



NATIONAL MODEL DC5-163 & DC5-163-P COMPOUND BIOLOGICAL MICROSCOPE WITH BUILT-IN DIGITAL HIGH RESOLUTION 2.0 MEGA PIXEL CAMERA

See illustration on page 3.

THE MICROSCOPE

Superior in design and in performance, the DC5-163 incorporates a wide range of features designed for university and laboratory use with the enhancement of a built-in 2.0 mega pixel digital camera. Superb optical clarity and reliable mechanical engineering assure years of top performance. Choose from two grades of objective lenses: Standard achromatic lenses deliver excellent clarity and normal flatness of field; Plan achromatic for superior clarity and flatness of field. This microscope is fully functional, independent of the camera application. Supplied with powerful Motic Images software.

OPTICAL SYSTEM

- Widefield 10x /18mm eyepiece, pointer standard in one eyepiece. Accepts optional #965-160 eyepiece reticle.
- 30° inclined binocular eyepieces with dual diopters and interpupillary adjustment 54mm to 76mm. 3-position sliding rod directs light 100% to binocular eyepieces, or 100% to camera, or 70% to camera and 30% to binocular eyepieces.
- DIN standard 4x (0.10 N.A.), 10x (0.25 N.A.), 40xR (0.65 N.A.) and 100xR oil immersion (1.25 N.A.) objectives. Choose from achromatic or plan lenses. Both are parfocussed, parcentered and color-coded.
- Quad objective turret is ball bearing mounted for smooth, precise positioning of objectives, features textured rubber knurling for easy grip. Mounted in reverse position to facilitate ease in changing slides.

ILLUMINATION

- 12v 20-watt halogen with variable rheostat control.
- 12VDC power converter operates on 100v-240v 50H/60H current, without need of additional transformer.
- Illuminated on/off switch, 3-wire grounded cord and plug.

FOCUSING

- Coaxial coarse and fine focusing controls, coarse has tension adjustment, fine is graduated.

STAGE

- Large 140mm x 135mm (5-1.2 in. x 5-1/4 in.) stage; built-in, low profile, ball bearing mounted mechanical specimen holder with low-position coaxial controls, 70mm (x) by 50mm (y) movement with graduations of 0.1mm.
- 1.25 N.A. Abbe condenser has rack & pinion focusing, iris diaphragm, swing-out filter holder with clear blue, green and yellow filters supplied.

FRAME

- Rugged cast aluminum, gray enamel finish.
- Base dimensions: 185mm x 235mm (7-1/4 in. x 9-1/4 in.)
- Height: 405mm (16 in.)
- Net wt. 6.3 kgs (13.9 lbs).

PACKING

- Molded styrofoam container with instruction brochure and vinyl dustcover.
- Individual: Ship wt. 9.6 kgs (21 lbs), Dimensions 575x450x300mm (23x18x12 in.)
- Master carton pack 1 each: Ship wt. 9.6 kgs (21 lbs), Dimensions 575x450x300mm (23x18x12 in.)

MICROSCOPE WARRANTY

- Lifetime limited warranty, excluding bulb and cords.

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Compound Biological Microscope with Built-In Digital & Analog Camera

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MICROSCOPE PARTS & ACCESSORIES

610-160	WF10X Eyepiece
610-160R	WF10X eyepiece w/reticle, 10mm/100div.
704-160	DIN 4X objective lens, 0.10 N.A.
710-160	DIN 10X objective lens, 0.25 N.A.
740-160	DIN 40X objective lens, 0.65 N.A.
799-160	DIN 100X objective lens, 1.25 N.A.
704-160P	DIN 4X Plan objective lens, 0.10 N.A.
710-160P	DIN 10X Plan objective lens, 0.25 N.A.
740-160P	DIN 40X Plan objective lens, 0.65 N.A.
799-160P	DIN 100X Plan objective lens, 1.25 N.A.
800-160	Replacement bulb, 12v 20 watt halogen bi-pin
965-160	Eyepiece reticle, 10mm/100 div 800-160 Replacement bulb, 12v 20 watt halogen bi-pin

THE CAMERA

SPECIFICATIONS – NATIONAL DIGITAL MICROSCOPE #DC5-163 USB 2.0 Digital Camera

	USB 2.0 (digital signal)
Image device	½ inch CMOS
Effective pixels	1600x1200
Framed resolution	1600x1200 pixels
White balance	Auto white balance
B.L.C.	Back light compensation (auto)
Power supply	5v self powered from computer USB

System Requirements

Operating System	Windows XP or above. OSX
Computer Requirements	CPU 1 GHz or above, Video card: 128 MB, Ram 512 MB or above, USB 2.0
Menu on monitor	Pull-down menus for opening, storing, printing, print preview, regulator for brightness, color, gamma correction. Icons for recording, image interpolation, switching between large and small image, image quality, automatic and manual white balance.
Image data	Automatic reference number, date, time
Interactive adjustment	Color, brightness, contrast
Import of stored data	Possible

Environmental conditions

Operating temperature	-50°F to +120°F	Same
Storage temperature	-70°F to +140°F	
Relative humidity	40% to 95%	

CAMERA WARRANTY:

- 1-year limited warranty

SOFTWARE WARRANTY:

- 90-day limited warranty.



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Subject to changes in material and design, equal to or exceeding those described above.