



## AB 6000

### Digital motorized microscope system

#### Features:

- Motorized XY and Z stages. Object size up to 250x300mm (larger size available on request)
- Ideal for examination of "Questioned documents" (forensic use), Wafers and other large material surfaces.
- Scanning of large areas in high resolution for use in "Virtual microscopy".
- Automatic stitching ("mosaic", "panorama")
- Automatic extended focus and exposure can be combined with automatic stitching
- Positions can be transferred to Electron microscopes or similar type of microscopes with nano capability
- XYZ position can be controlled by Joystick mouse.
- Full measurement on screen, automatic report generation, pdf, Excel.

#### Specifications in standard version (other specifications available)

*Dimensions without controllers:*  
540 x 445 x 525 mm (L x W x H)

*XY Travel range:* 125 x 75 mm (Optiscan)

*Motorized Z travel range:* 50mm

*Manual Z focus range:* 380mm (any size as option)

*XY repeatability:* <5um

- Magnification: (100 % pixel to pixel camera to monitor, no digital interpolated zoom, max optical magnification to a 24" 1920x1280 monitor, Invenio 5DII camera):  
10 x Objective: 385 x - 2380 x  
20 x Objective: 770 x - 4760 x
- Resolution: <1um (with 10x objective)  
<0.5 um (with 20x objective)

#### Minimum system requirement

- Intel i5 (Quad-Core) or better
- 4 GB RAM
- 15 GB free harddisk
- USB 3.0 port
- Windows Xp, Vista, 7, 8/10, 32 bit and 64 bit
- Full HD monitor

#### Complete XYZ motorized Microscope system for examination of large surfaces at high magnification

##### For detailed examination of documents and other material surfaces.

The Modus AB-6000 is designed for applications in which there is a need for examining large areas of documents, material surfaces and likewise. The system is especially suited for examination of questioned documents in Forensic applications.

##### Easy-to-use auto stitching

In many applications capturing a single image of a small part of a large object, is not informative enough. In order to follow larger structures, ink, stamps, cracks or similar, or/and to have everything in focus at the same time, it can be necessary to capture several images in different positions and with different focus level and combine them together, in order to get an overview, and to see all the microstructures at the same time.

The Modus AB6000 system can do this Easily in a superior quality.

##### Solid mechanics

In order to keep vibrations from affecting the image quality and visible details, the system is made from extreme solid mechanics, keeping the deflection less than 1 micron.

##### High Power coax light

The system is supplied with a high power LED fiber light source (equals a 150W halogen source) with extra wide diameter, in order to capture shadow free images. Due to the LED technology, change of lamps is not an issue.

##### Repeated capture in memorized positions.

If it is often necessary to capture many images in the same position of the same type of samples, a position table with all capture settings, can be saved for each type of sample. When loaded into the software, the system moves to each of the positions in the saved table, and captures an image (can be with extended focus and extended exposure) and saves the image in a predefined library position. In this way areas of interest on hundreds of samples can be captured in predefined positions in a few seconds, for examination and comparison.

##### High resolution optics with zoom capability.

As standard, the system is supplied with a mono zoom system with a base magnification range of 0.7-4.5x. To pick up the micro details the system has attached a High Resolution Infinity Corrected Microscope objective. With a 10x (20 times as option) objective and a 2x adapter, the system has a magnification range of approximately 400-2400x (with an Invenio 5DII camera and a 24" monitor)

##### Unique scanning option.

The system can automatically scan larger areas at low resolution, find areas of interest, and scan these areas at high resolution. This can be very useful for small objects spread over a large area. This function is optional.