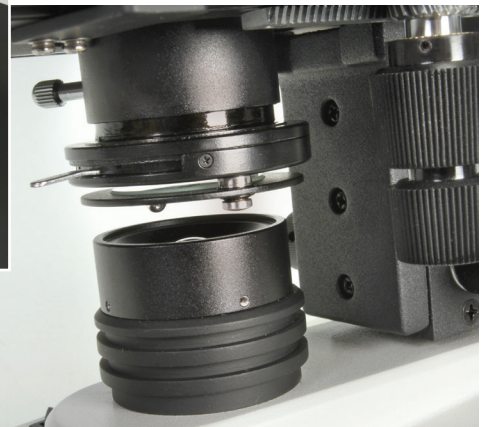
## Wolfe® LED Educational Series Replacement Lamp

Replacement lamp assembly fits Wolfe® LED Educational Series microscopes manufactured in 2016 or later.

**590979 Each \$14.50**



Details from 590963 Wolfe LED Advanced Educational Microscope with Mechanical Stage



# Compound Microscopes

## Wolfe® CFL Educational Microscopes

The right features, the right price, and the advantages of fluorescent illumination



### CFL Educational Microscopes

Grades 7–12.

**Wolfe® CFL Educational Microscopes—less heat, more value**

- Fluorescent illumination virtually eliminates heat buildup that can affect live microorganisms.
- Separate coarse and fine adjustments give faster, more accurate focusing at high magnifications.
- Built-in mechanical stage (item #590955) makes it easy to scan the entire specimen without using fingers to move the slide.

If you're looking for an educational microscope that's well designed, versatile, and durable, Carolina offers you an exceptional value with one of our quality Wolfe® CFL Educational Microscopes.

**Cool performance**—These high school microscopes have fluorescent illumination that radiates little or no heat compared with lower-priced models with tungsten illumination—a very important benefit when you're working with live microorganisms. Fluorescent light is also whiter and promotes longer bulb life. The focus mechanism has separate coarse and fine adjustments, incorporating travel stops and a slip clutch to protect slide, objectives, and focus mechanism.

**Cool options**—Choose between a model with stage clips that is predrilled for an optional add-on mechanical stage and a model with a built-in mechanical stage for smoother slide positioning.

**Cool value**—Get the features you need, including an inclined and rotatable monocular head, in-base illuminator, and disc or iris diaphragm, at affordable prices. Quality DIN\*\* optics include a widefield 10× pointer eyepiece and 4×, 10×, and 40× objectives. The 40× is retractable to prevent possible slide damage. Locked-on eyepiece and stage clips protect against loss and tampering.

Each comes with dust cover, foam case, and Wolfe® lifetime limited warranty (excluding bulb, cord, and fuse). Size, 14" H × 5" W × 6½" D; wt, about 7 lb.

\*\*DIN: Deutsche Industrie Normen, an industry standard.

### Replacement Lamp

Fluorescent; 5 W.

**595540 Each \$11.60**



590955 Wolfe CFL Educational Microscope with Mechanical Stage



590950 Wolfe CFL Educational Microscope

Catalog No.	Name	Head Type	Objective Lens	Mechanical Stage	Diaphragm	Each
<b>590950</b>	Educational Microscope	Monocular	4×, 10×, 40×R	Optional	5-Hole Disc	<b>\$259.00</b>
<b>590955</b>	Educational Microscope with Mechanical Stage	Monocular	4×, 10×, 40×R	Built-In	Adjustable Iris	<b>\$305.00</b>



# Compound Microscopes



## Advanced LED Series Microscopes

Grade 9–College.

### Traditional microscopes with modern design and advanced features

A series of microscopes that includes the latest and best features for educational microscopy. Affordably priced, these microscopes are designed for high performance, practicality, and easy operation. Size, 15" H × 7" W × 9" D; wt, 10 lb.

#### High performance

- Widefield WF10× eyepiece on a 360° rotating monocular head
- Siedentopf-design binocular head (item #591004) adds comfort for extended viewing
- Siedentopf-design trinocular head (item #591005) includes a C-mount adapter for adding an optional digital camera, such as a camera in the Motic® Moticam series
- Quality DIN\*\* parfocal, parcentric, EA achromatic objectives
- Advanced coaxial coarse- and fine-focusing adjustments with upper-limit stop to prevent damage to slide and objective
- Spiral-mounted 1.25 N.A. Abbe condenser with iris diaphragm

#### Easy to use

- Reverse-mounted quadruple nosepiece with positive stops for precise magnification changes
- Rounded stage and reverse-mounted objectives for easier slide access and manipulation
- Built-in mechanical stage with low-position coaxial controls gives students precise control over slide movements—excellent for slide scanning at higher magnifications

#### Practical value

- Integrated handle and cord wrap encourage proper handling and provide neat, easy storage
- Variable-intensity, energy-efficient, cool LED lighting for extended viewing of live specimens
- LED lamps last longer than any others—up to 50,000 hr!

