

**Motic**<sup>®</sup>

MORE THAN MICROSCOPY

EVOLUTION

BA210E

BA310E

**BA310E**

# BA310E

Motic is committed to the concept of continuously improving its models, especially after carefully looking at the increasing demands of its customers and their applications. The successfully established BA310 model was no exception, and for this reason Motic has launched the new **Elite model BA310E**. Once again Motic has challenged itself to stride ahead of the competition.

The BA310Elite model introduces **superior improvements both in optical and mechanical performance**. The model now incorporates a **lead-free manufacturing process** in accordance with current **RoHS** standards, and follows the optical features and performance derived from the flagship model BA410. The ELITE model's addition of a new **rackless stage** concept without prominent gear rack allows an even more convenient use of the x/y movement. For full freedom of illumination options, the new model has a complete and **easy interchangeability of its 6V/30W Halogen bulb with LED modules**.



## New EC Optics

Motic's new generation of **EC Plan Achromat objectives** sets a new price-performance standard in optical quality. With **excellent spherical aberration correction to significantly improve field flatness and resolution**, the EC optics offer **superior colour fidelity** through new multi-layer coated lenses. A lead-free manufacturing process according to **RoHS standard** sets new significant features for these CCIS® objectives, derived from the flagship model BA410. Significantly **increased working distances** of the objectives reduce contamination risk when changing from oil lenses to dry lenses. To protect the system from fungus growth in high-humidity environments, an anti-fungus treatment is applied to prolong the life of both microscope and objectives.

## Rackless stage

The **new rackless stage** enables a convenient movement of the x/y stage **without prominent gear rack** interference; while a **new specimen holder** design gives a soft but solid grip to the glass slides. These new mechanical improvements greatly enhance user safety in educational environments of schools and Universities. An optional 2-slide holder is also available when large throughputs of samples are required.

## Halogen/LED interchangeability

The importance of LEDs as safe and long-term illumination devices has increasingly become the norm in educational and clinical microscopy environments. Nevertheless, experienced users may still prefer the “warm” Halogen illumination with a large portion of long wavelengths. To cover this situation, Motic has implemented a **full interchangeability between its Halogen and LED light sources**. Coming with a standard 6V/30W Halogen bulb, the BA310Elite lamp socket also accepts a new LED module, which can be inserted instead of the Halogen bulb. **The choice of (2) different color temperatures (4500K, 6000K)** enhances illumination options in a user-friendly way.

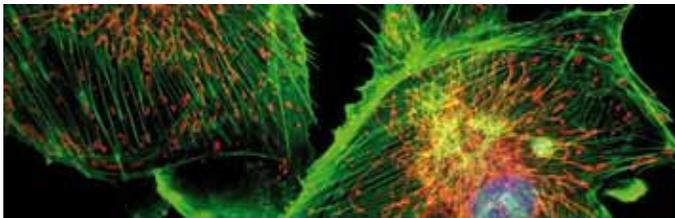


| Description        | N.A. | W.D.(mm) |
|--------------------|------|----------|
| EC Plan 4X         | 0.10 | 15.90    |
| EC Plan 10X        | 0.25 | 17.40    |
| EC Plan 20X        | 0.45 | 0.90     |
| EC Plan 40X        | 0.65 | 0.50     |
| EC Plan 60X        | 0.80 | 0.35     |
| EC Plan 100X - Oil | 1.25 | 0.15     |



**Add the New EPI LED  
Fluorescence module to your  
BA310E and get an LED  
Fluorescence Microscope**





## New EPI LED Fluorescence module for BA310E

The new Epi-LED FL module applies the LED technology as an excitation source without the drawbacks of conventional HBO illumination. Instant illumination readiness of the system without the need of lamp alignment and easy intensity control of the Fluorescence excitation are key advantages. The added safety factor of the LED excitation source allows an easy implementation of the Fluorescence method in Education and Teaching programs for schools and Universities.

The Auto ON/OFF function, an integrated “sleep mode”, helps in prolonging the life time of the sample by avoiding accidental bleaching. Equipped with both Transmitted light and Epi-Fluorescence, the BA310E with Epi-LED FL module maximizes user friendliness. Fluorescence and Bright field can be applied simultaneously by separate power supplies.

A selection of LED excitation sources and matching filter cube allows the use of numerous standard fluorescence dyes for multiple viewing applications, and the battery pack with double power-output gives freedom for outdoor activities in rural environments, independent from a power network.



## BA310E General Specifications

|                                |                                                                                                                                                                              |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Model</b>                   | BA310E                                                                                                                                                                       |
| <b>Optical System</b>          | Color Corrected Infinity Optical System [CCIS®]                                                                                                                              |
| <b>Observation Tube</b>        | Widefield binocular 30° [F.N.20]<br>Widefield trinocular 30° [F.N.20] - light distribution 100:0/20:80<br>Widefield trinocular 30° [F.N.20] - light distribution 100:0/0:100 |
| <b>Interpupillary distance</b> | 48-75mm                                                                                                                                                                      |
| <b>Nosepiece</b>               | Reversed quintuple                                                                                                                                                           |
| <b>Objectives</b>              | CCIS® EC Plan 4X, 10X, 20X (optional), 40X, 60X (optional) and 100X-Oil                                                                                                      |
| <b>Rackless Stage</b>          | 180 x 170 mm surface, 80 x 55mm movement, coaxial controls                                                                                                                   |
| <b>Condenser</b>               | N.A. 0.9/1.25 Abbe condenser with slider slot                                                                                                                                |
| <b>Focusing Block</b>          | Brass gears. Z-Axis movement with 25mm stroke; Fine focus with 2µm minimum increments, coarse focus with torque adjustment.<br>Stage lock for high samples, free definable   |
| <b>Illumination</b>            | Built-in transmitted 6V/30W Halogen Koehler illumination or<br>3W LED Koehler illumination (6000K & 4500K)                                                                   |

