

UVP Solo Elite

Automated Gel Documentation

BioImaging



UVP Solo Elite

The UVP Solo Elite is a benchtop, easy-to-use, automated system for gel documentation. Acquire gel images instantly with one-click imaging in our user-friendly VisionWorks acquisition and analysis software.

The UVP Solo Elite is the perfect addition to any lab running routine gel analysis, imaging and documentation. This compact imager provides researchers rapid processing in a bench space saving format. With the most competitive specifications on the market and a budget friendly price, the UVP Solo Elite is the right fit for your lab.

This all-in-one system features an integrated 11.6 inch touch screen computer, a high resolution 6.3 MP camera - available as color or monochrome with an automated lens, a three position filter tray with pre-installed filters, overhead blue and white LED lighting and the UVP Elite UV Transilluminator.



UVP Solo Elite

Automated Gel Documentation



All-in-one design for automated gel documentation

- High resolution 6.3 MP camera
- Three-position automated filter tray with your choice of pre-installed filters; EtBr included
- Epi-white and epi-blue LED lights enable a variety of gel imaging applications
- Large 11.6" integrated touch screen with user-friendly software optimizes image capture and analysis
- Easy access data storage (7 USB ports) for saving images on a USB drive, to the system or a network computer
- Wide front door; safety switch turns the UV light off when the door is open
- Compact design maximizes laboratory bench space
- UVP Elite UV Transilluminator with 16.8 x 21 cm illumination for a variety of gel sizes

Streamlined Gel Documentation and Analysis

Compact design, small footprint, a large integrated touch-screen computer and several ergonomic features – the UVP Solo Elite goes all-in.

Easily switch between emission filters

The three-position emission filter tray can be used to place three different filters and switch between them for different applications. An Ethidium Bromide filter is included with the system, but a variety of other emission filters are available for additional purchase.

Camera options

Choose from a 6.3MP color or monochrome camera with an automated lens. The Elite color camera can capture the natural color of the samples, eliminating the need for multiplexing and reducing post image processing for high quality color images.

UV Protection

We prioritize UV protection, ensuring safe operation for all users. Opening the front door of the UVP Solo Elite automatically switches off the UV light. For cutting fragments from a gel while the main door is opened, a UV override switch allows users to deactivate the safety switch-off. Closing the door automatically re-activates the UV protection switch. This ensures safe operation for subsequent users.

Converter plates

For blue light excitation of fluorescent dyes such as SYBR® Green, a Visi-Blue converter plate can be used as an economical alternative to the Visi-Blue transilluminator. Imaging of non-fluorescent gels (e.g. silver or Coomassie Blue stained polyacrylamide gels) can be done using the Visi-White converter plate. This plate converts the UV light to visible light, similar to the light of a white light table. Converter plates are meant to be directly placed on top of a UV transilluminator.



Visi-Blue and Visi-White Converter Plates



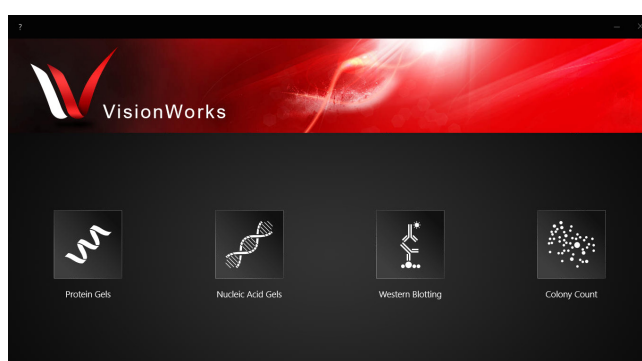
Simplify Your Routine with the Intuitive VisionWorks Acquisition and Analysis Software

Easy and customizable, VisionWorks does the work for you.

