



**Motic®**

MORE THAN MICROSCOPY



# BA310Met | Metallurgical Microscope



# BA310Met Metallurgical Microscope

The ideal instrument for inspection and analysis of electronic components, materials, minerals and precision molds.

Match all applications for educational, industrial and scientific research use.

The coaxial EPI illumination system and CCIS® M-Plan metallurgical objectives, provides optimal brightness and image quality.



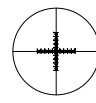




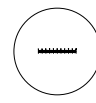
## Eyepieces

The new standard eyepieces, made of high quality optical glass, N-WF 10x/20 FOV with high-eyepoint for eyeglass wearers provide consistent diopter adjustments for both eyes. This enables perfect usage of reticles for measuring, counting, etc. Standard lockable eyepieces ensure against inadmissible removal and confirms Motic's dedication to student proof quality.

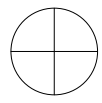
The following reticles are available:



Cross hair point  
= 0.1mm/10mm



Linear hair point  
= 0.1mm/10mm



Plain cross hair

Description	F.N.
Widefield high eye point N-WF 10X	20
Widefield high eye point N-WF 15X	16

## Observation Tubes

New designed-eyepiece tube(erect image) with an ergonomic viewing angle of 30° and incorporating an interpupillary distance of 55-75mm, the observation tubes guarantee fatigue-free viewing for hours.

A large field of view option (20mm) enables fast and comfortable screening.

The trinocular tubes allow digital documentation and integration of each observation head into a wide variety of digital cameras, with optional 20/80 or 0/100 light splits for the trinocular exit.

High quality Brightfield metallurgical objectives.  
Infinity corrected F=200mm



## Objectives

To improve the overall optical performance of the BA310MET, Motic introduces a newly designed generation of Plan Achromatic Objectives made of high quality optical glass; CCIS® M Plan. These new lenses are now multi-layer coated for improved contrast and to enhance images.

Magnification	N.A.	W.D. (mm)
Plan 5X	0.13	11.5
Plan 10X	0.3	6.8
Plan 20X	0.4	11.1
Plan 50X	0.55	8.2
Plan 100X	0.8	2

## Epi-illumination

12V/50W halogen provides sufficient light intensity for all microscopy applications. Adjustable field diaphragm and centering mechanism guarantee homogenous illumination.

Optional polarizing observation is available!



## Mechanical Stage

Special three-ply stage provides more convenient slide movement. The new slide holder enables consistent sample movement across a 76 x 50mm range with a stage area 180mm x 140mm. The model also offers a hard coated surface, resistant against routine usage abrasion and most lab chemicals. 30mm focusing range with 2u minimum increments provides ample operational room.



## Accessories

BA310Met could be upgraded freely. It has not only traditional Metallurgical function but also digital documentation and polarizing observation function.



Analyzer and Polarizer



Camera Adapter

## Anti-Fungus Design

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.

