

**Motic®**

MORE THAN MICROSCOPY



**AE31E**

LIVE CELL MICROSCOPE PLATFORM

# AE31E

The AE31E is Motic's new statement for a professional inverted microscope. It is the perfect instrument for microbiology research in clinical and pharmaceutical laboratories where the Fluorescence method is of general interest. The LWD Plan Achromatic optics with a clever Phase contrast concept delivers a remarkable image quality in a Field of View 22. The AE31E stand carries an encoded quintuple

✓ PHASE CONDENSER WITH SLIDER

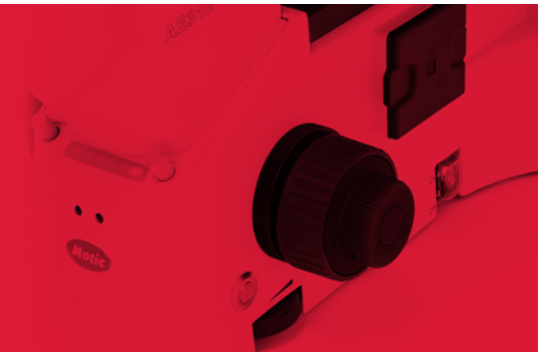
✓ STAGE INSERTS GLASS & METAL

✓ PLAN ACHROMAT PHASE OBJECTIVES IN A 5-FOLD NOSEPIECE

✓ AUTO ON/OFF



nosepiece with light memory function. A 30W Halogen light source in a Full-Koehler setup is interchangeable with 3W LED modules. For maximum power requests, a 100W Halogen stand version is available. The AE31E is a flexible microscope platform with multiple options to configure a workstation which perfectly suits individual demands.



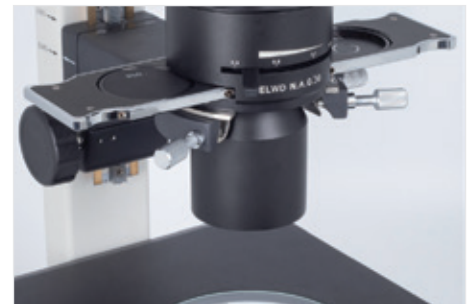
#### POWERFUL HALOGEN-ILLUMINATION

The AE31E microscope features a 30W Halogen illumination system in a “Full- Koehler” setup. The Halogen light source can easily be replaced by LED modules of different color temperatures if desired, and for high illumination power requests, a 100W Halogen stand is available. An easy upgrade with Fluorescence rests upon Motic’s established fluorescence attachment with a slider mechanism. This device carries 3+1 (optional: BF/FLUO) filter cube positions. A complete range of filter combinations is available.



#### FOR ADVANCED DEMANDS IN DAILY ROUTINE

Motic’s AE31E is designed for advanced work in microbiology. The fixed stage plate with glass insert allows a quick overview and easy change of magnification. The switch from Brightfield to Phase Contrast is done by a simple push of the Phase slider. As one Phase ring corresponds to the Phase objectives Ph10X/20X/40X of the basic package, no need to move the slider when changing the respective objectives. The “light memory” function of the AE31E is based on the encoded 5-fold nosepiece. The system replicates the former intensity setting once the respective nosepiece position is swung in again. Finishing work, the Auto ON/OFF mode ensures an automatic switch-off: a contribution to lab safety and energy saving



#### MOTIC'S INVERTED MICROSCOPE PLATFORM

Motic’s AE31E is the flagship of Motic’s Inverted microscope series. A flexible stand concept allows to upgrade the microscope with a variety of application solutions including Fluorescence. Focusing is done by a 5-fold encoded nosepiece with “light memory” for easy reproduction of former illumination settings. With a fine focus step size of 2 microns, a smooth drive through cell cultures is easily performed. The fixed stage plate carries a glass insert for quick overview and comfortable change of objectives. An optional X/Y mechanical stage for a convenient sample examination under high magnification is available. The AE31E offers maximum flexibility within the AE series: a true leader in performance.



#### LWD PLAN ACHROMATIC OPTICS FOR FAST IMAGE RESULTS

The LWD Plan Achromatic objectives are available from 4X to 40X magnification both in Brightfield and Phase contrast version. They deliver an improved image contrast for human eye and digital camera sensor through the photo port. The AE31E offers a stand option with a 100:0 / 0:100 beam split for best efficiency in Fluorescence. The eyepiece tubes allow an individual seating position as the “butterfly” mode may increase the viewing height by 60mm. A fatigue-free work is guaranteed by a viewing angle of 45° and an interpupillary distance of 48-75mm. The N-WF eyepieces start with the standard 10X/22 mm Field of View and provide a diopter adjustment (+/-5dpt) for both eyes, as well as allowing the use of optional reticles.



Our **MOTICAM** range offers the choice between several imaging options. Besides the standard USB cameras, we offer solutions like the Moticam Full HD cameras, tablet solutions, and Wi-Fi cameras working with our free “MotiConnect” App.

Know more at [www.moticamseries.com](http://www.moticamseries.com)



## SPECIFICATIONS

AE31E



Model	AE31E Binocular	AE31E Trinocular	AE31E Bino 100W	AE31E Trino 100W
Optical system	Colour Corrected Infinity Optical System (CCIS®)			
Observation tube	Binocular / Trinocular head, Siedentopf type, 360° swiveling			
Inclination	45° inclined			
Trinocular light split	-	100:0/20:80 (optional 100:0/0:100)	-	100:0/20:80 (optional 100:0/0:100)
Interpupillary distance	48-75mm			
Diopter adjustment	On both eyepieces, +/- 5 diopter			
Eyepieces	Widefield WF10X/22mm with diopter adjustment			
Nosepiece	Left side facing quintuple			
Objective classification	CCIS® Plan Achromatic, DIN			
Objectives	4X/0.10 (WD 12.6mm), PH10X/0.25 (WD 4.1mm), LWD PH20X/0.30 (WD 4.7mm), LWD PH40X/0.50 (WD 3.0mm)			
Objective mounting thread	W 4/5"x1/36" (RMS standard)			
Stand type	Inverted			
Stage	Plain stage with metal and glass stage inserts			
Stage size	200x239mm			
Condenser	Focusable and centerable ELWD condenser N.A. 0.30 (WD 72mm)			
Diaphragm	Iris diaphragm			
Focus mechanism	Coaxial coarse and fine focusing system with tension adjustment			
Fine focus precision	2µm			
Focusing stroke	10mm			
Free working distance	Working distance without condenser 231mm			
Transmitted illumination	Koehler Quartz halogen 6V/30W with intensity control		Koehler Quartz halogen 12V/100W with intensity control	
Illumination interchangeability	Quartz halogen 6V/30W or LED 3W		-	
Illumination features	Auto-OFF and Light Memory function			
Transformer	Internal		External	
Power supply	100-240V (CE)			
Accessories included	Dust cover, power cord, Allen key, blue, green interference and ground glass filters, phase ring Ph1, centering telescope, centering keys, spare fuse			
Dimensions LxWxH	556x200x529mm		629x200x595mm	
Net weight	11.7kg		13.2kg	
Contrast techniques				
Brightfield	Brightfield, phase contrast			
Phase contrast	Slider			
Fluorescence	Optional HBO			

[www.moticeurope.com](http://www.moticeurope.com)

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