#### Great warranty

- Lifetime limited warranty



591002 Wolfe  
Advanced LED  
Monocular  
Microscope



591004 Wolfe  
Advanced LED  
Binocular  
Microscope

Catalog No.	Head Type	Objectives	Each
591000	Monocular	4×, 10×, spring-loaded 40×	\$479.00
591002	Monocular	4×, 10×, spring-loaded 40×, spring-loaded oil-immersion 100×	\$539.00
591004	Siedentopf Binocular	4×, 10×, spring-loaded 40×, spring-loaded oil-immersion 100×	\$719.00
591005	Siedentopf Trinocular	4×, 10×, spring-loaded 40×, spring-loaded oil-immersion 100×	\$849.00

# Stereomicroscopes

## Stereomicroscopes

The advantages of having a stereomicroscope in your classroom:

- No specimen preparation necessary
- 3-D image has depth
- View virtually anything—whole specimens or slides
- Simple to use and frustration free
- No special lighting required—use indoors or out
- Binocular viewing—use both eyes
- Long working distance, large field of view
- Image is erect—not reversed or upside down

A stereomicroscope sparks and maintains students' interest through almost limitless specimen choice and gives simple, immediate insight into the world beyond the naked eye.



591815 Wolfe Student Stereomicroscope, 20× and 40× Magnification



### Student Stereomicroscopes

Grades 6–12.

New advanced LED illumination and forward-facing head make the Wolfe® Student Stereomicroscopes outstanding performers in the science classroom.

- LED lighting has a longer lifetime than tungsten and provides a bright, cool light source that is especially beneficial for viewing living specimens
- Independently controlled upper and lower illuminators allow proper viewing of opaque and transparent specimens
- Forward-facing head places the microscope in a better position for students to manipulate and exchange specimens

Just imagine how a stereomicroscope will widen your classroom studies—allowing you to view everything from tiny cells to large rock, wood, plant, and insect specimens. These durable Wolfe® dual-magnification student microscopes have built-in, rotating objectives that make changing magnifications a snap. Their 45° inclined binocular heads conveniently adjust to accommodate large specimens. Each of these educational microscopes includes eyecups, stage clips, 3 stage plates (frosted, black, and white), and dust cover.

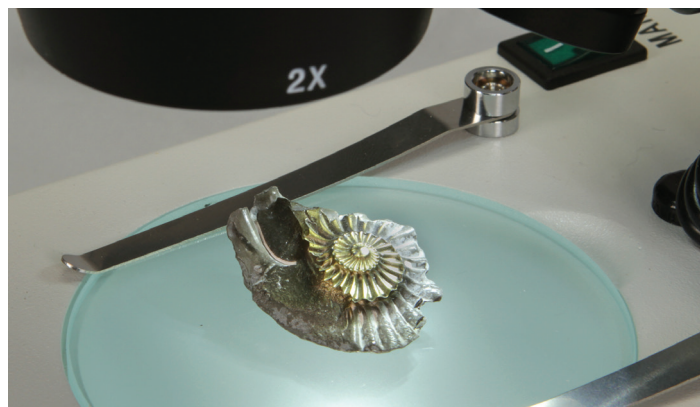
- Your choice of **10× and 30× Magnification** or **20× and 40× Magnification**
- Working distance of 75 mm with a maximum on-stage specimen height of 35 mm
- Inclined eyetubes for viewing ease, even when seated
- Adjustable interpupillary distance
- Independently adjustable left eyetube focus
- Size, 10" H × 4½" W × 7" D; wt, about 5 lb

**591810** 10× and 30× Magnification Each **\$265.00**

**591815** 20× and 40× Magnification Each **\$265.00**



Close-up of stage plate from 591815 Wolfe Student Stereomicroscope, 20× and 40× Magnification



LED lighting is cool and energy efficient



## Cordless Microscopes

### Wolfe® Cordless Microscopes with LED Illuminators

Use anywhere—in the classroom or in the field; cordless or plugged in!

Wolfe® Cordless Microscopes can be used anywhere, inside the lab and out. Nickel-metal hydride batteries (included) provide hours of uninterrupted illumination. Unlike some other models, these Wolfe® Cordless Microscopes can be used while the batteries are being charged—that means no downtime for busy laboratories. An AC adapter/charger and a dust cover are included with each microscope.

- Batteries recharge and stay charged when the microscope is plugged in
- Uses super-bright LED illuminator instead of a small reflective mirror



#### Introductory Cordless Microscope

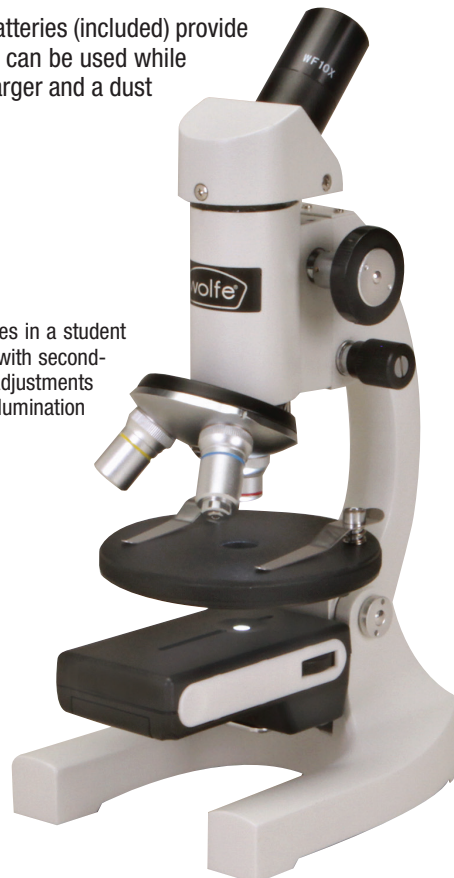
Grades 3–8.

