



## » Heating Microscope with Automatic Image Analysis Upgrade EMI III

### » Product description

One essential component of Hesse Instruments' heating microscope is the **heating microscope software EMI III**, which includes the following functions:

- ... Preparing, executing and evaluating measurements
- ... Documenting data and measurement results
- ... Managing measurements and user accounts

Compared to the previous software **EMI 2**, **EMI III** offers a higher performance and a wider scope of functions. The differences are given in detail on the next page of this brochure.

### » Scope of delivery

- ... Heating microscope software **EMI III**
- ... Network-compatible CCD camera
- ... Pre-configured measuring station computer with Windows operating system
- ... New temperature acquisition device for the existing furnace control

## Differences at a glance

EMI 2 EMI III

<b>Preparation of measurements</b>	Support for adjusting the camera image	✗	✓
	... Definable image section for the image analysis	✗	✓
	... Utilities such as a grid or specimen silhouettes	✗	✓
	Storage of measurement settings and heating profiles as methods	✗	✓
<b>Execution of measurements</b>	Automatic control of the furnace	✓	✓
	Real-time evaluation and display of results	✓	✓
<b>Evaluation of measurements</b>	Interactive displays of measurement results	✗	✓
	Input of extensive notes possible	✗	✓
	Recording of all evaluation changes	✗	✓
	Advanced functions for diagrams and images: ... Zoom and image details ... Results markers on graphs	✗	✓
	Storage of generated diagrams	✗	✓
<b>Management of measurements</b>	Enhanced data base	✗	✓
	Enhanced archiving function	✗	✓
	Enhanced export function	✗	✓
<b>Automatic generation of measurement reports</b>	Short measurement report	✓	✓
	Long measurement report	✗	✓
	... User-defined content		
	... Insertion of notes, diagrams, etc.		
	... Insertion of user data (i.e. logo) ... Cover sheet with text fields		
<b>Advanced configuration options</b>	Evaluation parameters	✗	✓
	Users and user rights	✗	✓
	User data	✗	✓
	... Logo ... Address		
<b>Expansion with modules</b>		✗	✓

## Advantages of EMI III compared with EMI 2

### Enhancement of the performance

**Programmed for current operation systems** (Windows 7 and higher, 32BIT and 64BIT) » EMI III can access up-to-date hardware, enhancing its performance

**Use of a network compatible CCD-camera** » Quick and digital transfer of the recorded images to the computer (1000 MBit / s)  
» No conversion loss  
» Increase of the image quality

**Development of new evaluation algorithms** » Finer resolution of the gray-scale analysis during the automatic image analysis

### Increase in efficiency

**Structured and clearly arranged user interface** » Easy and intuitive operation of the software during setup of the camera image and preparation, execution and evaluation of measurements  
» Short training periods for new users  
» Clear display of measurements and results

**Various editing options** » Bigger scope of functions than in EMI 2  
» Evaluation via linked and interactive diagrams, tables and images  
» Optimal and quick evaluation of measurements  
» User-defined design of diagrams and measurement reports  
» Automatic generation of measurement reports possible

### Control and flexibility

**Configuration of evaluation parameters** » Direct influence on the automatic image analysis  
» Adaption of the parameters to diverse and non-typical measurement concepts possible