

## AE2000 Routine and Live Cell Microscope Solution

## **AE**2000

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otic's new **AE2000 Inverted Microscope** is the ideal instrument for routine live cell inspection in both educational and high grade professional.

Uniquely integrated features like the Ergo tube and Auto cut-off mode ("sleep mode") are focused on enhancing its performance during the rigors of daily use.

Designed for routine-lab or clinical work, as well as research requirements in Pharmaceutical Laboratories or Universities, the AE2000 is more than capable of fulfilling the expectations of its users. Superb optical quality can be expected from a brand new optical series of both bright field and phase contrast lenses, following Motic's proven successful CCIS® Infinity Optical System.







#### Microscope Stand

Designed as a basic instrument for any life-science laboratory, the AE2000 comes in **three different stand types. Besides the standard Binocular and Trinocular versions, Motic is proud to present an astonishing ergonomic solution not before offered within this class of microscope: a Binocular Ergo model.** The Ergo stand allows an adaptation of the viewing angle to the personal demands of the individual user, especially useful over prolonged hours of viewing.





#### **Eyepiece tubes**

Depending on the working environment and its demands, the AE2000 Series has a solution. Each eyepiece tube allows a **360°** swiveling movement as well as a flexible adjustment of the interpupillary distance between **48** and **75mm**. The "Butterfly mode" increases the viewing height by 40mm.

Designed with a comfortable viewing angle of 45°, all AE2000 eyepiece tubes (Binocular, Trinocular and Ergo) offer a **20mm** Field of View (FOV 20). The binocular Ergo version gives the user the additional freedom to vary the standard viewing angle in a range of +/- 15°, allowing in total a **30°-60° angle**.

#### **Eyepieces**

In the AE2000, Motic's Infinity Corrected CCIS Optical system displays a field flatness of 20mm. The high eye point principle of the AE2000's eyepieces ensure true colour and sharp images, while minimizing eye fatigue and strain.

# AE2000 with Ergo-head

#### **Objectives**

With the release of the new AE2000, Motic has achieved a new standard in optical design and development. The AE2000 offers a completely upgraded class of Plan Achromatic lenses within the CCIS Infinity Optical concept. This upgrade covers a complete range of the following magnifications for bright field and phase contrast: 4X, 10X, 20X and 40X. New in this level of microscopy is the special designed 4X Phase objective for fast overview and screening examinations.



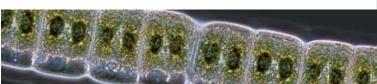
#### **Stage**

The convenient low positioned stage for optimized viewer posture and easy access has a new hard-coated surface for easy cleaning. All standard packages contain a glass stage insert as well as a new metal insert.

The optional mechanical stage can be supplied with inserts for the more common cell culture vessels, and standard glass slides.

#### Condenser

The dovetail mounting of the condenser allows a quick change between the two condensers. Surprisingly Motic's concept has **one phase ring set**, covering both condensers and thus ensuring maximum flexibility. When the condenser is removed, the maximum free working distance is 184mm.





#### Illumination

Motic's AE2000 has a significantly brighter and more even

illuminated image. The light management of both Halogen and LED versions has been improved in terms of transmission rates and optimization of the light path. Standard packages come with a 6V/30W Halogen illumination.

The AE2000 also supports the most recent requirements for LED illumination by a simple replacement of the Halogen bulb by a small LED module. One of the main advantages of LED, the extreme reduction of heat development, can now be achieved for the essential study of living samples.

As a new safety precaution Motic has implemented a "sleep mode" on the AE2000, based on an IR-sensor. This motion sensor detects a user in front of the microscope and automatically turns off the microscope when it is left for more than 15 minutes.







#### **Documentation**

Today, accurate documentation is becoming an increasingly important part in most natural science applications.

The combination of the AE2000 with a member of the **Moticam series** of digital cameras delivers **excellent live images, which can easily be stored for future usage.** All Motic cameras come equipped with software to transform the AE2000 into an analysis and documentation workstation.

Motic offer a complete range of digital cameras, starting with a basic resolution of 1.3MP (CMOS) up to the **research grade**Moticam Pro Line (CCD) with a maximum of 5MP, including

Monochrome and Cooled versions. These Moticam cameras deliver sharp live images with easy post-capture handling.

#### **General Specifications**

- Binocular/Trinocular head, 360° Swiveling type, 45° inclined (light split in Trino head 100:0/20:80) or Binocular Ergo head, 360° Swiveling type, 45° inclined with a range of +/- 15°
- Interpupillary distance 48-75mm
- Widefield high eyepoint eyepieces, N-WF10X/20mm, with diopter adjustment on both eyepieces, with rubber eyecups
- Reversed quadruple revolving nosepiece, left side orientated
- CCIS<sup>®</sup> PL4X, PL PH10X, LWD PL PH20X and LWD PL40X
- Coaxial coarse and fine focusing system
- Hard coated stage 200X239mm
- ELWD N.A. 0.3, working distance 72mm
- 3- Position Phase slider, with Phase ring Ph1
- 6V/30W Quartz Halogen illumination with intensity control
- Universal power supply 100-240V
- Metal stage plate, Glass stage plate, blue filter, green filter, centering screws, power cord, Allen hexagonal key and vinyl dust cover are included

### Motic



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