This microscope is a compact, economical instrument incorporating the most wanted features in a student microscope. Although designed for more inexperienced users, the quality optics offer an excellent image. Coupled with second-to-none mechanical quality, this microscope aims to bring you years of enjoyable use. The separate coarse and fine adjustments allow for faster and more accurate focusing, especially at higher magnifications. The rechargeable cordless LED illumination provides a cool light source and allows you to use the microscope in virtually any location.

- 10×/14-mm widefield eyepiece with locked-in and rotatable pointer
- The 360° rotatable head is inclined 45° for viewing ease when seated
- Corrected parcentric and parfocal 4×, 10×, and 40×R objectives provide 40×, 100×, and 400× magnification
- Rack-and-pinion coarse and fine adjustment with slip clutch to protect focusing mechanism
- Upper and lower travel stops prevent damage to slide or objective
- Movable stage with locked-on stage clips
- Sturdy, all-metal stand with stain-resistant, baked-on finish
- Dust cover and Styrofoam® case
- Wolfe® 5-year limited warranty
- Size, 11½" H × 4½" W × 6½" D; wt, about 3½ lb

591182 Each \$185.00

591182 Wolfe Introductory Cordless Microscope



591848 Wolfe Intermediate Tri-Power Cordless Stereomicroscope



#### New! Intermediate Tri-Power Cordless Stereomicroscope

Grades 6–12.

Introducing the most versatile stereomicroscope Wolfe® has ever offered. Three levels of magnification and cordless operation make it a great choice for the classroom or field.

- LED illumination—cooler and lasts longer than tungsten or halogen bulbs
- Built-in tri-power magnification—view a large variety of specimens
- Cordless operation—can be used anywhere

With 3 magnifications, 10×, 20×, and 40×, students can view 3-D images of rocks, fossils, insects, plants, larger protozoa, and much more. The variable-intensity top and bottom LED illumination provides cool, bright, energy-efficient lighting that will not harm live specimens. Unlike many competing models, this stereomicroscope is fully functional while being recharged, eliminating a source of downtime. Additional features:

- 45° inclined binocular head for a more comfortable viewing angle
- Three sets of objectives housed in a rotating turret for fast magnification changes
- Forward-facing head that makes it easy for students to manipulate and exchange specimens
- Size, 12" H × 6" W × 9" D; wt, 6 lb

Includes an AC adapter/charger, 3 rechargeable AA nickel-metal hydride batteries (installed), and 2 stage plates (1 frosted and 1 reversible black-and-white).

591848 Each \$279.00

# Cordless Microscopes



## LED Cordless Educational Microscopes

Grades 7–12.

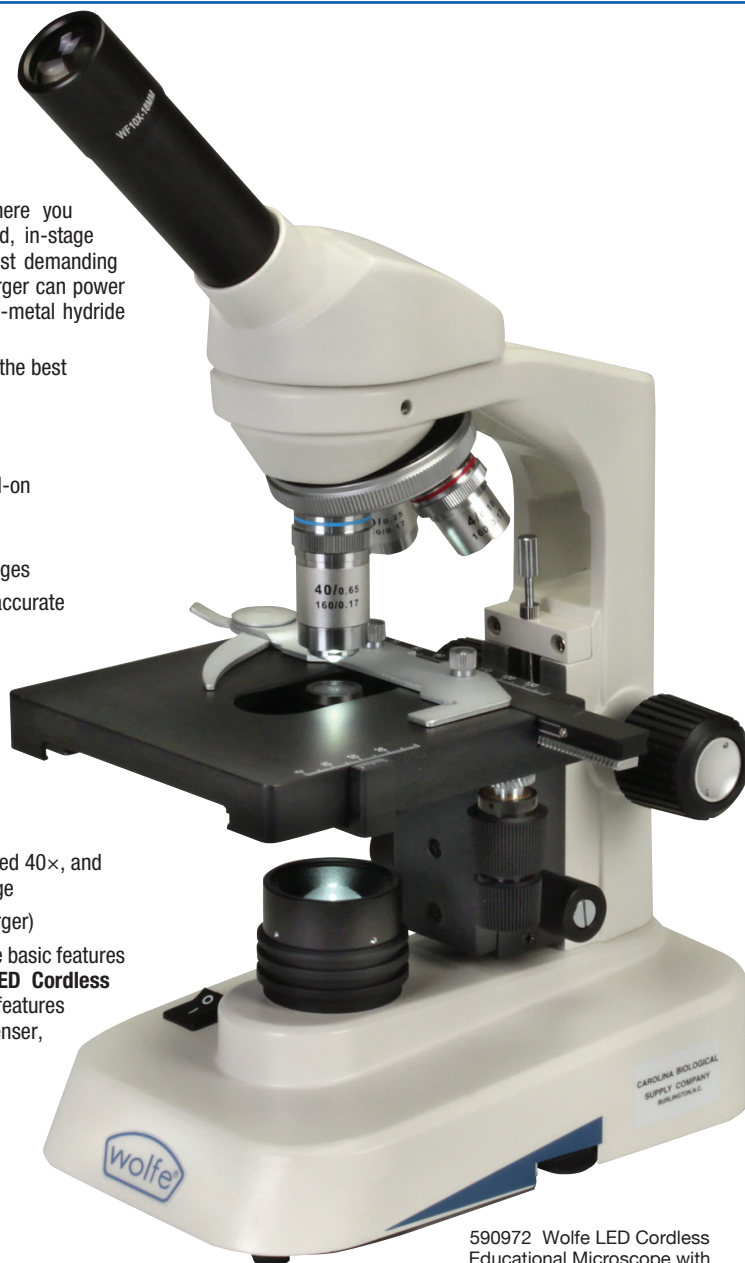
### Unique in design, engineering, quality, and value

