

Biochemicals
Electrophoresis
Bioseparation
Life Sciences
Specials

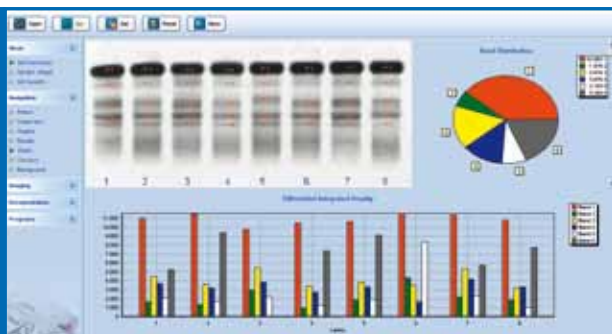
Digital Imaging and Analysis System II (DIAS-II)

The Digital Imaging and Analysis System II (DIAS-II) from SERVA is the ideal solution to master the daily tasks of documentation and 1D gel analysis in the routine laboratory work. Solid hardware including a digital camera and easy-to-grasp software are combined to provide an excellent tool to meet your needs. Capture a quick image of your protein or DNA gel for your records in the lab book and perform an advanced analysis conforming to GLP standards. Export of preformatted data sets into MS Word™, MS Excel™ or MS PowerPoint™ for further analysis or publication.

The Components

Darkroom cabinet & digital camera

- solid design, made from steel
- small footprint (50 x 40 x 50 cm)
- large sized doors plus drawer, easy handling of gels
- UV filter and filter holder included
- equipped with digital camera
- software for camera operation via PC



GelScan 6.0 software pack for 1D analysis

(for a more detailed description please see overleaf):

- comparison of expression patterns of different gels
- quantification of bands
- determination of molecular weight
- determination of isoelectric point
- automatic band detection
- individual edition of bands
- automatic background subtraction
- gel-management-tool
- GLP-conform incl. read-out of embedded tiff-tags
- database for pictures, projects and results
- automatic backup of all data
- export into MS Word™, MS Excel™, MS PowerPoint™
- RFLP and cluster analysis available (GelScan 6.0 Pro)
- HTS modul in GelScan 6.0 HTS (incl. GelScan 6.0 Pro)
- 2 years update, free of charge (online registration)
- full demo version available, free of charge

GelScript 1.1

- included free of charge with every GelScan 6.0 software package
- for easy inscription of images

The 1D Analysis Software GelScan 6.0

Analysis of electrophoresis gels

GelScan 6.0 is a software which allows easy analysis of electrophoretic gels, including expression analysis, quantification of bands and determination of molecular weight or isoelectric point.

The expression modul allows to compare expression patterns of different gels, to investigate the presence or absence of bands in protein or DNA gels. Unknown bands may be quantified, for example, linearly increasing amounts of proteins can be calculated. Values are depicted as a standard curve, using these standard bands can be quantified. The analysis of the molecular weight (MW) or the isoelectric point (pI) of different species separated in a gel is carried out easily by comparing bands in adjacent lanes. Even oblique running gels can be analysed. User-defined markers can be edited and calibrated.

Optional modules for analysis of RFLP, cluster and for High Throughput Screening are available.

Description of bands

Using specially developed mathematic algorithms, the program even detects and calculates weak bands. Additionally, a manual mode allows to edit bands individually. This is of particular advantage if bands have to be modified, false bands have to be deleted or bands need to be added which were not identified automatically. A three dimensional view of the bands is an innovative element and helps you to find the best way to border the bands. It assists to differentiate peaks from background, to isolate and calculate them.

Background substraction

The program includes automatic and manual routines to calculate and substract background. Each lane can be corrected separately.

Gel-Management tool

All calculated values and graphics can be comfortably exported into MS Word™, MS Excel™ and MS PowerPoint™. All graphics are preformatted!

GLP conformity

A GLP-conform, ongoing protocol recording user name, date and all calculations and manipulations done on the image is created in the background. The protocol is unchangeable and can be printed out on demand. Proof of authenticity of the image is obtained through the tiff-tag embedded in all original tiff files generated by the Canon PowerShot G6. Readout of the tiff tag is included in the GLP protocol.

Imaging and scanning (8 – 16 bit grey scales)

The program includes a twain interface. Images of gels and blots can be imported using an ordinary scanner. Gels and blots stored digitally on discs in various formats (jpg, gif, pcx, bmp, png, tiff, pcd, wmf) can be loaded. A set of tools is available to edit images for optimisation.

Database and network

Using GelScan 6.0 it is easy to store your results on your own computer and to continue work later on. Some features of these databases are construction of projects, different levels of security, automatic search mode, memo functions, preview of pictures and a direct connection to a protocol. The database GelBase 5 turns your GelScan software into a professional clientserver-version. Your data can be comfortably administrated using a SQL orientated database.

Ordering Information

Product	Cat. No.
Digital Imaging and Analysis System II	DIAS-II
GelScan 6.0	GS-V60
GelScan 6.0 Pro	GS-V60P
GelScan 6.0 HTS	GS-V60HTS



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