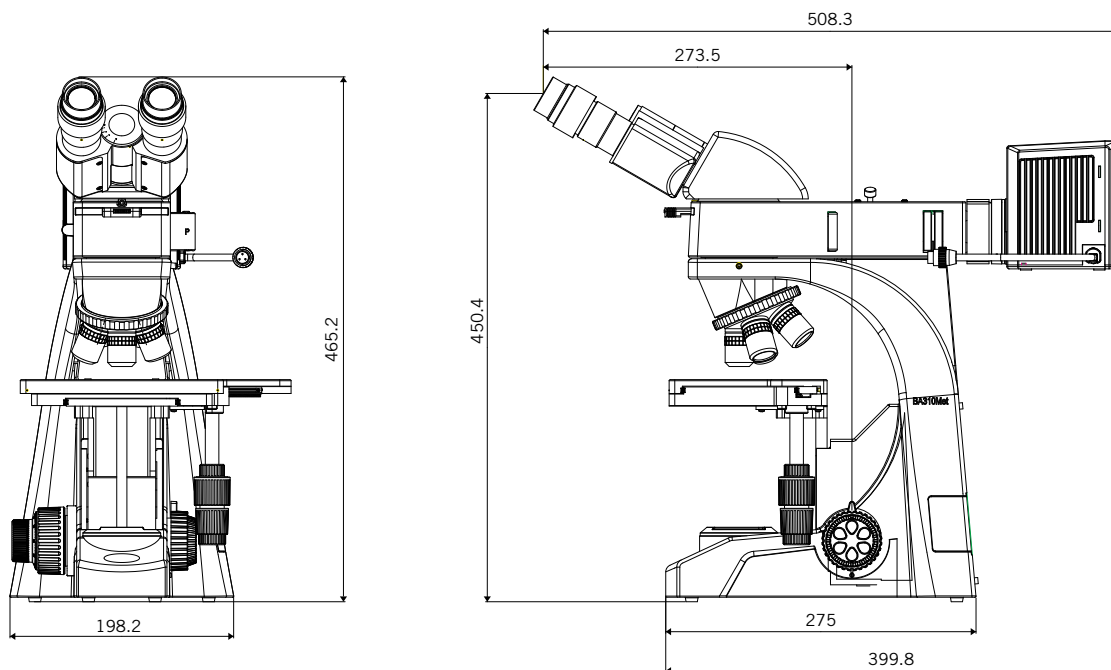


## BA310Met Standard Specifications

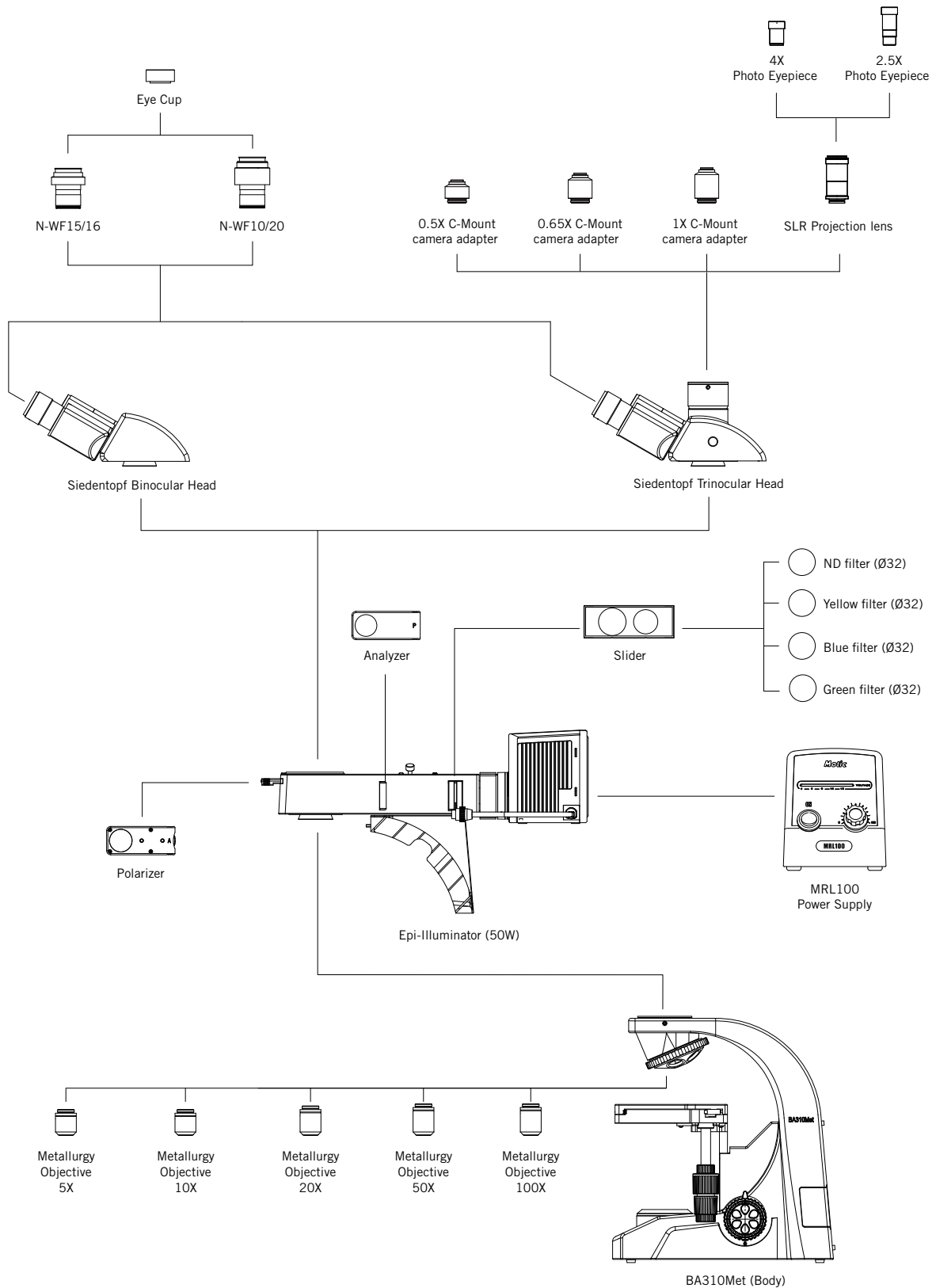
<b>Model</b>	BA310Met
<b>Optical System</b>	Color Corrected Infinity Optical System [CCIS®]
<b>Observation Tube</b>	Widefield binocular 30° [F.N. 20] Widefield trinocular 30° [F.N. 20]- light distribution 20/80
<b>Nosepiece</b>	Reversed quintuple
<b>Stage</b>	180 x 140mm surface; 76 x 50mm movement; coaxial movement
<b>Focus</b>	Brass gears 25mm stroke; 2µm minimum increments; torque adjustment for coarse; stage lock
<b>Illumination</b>	12V/50W Epi-Illumination

## BA310Met Schematic Diagrams

Unit:mm



# BA310Met System Diagrams





# Motic®

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**Design Change :**

The manufacturer reserves the right to make changes in instrument design in accordance with scientific and mechanical progress, without notice and without obligation.



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