Pack up one of these cordless, portable microscopes and take it anywhere you have something needing a closer look. With an inclined 360° rotatable head, in-stage condenser, in-base illuminator, and iris diaphragm, each is ready for the most demanding student laboratories—whether inside or outside. The included AC adapter/charger can power the microscope from a standard electrical outlet, or charge the internal nickel-metal hydride batteries for up to 60 hr of cordless use per charge.

- Cool, energy-efficient, long-lasting LED illumination with intensity control is the best choice for educational microscopy
- Reversed nosepiece allows objectives to rotate out of harm's way, providing better stage access
- Rugged metal construction, metal focusing gears, and student-proof, locked-on components
- Superior DIN\*\* optical system and precision manufacturing assure the microscopes are parcentric as well as parfocal and deliver bright, sharp images
- Separate coarse and fine adjustments with tension control for faster, more accurate focusing at high magnifications
- Easy "one-touch" stage clips; simply place a finger at the back of the stage clip and both clamps will lift to accept the slide
- Built-in mechanical stage (items #590972 and #590973) allows scanning of the entire specimen without moving the slide with your fingers
- Iris diaphragm with infinite degrees of control for more precise contrast and image resolution
- Quality DIN\*\* optics with WF10× pointer eyepiece and 4×, 10×, spring-loaded 40×, and 100× (item #590973) objectives that retract to prevent possible slide damage
- Wolfe® lifetime limited warranty (excluding bulb, batteries, and adapter/charger)

The **LED Cordless Educational Microscope with Mechanical Stage** has all the basic features plus a built-in mechanical stage with low-position coaxial controls. The **LED Cordless Advanced Educational Microscope with Mechanical Stage** has all the basic features plus a spring-loaded 100× oil-immersion lens, quadruple nosepiece, Abbe condenser, and built-in mechanical stage. Size, 14" H × 5" W × 6½" D; wt, about 7 lb.

\*\*DIN: Deutsche Industrie Normen, an industry standard.



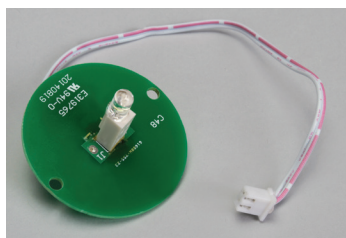
590972 Wolfe LED Cordless Educational Microscope with Mechanical Stage

Catalog No.	Name	Objective Lens	Mechanical Stage	Diaphragm	Each
590971	LED Cordless Educational Microscope	4×, 10×, 40×R	Stage Clips	Adjustable Iris	\$287.00
590972	LED Cordless Educational Microscope with Mechanical Stage	4×, 10×, 40×R	Built-In	Adjustable Iris	\$335.00
590973	LED Cordless Advanced Educational Microscope with Mechanical Stage	4×, 10×, 40×R, 100×R	Built-In	Adjustable Iris with Abbe Condenser	\$459.00

### Wolfe® LED Educational Series Replacement Lamp

Replacement lamp assembly fits Wolfe® LED Educational Series microscopes manufactured in 2016 or later.

590979 Each \$14.50



590979 Wolfe LED Educational Series Replacement Lamp



## Digital Microscopes

### Wolfe® Digital Series

#### Wolfe® microscopes change the way you teach!

Revolutionary digital technology allows you to attach your microscope to a computer, projector, or video screen. Special *Motic® Images Plus 2.0 ML* software is included free and lets you use Wolfe® digital microscopes for:

#### Capturing images

- Record still, time-lapse, and video
- Capture JPG, TIF, BMP, or SFC formats

#### Accurate measuring

- Measure lines, circles, irregular shapes, and more
- Make simple, accurate calibrations

#### Live viewing

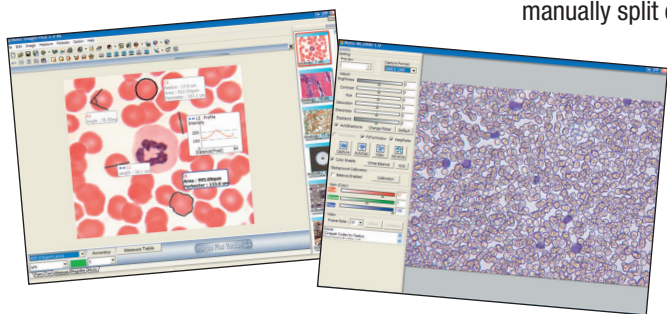
- Teach an entire class with 1 microscope
- View a live image in high resolution and true color

