



**The Expert for Microarray  
Scanner Systems**

*Made in Germany*

**Microarray Scanner**

**Verification Kits**

**Software**

**Development**

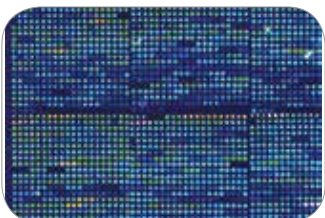
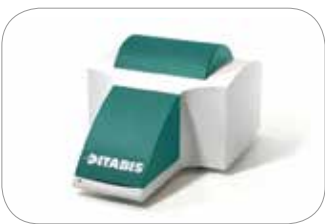
**Certification**

**IVD**

# DITABIS Microarray Scanner MArS



The DITABIS microarray scanners are affordable general-purpose devices for every laboratory. The DITABIS scanners offer you the opportunity to scan all common low and medium density arrays on all standard slides. The systems developed and produced “Made in Germany” have excellent optical precision and highest sensitivity in detection and therefore provide best scan results.



## Specifications

- Fluorescence scanner with two laser modules
- 532 nm and 635 nm (Cy3, Cy5, Alexa 546, 555, 647, 666)
- Peltier-cooled laser modules
- Low-noise photomultiplier
- 16-bit dynamic range, two data channels for up to 20 bits
- Motorized X/Y/Z scan mechanics
- Pixel resolution adjustable 100 to 10  $\mu\text{m}$  (expandable to 5  $\mu\text{m}$ )
- Automatic focus adjustment
- Scanning up to four slides simultaneously
- ISO slide standard, structured surface if required
- Scanning field: 23 x 76 mm
- Up to 6 emission filters
- Grey filter for unambiguous barcode reading
- Flexible control and evaluation software; research and OEM
- Verification Kit
- Expandable for Microplates; OEM
- Higher resolutions possible; OEM

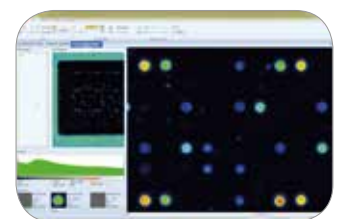
# DITABIS Microarray Scanner Accessories



## DITABIS Microarray Scanner Software SpotScout

The DITABIS scanner software SpotScout is easy to operate and offers highest flexibility in setting the scanning parameters and in image processing.

- Quantification and evaluation of microarray image data
- One click starts the scanning process with up to four slides
- Excellent image viewer
- Algorithms for safe automatic grid finding
- Objective quality control of the whole chip and every individual spot, and much more.
- Import of GAL files
- Start of scan via barcode recognition and safe data assignment



## DITABIS Microarray Scanner Verification Kit

The DITABIS verification kit allows the usage of the scanner for diagnostic purposes. A software wizard automatically checks the required scanner performance and corrects deviations in many cases what prevents service work.

- Routine quality checks of MARs based on the 'IVD-Directive 98/79'
- Gain, focus and background verification
- Slot geometry
- Red-green alignment
- Autofluorescence
- Laser and electronic noise



# Applications

The microarray technology is an important part of analyzing systems in molecular biology with a variety of possible application areas. The decisive advantage is the possibility to analyze hundreds of thousands of probes at the same time.

## Possible Application Areas (Low and Medium Density)

- Conventional DNA/RNA microarrays: diagnostics, differential gene expression and genome analysis
- Protein microarrays: samples can be analyzed in extremely restricted spaces (protein chip)
- Transfection arrays: screening of transgenic activation
- Cell and tissue fluorescence arrays: e.g. specific protein expression

## What are Low and Medium Density Arrays?

If microarrays have a spot size of more than 40 µm they are called low or medium density arrays. Those include the main part of all DNA/RNA and protein arrays for which the DITABIS MARs is perfectly suited.

## Small Device – High Performance

MARs is the ideal general-purpose device for every laboratory looking for easy access to the world of microarrays. The compact dimensions and the favourable price at the highest quality make MARs particularly interesting. In spite of the compact dimensions, the user does not need to sacrifice high performance and extensive features. DITABIS delivers the highly sensitive MARs with 4 slide-slots and the powerful control and analyzing software SpotScout as standard.

## Your Personal OEM Solution for In Vitro Diagnostics (IVD)

Since more than 10 years, DITABIS successfully cooperates with well-known companies in the field of microarray-based in vitro diagnostics. Being an IVD kit manufacturer, you have the opportunity to get an OEM scanner on the basis of our MARs scanner especially customized to your applications. We make full use of our profound know-how to develop technical and regulative solutions and implement them with great commitment within the shortest possible time. Additionally, our in-house production allows us to be very flexible in cost-efficiently producing your microarray scanner “Made in Germany”.

**We are looking forward to your inquiry!**

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