Intuitive Software with easy access to capture controls:

VisionWorks software on the UVP Solo Elite is a powerful yet intuitive software for capturing gel images and analyzing them. The simple user interface enables easy access to auto and manual image capture modes under the Device tab. Exposure time can be adjusted with customizable exposure settings. Captured images are saved in TIFF or JPEG formats.

- User friendly interface, streamlining the image acquisition, post processing and analysis workflow
- One-touch preset actions with Auto Focus and Auto Exposure for wide range of gel and blot applications for DNA gel, protein gel, Western Blot, and colony counting
- Streamlined 1D analysis for lane and band fine editing
- Auto Classification for Colony Sample. VW10 is trained to auto classify up to 3 classes on one sample plate.
- Supports advanced calibration for flat fielding, dark frame, and photon flux.
- Master audit trail to record all activities within VisionWorks during a session with the currently logged windows user name.



Extensive image enhancement and analysis tools:

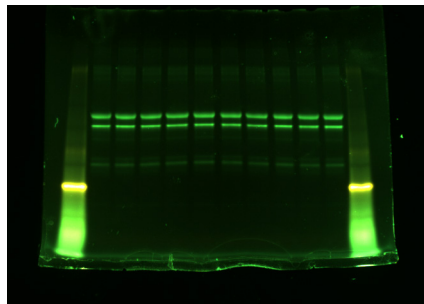
Image enhancement and analysis features are included with all systems. Researchers can personalize their experiments and make use of enhancement features and annotation tools for publication purposes. The software offers many powerful tools such as noise reduction, histogram adjustment, inversion, pseudocolor, and more.

The extensive analysis features are optimized for accurate and reproducible results. Several custom tools are available, such as automatic lane and band detection, 1D analysis, area density, and colony counting. Once the quantitation results have been generated, reports are created to show thorough analysis, such as Molecular Weight (MW), Rf, band intensities, and area density calculations. All the data can be conveniently exported to Excel.

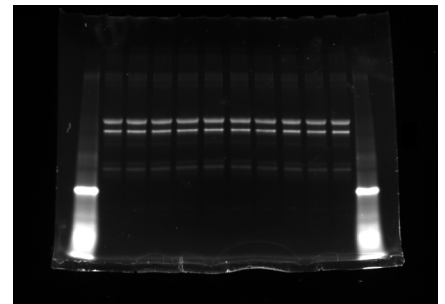
Applications

A range of applications from fluorescent DNA gels, fluorescent protein gels, and blue light gels, to colorimetry and more.

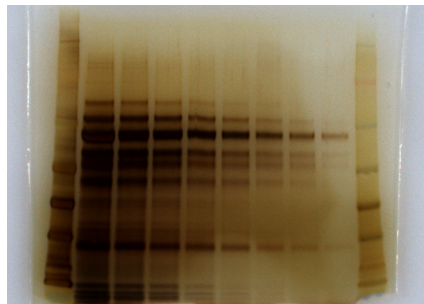
- DNA Applications: Most commonly used DNA dyes such as EtBr, GelRed, GelGreen, SYBR Safe, SYBR Green
- Protein Applications: Coomassie blue and Silver stain (with UV to White converter plate), Stain Free Gel, SYPRO Ruby (and other dyes with similar excitation and emission range)
- Western Blotting: colorimetric blot, CF488, Cy2 (or other dyes with similar excitation and emission range), Cy3 (or other dyes with similar excitation and emission range)
- Colony Applications: Bacterial colony plate, Clonogenic assay (with UV to White converter plate)



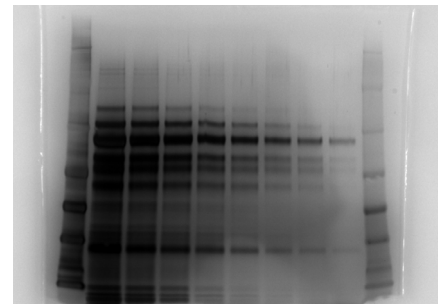
Diluted Rabbit anti mouse IgG2a Secondary Antibody were separated on the 4–20% Mini-PROTEAN® TGX Stain-Free™ Protein Gels and imaged on the UVP Solo Elite with Color camera