#### Editing images

- Edit captured images with available effects
- Use simple segmentation to count and manually split objects

#### Recording narration

- Create multimedia class reports
- Add your voice to multiple points



### DigiVu™ 2.0 Cordless Digital Microscope

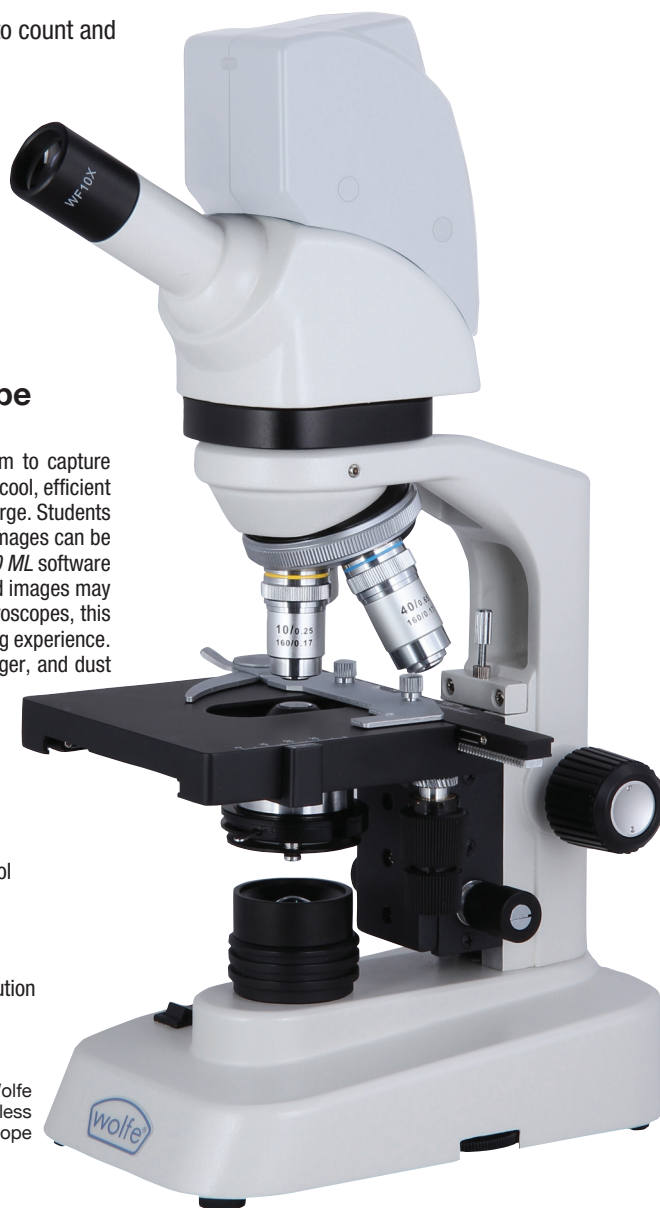
Grades 6–12.

Wolfe's new DigiVu™ 2.0 Cordless microscope provides the freedom to capture microscopic images in the classroom or field, using a laptop computer. This microscope uses cool, efficient LED lighting that runs off rechargeable NiMH batteries (included) for up to 50 hr of use per charge. Students can view real-time images on the computer screen, allowing the microscope to be shared. Images can be captured as stills, video clips, or time-lapse sequences. The included *Motic® Images Plus 2.0 ML* software allows students to perform accurate measurements of specimens within the image. Captured images may be placed in Word® documents and PowerPoint® presentations. Like all Wolfe® DigiVu™ microscopes, this unit can also be used with interactive whiteboards and LCD projectors for a classroom teaching experience. The package comes complete with software, quick start guide, USB cable, AC adapter/charger, and dust cover. System requirements: Windows® XP and above; Macintosh® OS X and above.

- Reversed nosepiece includes parfocal, achromatic DIN\*\*, 4×, 10×, and 40× (spring-loaded) objectives
- Locked-on 10× widefield eyepiece
- Focus mechanism has separate coarse and fine adjustments; incorporates travel stops and a slip clutch to protect slide, objectives, and focus assembly
- Built-in mechanical stage with low-position coaxial controls gives students precise control over slide movements—excellent for slide scanning at higher magnifications
- Professional CMOS imaging chip provides 2-megapixel (1,600 × 1,280) resolution for excellent image detail
- Iris diaphragm with infinite degrees of control for more precise contrast and image resolution
- Wolfe® lifetime limited warranty (excluding bulbs, camera, and cords); 1-year warranty on internal camera
- Size, 15" H × 5" W × 6 1/2" D; wt, about 7 1/2 lb

**591268 Each \$635.00**

591268 Wolfe  
DigiVu 2.0 Cordless  
Digital Microscope



\*\*DIN: Deutsche Industrie Normen, an industry standard.

# Digital Microscopes



## New! DigiVu™ DVM 6.0 Digital Microscope

Grade 6–College.

The DigiVu™ DVM 6.0 combines the latest in digital imaging technology with a high-quality microscope specifically designed for educational use. The detachable camera system features a high-resolution 8" color touch screen tablet based on the popular Android™ platform. The camera connects to the tablet through a dedicated high-speed wireless connection. This is an all-in-one digital microscope ideal for group learning and fully functional without an external computer.

