Nikon’s CFI optical system and new dedicated objectives produce high quality images.

Nikon, the global leader in advanced optical technology, designed the new infinity corrected microscope to provide outstanding optical performance with elegant ergonomic touches. With a very small footprint, the Eclipse E100 fits easily into the minimum storage space. Its revolutionary CFI* optics achieve flat and sharp images right up to the periphery of the viewfield. Allowing phase contrast observations as well as brightfield, the Eclipse E100 is the perfect choice for education and routine laboratory use.

*Chromatic aberration free infinity

Newly developed objective lenses for flat images
Nikon has developed the new CFI BE Plan objectives, which feature superior image flatness, exclusively for the E100. Chromatic aberration and field curvature are corrected over the entire field of view. Images are clear and bright at every magnification. The E100 provides first class optical quality at a modest price.

Anti-mold design
Anti-mold paint and an anti-mold tablet are used in the objective lenses, eyepiece lenses and eyepiece tubes to prevent mold forming in high-humidity environments.
Compact, lightweight body with enhanced operability—providing ease of use

**Binocular and trinocular eyepiece tubes available**
The Eclipse E100 employs a Siedentopf-type eyepiece tube that provides a constant and accurate eyepiece tube length. Both binocular and trinocular eyepiece tubes are available. A digital camera can be attached to the trinocular eyepiece tube.*

*See “Eyepiece tube” on page 6.

**Observation with comfort**
The eyepiece tube is inclined at 30°, allowing comfortable viewing in a natural posture. By simply swinging the front part of the eyepiece tube, the user can adjust the eyepoint height by up to 34mm to find the most comfortable height for observation. In addition, the interpupillary distance adjustment and the diopter adjustment ring are designed to accommodate a wide range of operators.

**Smooth rotation quadruple nosepiece**
The high-quality revolving nosepiece has a superior internal detent click-stop mechanism. A knurled elastic covered grip around the base of the nosepiece makes the nosepiece easy to rotate and eliminates the need to touch the objectives.

**Double-plate mechanical stage**
The built-in stage has a double-plate mechanism with an XY dual travel control. The large, flat stage surface facilitates easy specimen handling. Because the height of the X-axis guide rail is level with the stage surface and the stage surface is flat and smooth, glass slides move easily over the surface. A spring-loaded slide holder is included.

**Condenser with position guide markings**
The condenser comes with an aperture diaphragm with position guide markings for the 4x, 10x, 40x, 60x and 100x objectives to make operations quick and easy, ensuring perfect specimen images.

**Coaxial coarse/fine focus knob**
The coaxial coarse/fine focus knob is comfortably located at desk-height level. The focus knob and the stage handle are ergonomically designed and are located equidistant from the operator, meaning they can both be easily adjusted from a normal sitting position. In addition, the torque of the coarse focus knob can be adjusted.

**Easy-to-replace halogen lamp**
The powerful long life 6V-20W halogen lamp is adjustable up to 6V for convenient illumination control. Replacing the lamp is easy and trouble-free. Simply detach the FL (field lens) unit and replace.

**Convenient for transportation and storage**
The microscope body is compact and lightweight. A cord hanger and storage case are available to make transporting and storing the E100 easier.
**Accessories corresponding to a wide variety of applications**

**Phase contrast attachment**

Simple phase contrast observation at 10x and 40x is possible with a single phase annulus slider. The aperture diaphragm automatically opens when the slider is inserted into the condenser. A phase contrast 100x slider and darkfield ring stop for 10x, 20x or 40x objectives are available as options.

**Mirror unit**

A mirror unit is available for observation where there is no access to a power source. Removal of the FL (field lens) unit and insertion of the mirror unit in its place is easy.

**Eyepiece tube**

Siedentopf-type binocular and trinocular eyepiece tubes are available. A digital camera can be attached to the trinocular eyepiece tube.*

*With a 4x objective lens, the image may show uneven illumination depending on the camera used.

**Condenser**

An Abbe condenser for brightfield observation and a phase condenser for phase contrast and darkfield observations are available.

**Cord hanger**

The power cord can be simply wound up when not in use.

**Storage case**

Available in both wood and aluminum, the dedicated storage case is handy for transporting and storing the E100.

---

**Digital Sight series digital camera system for microscopes**

When the trinocular eyepiece tube is used, a digital camera can be attached.* The DS-2Mv-L2, a color camera head combined with a standalone control unit, enables focusing and viewing of images on the built-in 8.4-in. LCD monitor without the need for a PC. The optimum imaging conditions that match the observation technique in use can be automatically set by clicking on the appropriate "scene mode." Storing optimal images is easy.