Diluted Rabbit anti mouse IgG2a Secondary Antibody were separated on the 4–20% Mini-PROTEAN® TGX Stain-Free™ Protein Gels and imaged on the UVP Solo Elite with Monochrome camera



Serial 1:2 dilutions of mouse serum were separated on NuPAGE™ 4 to 12%, Bis-Tris, 1.0 mm, Mini Protein Gel and stained with SilverXpress™ Silver Staining from ThermoFisher. Image is captured on UVP Solo Elite with color camera and UVP Visi-White™ Converter Plate UV-to-white



Serial 1:2 dilutions of mouse serum were separated on NuPAGE™ 4 to 12%, Bis-Tris, 1.0 mm, Mini Protein Gel and stained with SilverXpress™ Silver Staining from ThermoFisher. Image is captured on UVP Solo Elite with monochrome camera and UVP Visi-White™ Converter Plate UV-to-white

Technical Data

Specifications/features	UVP Solo Elite
Camera	<ul style="list-style-type: none"> ▪ 6.3 MP, available in monochrome and color version ▪ Automated lens ▪ 3072 x 2048 pixel resolution ▪ 65,536 grey scales (16-bit) ▪ Max. Sample Area: 16.8 x 21cm ▪ CMOS sensor
Darkroom features	<ul style="list-style-type: none"> ▪ 11.6" large integrated touch screen computer with 128GB of storage on a Solid-State Drive (SSD) ▪ Integrated shutoff UV door Safety switch ▪ 3-position automated emission filter tray with pre-installed filters ▪ Overhead white and epi blue LEDs ▪ 7 rear, one side USB ports for flash drive data export, USB-to-Ethernet connection or use with mouse or keyboard
Accessories included	<ul style="list-style-type: none"> ▪ EtBr emission filter, Elite Mount ▪ UVP Elite UV Transilluminator
Dimensions: H x W x D	61 x 46 x 38 cm



Order Information

Order number		Description
115 V	230 V	UVP Solo Elite
849-97-0944-01	849-97-0944-02	UVP Solo Elite Imaging System, 6.3 MPx MONOCHROME
849-97-0944-03	849-97-0944-04	UVP Solo Elite Imaging System, 6.3 MPx COLOR
		Accessories
95-0593-01		UVP Visi-Blue™ LED Transilluminator, 16.8 x 21cm
38-0408-01		UVP Visi-White™ Converter Plate 16.8 x 21cm
38-0409-01		UVP Visi-Blue™ Converter Plate 16.8 x 21cm
38-0220-05		Emission filter 580 – 630 nm: EtBr, Elite Mount
38-0219-05		Emission filter 510 – 560 nm: SYBR® Green, Elite Mount
38-0221-05		Emission filter 520 - 620 nm: SYBR® Gold, Elite Mount
38-0352-05		Emission Filter 503 - 523 nm: GFP mice, Elite Mount
38-0340-05		Emission Filter 513 - 557 nm: Cy2®, FITC, FAM™, GFP, SYBR® Green, SYBR® Gold, Elite Mount
38-0344-05		Emission Filter 565 - 625 nm: Alexa555®, Cy3®, SYPRO® Orange, Elite Mount

Headquarters

Analytik Jena GmbH
Konrad-Zuse-Str. 1
07745 Jena · Germany

Phone +49 3641 77 70
Fax +49 3641 77 9279
info@analytik-jena.com
www.analytik-jena.com

Your Regional Partner

Analytik Jena US
2066 W. 11th Street
Upland, CA 91786 · USA

Phone (909) 946-3197 | (800) 452 6788
Fax (909) 946-3597
info@us.analytik-jena.com
www.us.analytik-jena.com

Pictures: Analytik Jena US
Subject to changes in design and scope of delivery as well as further technical development.