The high-resolution camera can capture high-quality still images (4 MP) and video clips of microscopic specimens and save them to the included micro SD card. Using the microscope's built-in Wi-Fi®, high-definition-quality live images can be viewed and sent to other tablets, Wi-Fi®-enabled computers, or smartphones. The HDMI output allows users to send high-definition live images directly to an HDMI monitor or projector for classroom viewing. The included MotiC® app (MotiConnect) allows users to capture, measure, and edit images at the touch of a finger.

The DigiVu™ DVM 6.0 features state-of-the-art LED illumination with intensity control that produces a bright white light with virtually no heat. This is especially beneficial when viewing live protozoa.

### Tablet

- 8" full color tablet with high resolution IPS touch screen mounted on universal bracket holder
- Android™ operating system
- HDMI output
- Pre-loaded MotiConnect application software to view, capture, annotate, measure, and edit captured images

### Camera

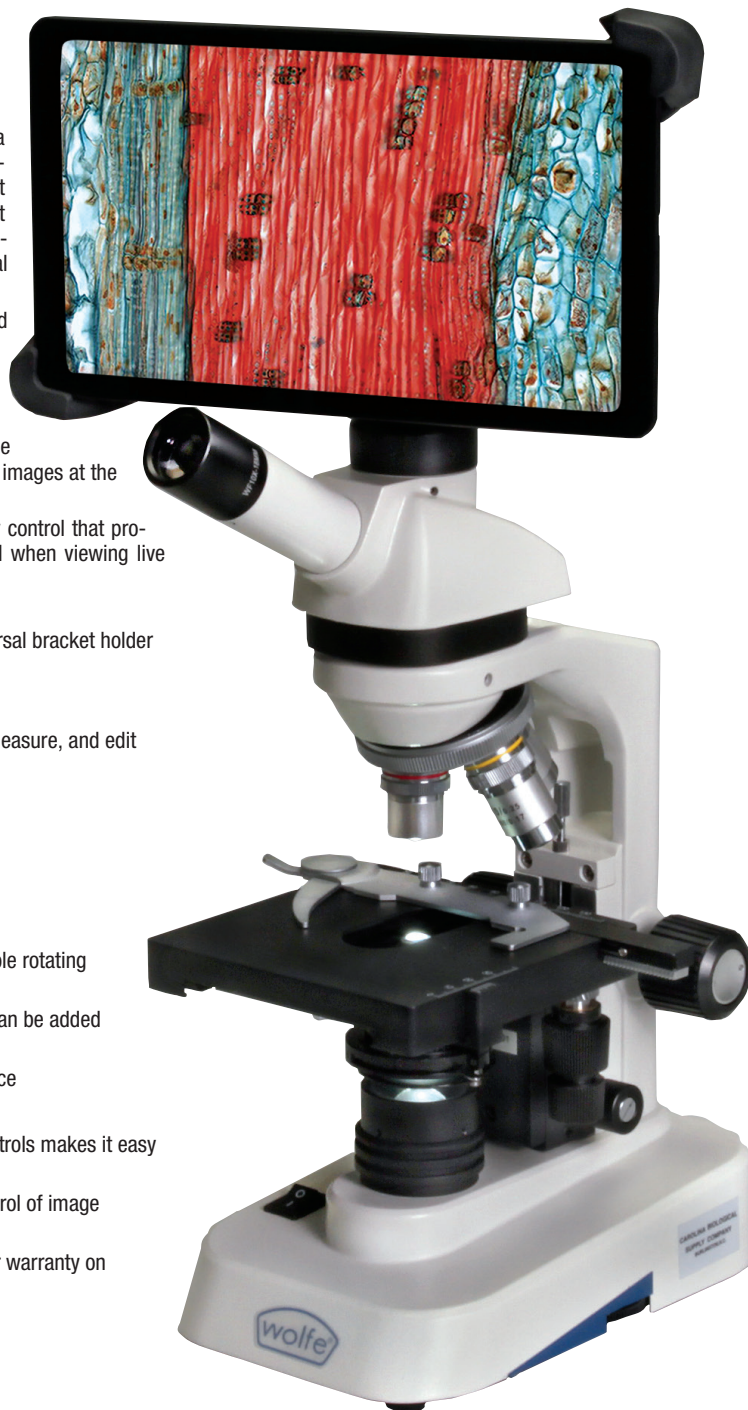
- HD resolution through Wi-Fi®; 4 MP capture
- Full-color precision optical sensor adapted for microscopy use

### Microscope

- Monocular head, 30° inclined
- DIN\*\* standard EA 4×, 10×, 40× achromatic objectives mounted on a 4-hole rotating turret
- An optional 100× spring-loaded, oil-immersion objective (item #591297) can be added easily
- Reversed quadruple revolving nosepiece provides maximum operating space
- Separate coarse- and fine-focus controls for increased accuracy
- Low-profile mechanical specimen holder with low-position coaxial X-Y controls makes it easy to scan the entire specimen without using fingers to move the slide
- Focusable 1.25 N.A. Abbe condenser with iris diaphragm for excellent control of image contrast
- Wolfe® lifetime limited warranty (excluding bulbs, camera, and cords); 1-yr warranty on camera and tablet
- Size, 19" H × 6" W × 7" D; wt, 10 lb

**591316** Each **\$839.00**

\*\*DIN: Deutsche Industrie Normen, an industry standard.