*See "Eyepiece tube" on page 6.

---

**System Diagram**

![Digital Sight Series Digital Camera System for Microscopes Diagram](image_url)
Specifications

Optical system
CFI optical system

Magnification
40–1500x

Illumination
6V-20W halogen lamp, FL (field lens) unit, lamp changeable by removing the field lens unit

Coarse and fine focusing
Coaxial coarse/fine focusing with cross roller guide incorporated, 22mm coarse/fine focusing range, Coarse motion: 37.7mm/rotation, Fine motion: 0.2mm/rotation with 2µm scale increments, Coarse motion torque adjustable

Eyepiece tube
E2-TB binocular tube (inclination: 30°, 360° rotatable Siedentopf-type, interpupillary distance: 47–75mm)

Eyepiece lens
(E1-CFI 10x (F.O.V.: 18mm), CFI E 15x (F.O.V.: 12mm))

Condenser
Abbe condenser, NA 1.25 (aperture diaphragm with position guide marking for respective objectives), 33mm-diameter filters attachable (including standard blue filter)

Nosepiece
Quadruple click-stop, revolving mechanism with multiple ball bearings, elastic nosepiece grip-ring

Dedicated objectives
CFI BE Plan Achromat 4x (NA 0.1/W.D. 25mm), 10x (NA 0.25/W.D. 6.7mm), 20x (NA 0.4/W.D. 3.7mm), 40x (NA 0.65/W.D. 0.6mm), 60x (NA 0.8/W.D. 0.24mm), 100x (NA 1.25/W.D. 0.14mm), DL 10x (NA 0.25/W.D. 6.7), DL 40x (NA 0.65/W.D. 0.6), DL 100x (NA 1.25/W.D. 0.14)

Stage
Double-plate rectangular mechanical stage, stage size: 155 (W) x 134 (D)mm, removal slide holder, travel area: 76 (W) x 40 (D)mm, vernier provided

Substage
Adjustable vertical condenser movement range: 10mm

Optional accessories
Phase contrast attachment (dedicated Abbe condenser, sliders, objectives (10x, 40x, 100x), GIF filter, phase centering telescope, object marker, darkfield ring unit, mirror unit, cord hanger, storage case

Power consumption
50W

Weight
Approx. 7.3kg

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. August 2008 © 2006-8 NIKON CORPORATION

Monitor images are simulated.

Company names and product names appearing in this brochure are their registered trademarks or trademarks.

WARNING
TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.

NIKON CORPORATION
6-3, Nishiohji 1-chome, Shinagawa-ku, Tokyo 140-8601, Japan
phone: +81-3-3773-8973 fax: +81-3-3773-8986
http://www.nikon.com/products/instruments/

NIKON INSTRUMENTS INC.
1300 Walt Whitman Road, Melville, N.Y. 11747-3064, U.S.A.
phone: +1-631-547-8500; +1-631-547-8550 (within the U.S. only)
fax: +1-631-547-0496
http://www.nikoninstruments.com/

NIKON INSTRUMENTS EUROPE B.V.
Laan van Koningsveld 1, 1183 AS Amstelveen, The Netherlands
phone: +31-20-44-96-222 fax: +31-20-44-96-298
http://www.nikoninstruments.eu/

NIKON INSTRUMENTS (SHANGHAI) CO., LTD.
Chinaworld: phone: +86-21-5886-0500; fax: +86-21-5886-0030
(Shanghai branch): phone: +86-21-5869-2225; fax: +86-21-5869-2277
(Guangzhou branch): phone: +86-20-3882-0552; fax: +86-20-3882-0580

NIKON SINGAPORE PTE LTD

NIKON MALAYSIA SDN. BHD.
MALAYSIA: phone: +60-3-7809-3510 fax: +60-3-7809-3530

NIKON INSTRUMENTS KOREA CO., LTD.
KOREA: phone: +82-2-355-8410 fax: +82-2-355-4410

NIKON CANADA INC.

NIKON FRANCE S.A.S.
FRANCE: phone: +33-1-4515-1601 fax: +33-1-4515-1655

NIKON GMBH

NIKON INSTRUMENTS S.p.A.
ITALY: phone: +39-055-990-96-01 fax: +39-055-30-09-93

NIKON AG

NIKON UK LTD.
UNITED KINGDOM: phone: +44-208-247-1717 fax: +44-208-541-4584

NIKON GMBH AUSTRIA
AUSTRIA: phone: +43-1-972-6111-0 fax: +43-1-972-6111-40

NIKON BELUX

Printed in Japan (0808-07)T

Code No. 2CE-MRTH-2

This brochure is printed on recycled paper made from 40% used material.