591316 Wolfe DigiVu DVM 6.0 Digital Microscope  
(simulated screen image)



591297 Wolfe 100×  
Oil-Immersion Achromatic  
Objective

### Wolfe® 100× Oil-Immersion Achromatic Objective

This spring-loaded 100× objective easily screws into the quadruple nosepiece of the Wolfe® DigiVu™ DVM 6.0 Digital Microscope (item #591316). It increases the highest magnification available from 400× to 1,000×—perfect for viewing cellular details. Immersion Oil (item #853311) is needed when using this objective.

**591297** Each **\$69.00**





**New! DigiVu™ DVM 9.0 Digital Microscope**  
Grade 9–College.

The Wolfe® DigiVu™ DVM 9.0 offers the latest in digital technology for the classroom. Ideal for group learning, this full-featured microscope combines high-quality construction with a versatile digital camera that is detachable. The camera features a universal bracket that securely holds a high-resolution 8" color touch screen tablet based on the popular Android™ operating system. This all-in-one digital microscope is fully functional without a computer. Its high-resolution camera can capture 4.0-megapixel still images and video clips and save them to the included micro SD card. The wireless connection between the camera and tablet enables the HD-quality live image to also be transmitted to another tablet or Wi-Fi®-enabled device. An HDMI output port allows users to send live HD images directly to an HDMI monitor or projector for classroom viewing. The included MotiC® MotiConnect app lets users capture, measure, and edit images at the touch of a finger. State-of-the-art LED illumination with intensity control produces a bright white light with virtually no heat. This is especially beneficial when viewing live protozoa.

#### Tablet

- 8" high-resolution IPS touch screen mounted on universal bracket holder
- Android™ operating system
- Preloaded MotiConnect application software to view, capture, annotate, measure, and edit images captured from the microscope
- HDMI output port for connecting directly to high-resolution monitors or projectors

#### Camera

- HD resolution through Wi-Fi®; 4.0-megapixel still image capture
- Full-color precision optical sensor adapted for microscopy

#### Microscope

- Widefield 10×, 20-mm eyepieces on a 360° rotating head
- Superb optical quality with advanced parfocal, parcentric, DIN\*\* standard EA 4×, 10×, 40×, and 100× (oil-immersion) achromatic objectives
- Siedentopf-design trinocular head with C-mount adapter
- Advanced coaxial coarse- and fine-focusing adjustments with upper-limit stop to prevent damage to slide and objective
- Built-in mechanical stage with low-position coaxial controls offers precise control over slide movements—excellent for slide scanning at higher magnifications
- Spiral-mounted 1.25 N.A. Abbe condenser with iris diaphragm and filter holder
- Integrated handle and cord wrap encourage proper handling and provide neat, easy storage
- Variable-intensity, energy-efficient, cool LED lighting for extended viewing of live specimens
- Wolfe® lifetime limited warranty (excluding bulbs, camera, and cords); 1-year warranty on camera and tablet
- Size, 21" H × 9" W × 9" D; wt, about 14 lb

**591330 Each \$1,395.00**

\*\*DIN: Deutsche Industrie Normen, an industry standard.



591330 Wolfe DigiVu DVM 9.0 Digital Microscope

## Motic® Moticom Series

**Turn almost any microscope into a digital microscope**

Don't have the budget for a new microscope? Why not upgrade your current microscope with a powerful digital peripheral instead? This camera is from the next-generation Moticom series, which continues to advance the easy-to-use, all-inclusive solution by turning almost any existing microscope into a digital microscope. Choose from several resolutions and features to match your needs and budget. The higher the resolution, the better the quality—important to remember if you require a high-quality print or an enlarged display for your LCD projector. Moticom 3+, 5+, and 10+ models also offer a new USB 3.0 connection for significantly faster live image transfer on newer computers with 3.0 connections.

Backed by a dedicated technical service hotline from Motic®, the Moticom includes the following free accessories, making it an ideal purchase to update your microscope.

- Focusable lens that allows you to use the Moticom as a macro camera
- C-ring
- Motic® 4-dot calibration slide to ensure accurate measurements
- Mini USB cable
- 2× variable diameter eyepiece adapters to attach the camera to almost any microscope eyepiece
- Macro tube that enables viewer to see larger specimens, such as large insects, without a microscope
- *Motic® Images Plus 2.0 ML* (for Windows® XP and above, Macintosh® OS X and above), a powerful software tool for image capture, measuring, reporting, cell counting, classroom projects, and more



591411 Motic Moticom 3+ (microscope not included)

### Moticom 1

Includes all accessories and provides good quality at an entry-level price.

Sensor: CMOS  
Live Resolution: 800 × 600 pixels  
Optical Calculation: 1/4"  
Focusable Lens: 8 mm

**591405 Each \$199.00**

### Moticom 2

Two-megapixel live imaging to use with LCD projectors and produce large, crisp display images.

Sensor: CMOS  
Live Resolution: 2 megapixels  
Optical Calculation: 1/3"  
Focusable Lens: 12 mm

**591409 Each \$349.00**

### Moticom 3+

As resolution increases, so does image quality, making this the ideal camera for live imaging and documentation.

Sensor: CMOS  
Live Resolution: 3 megapixels  
Optical Calculation: 1/2"  
Focusable Lens: 16 mm

**591411 Each \$699.00**

### Moticom 5+

Documentation and high-resolution live imaging camera in a sensible package. Great choice for printing high-quality pictures of captured images.

Sensor: CMOS  
Live Resolution: 5 megapixels  
Optical Calculation: 1/3"  
Focusable Lens: 12 mm

**591413 Each \$899.00**

### Moticom 10+

An affordable documentation camera with high-speed binning functions, it is an excellent choice for teachers desiring the highest-quality resolution in both live and captured images.

Sensor: CMOS  
Live Resolution: 10 megapixels  
Optical Calculation: 1/3"  
Focusable Lens: 12 mm

**591416 Each \$1,099.00**





# Ordering Information

## The Carolina Pledge: 100% Satisfaction Guaranteed

All of our products are unconditionally guaranteed. If for any reason you are not satisfied with any item, you may return it for a replacement, a refund, or credit. It's that simple.

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**Fax:** 800.222.7112

**Online:** Carolina.com

**Mail:** Carolina Biological Supply Company  
PO Box 6010  
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### International Sales

**Phone:** 336.586.4399

**E-mail:** internationalsales@carolina.com

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International terms and conditions apply outside the United States. Shipping charges vary for international orders, including Guam, the Virgin Islands, Puerto Rico, and the Caroline Islands.

The methods of transportation are determined by the type of product, its weight, its volume, and by the transit time needed for timely delivery. All charges will be added to your invoice. Payment will be accepted in US currency only.

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## Safety

Carolina places a very high priority on customer safety. Our safety communications are under continual update and improvement. In the event of a serious spill, contamination, or other emergency situation, contact local emergency response personnel or call 911. For chemical exposure or ingestion assistance, contact your poison control center (800.222.1222 within the US). General safety and/or product information is available from Carolina Biological Supply Company during normal business hours at 800.334.5551 or 336.584.0381.

## Product Information

If you have questions about any of our products, or need help selecting or using materials for specific applications, call our professional staff at 800.334.5551 (8 am to 5 pm, ET, M–F), or e-mail us at customer\_service@carolina.com.

## Prices

We realize that teachers and our educational systems face huge challenges, not the least of which is to learn how to do more with fewer resources. We try our best to honor catalog prices for as long as possible. However, sometimes our suppliers increase their prices, and we must do likewise. Unless otherwise noted, prices are FOB shipping point. (We reserve the right to correct typographical errors.)

## Terms

Our terms for customers with established accounts are net 30 days. Materials and shipping/handling charges will be invoiced and payment can be made by check, money order, or credit card. There is no minimum order (except where noted). To establish a new account, contact us at 800.334.5551. We accept personal orders from individuals. A personal order must be accompanied by a check, money order, or credit card information and must include shipping and handling.

## Returns

If you need to return an item, please notify Customer Service for the required return authorization. Please provide your purchase order number and our order number.

## Quotations

Carolina is eager to bid on your quotation requests. Please send your requests to the attention of the Quotations Department. When faxing quotation requests, use 336.538.6330 or e-mail quotations@carolina.com. Be sure to include a contact name, your complete address, and your fax and telephone numbers with all quotation requests. You may also call and request quotations at 800.334.5551.

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- For delivery to ID, IA, MA, OK, UT, and WY, add sales taxes to the merchandise total.
- For delivery to NM, add state sales tax only to the subtotal.
- For delivery to AK, DE, HI, MT, NH, and OR, do not remit sales tax.
- For delivery to all other states, add all sales taxes to the subtotal.

**Note:** If tax exempt, a copy of exemption certificate is required. For any questions concerning your tax exempt status, please call Customer Service at 800.334.5551.

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## Missing or Damaged Merchandise

We do everything in our power to make certain you receive your order promptly and in good condition. Check your order as soon as it arrives. If you discover missing or damaged merchandise, call Customer Service at 800.334.5551 and we will process a replacement. Please have your order number or account number available when you call.

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591435 Motic Moticam X3 Wi-Fi Camera

## **Motic**® New! Moticam X3 Wi-Fi® Camera

The Moticam X3 is an HD-resolution Wi-Fi® digital microscopy camera that can transmit live images directly to tablets, computers, or even smartphones. Perfect for bring your own device (BYOD) institutions, the Moticam X3 can be accessed from a Web browser or through the freely downloadable MotiConnect app for iOS® and Android™ devices. The Moticam X3 also includes an RJ45 port for wired networking or connection to a wireless router for broadcasting the fast-frame rate images further and to more students. Now everyone in the class can capture true-color 4.0-megapixel still images and work on them independently on their own device. The X3 easily connects over the eyepiece of any full-sized microscope using the included adjustable eyepiece adapters and to microscopes equipped with C-mount adapters.

### Camera

- CMOS sensor with 4.0-megapixel resolution
- 12-mm focusable lens
- Powered by an AC adapter/charger (included)
- Equipped with an RJ45 port

### Requirements

- An Android™ or iOS®-ready device, or
- A Wi-Fi®-enabled computer (Windows® and Macintosh® only)

**591435 Each \$349.00**

## Order Today!

**100% Satisfaction Guaranteed**

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