



# Your partner in scientific discovery with GeneBio Systems

# **UVP GelSolo** Simplified Gel Documentation



## **UVP** GelSolo

The UVP GelSolo is a compact, easy-to-use, stand-alone system for gel documentation. It is designed to acquire gel images easily and without any need for training. Thus, it is ideal for multi-user laboratories and practical trainings.

Gel documentation, or the gel imaging process, involves recording and measuring labeled nucleic acid and protein in various types of media such as agarose or acrylamide.

The UVP GelSolo streamlines this process with live view; all exposure time, zoom and aperture settings are displayed in real-time on the 11.6 inch screen. Saturation monitoring allows for easy capture of fully quantifiable images. The UVP GelSolo system includes a light-sensitive monochrome camera with a high resolution of 5 megapixels. A highly sensitive zoom lens allows for high-contrast image acquisition. The system is controlled by a touch screen with the intuitive VisionWorks image acquisition and analysis software.

## **UVP** GelSolo

Streamlined Gel Documentation















## All-in-one design for streamlined gel documentation

- High resolution 5.0 MP camera
- Lens is easily accessible for adjustment of aperture, zoom and focus
- Three-position filter tray with Ethidium Bromide filter; additional filters are available
- Epi-white and epi-blue LED lights enable a variety of gel imaging applications
- Large 11.6" touch screen with user-friendly software optimizes image capture and analysis
- Easy access data storage for saving images on the USB drive, to the system or network computer
- Unique viewing window allows UV-safe viewing of gels without opening the door
- Wide front door; safety switch turns the UV light off when the door is open
- Side access doors for gel repositioning and cutting while viewing the gel on the screen
- Compact design maximizes laboratory bench space
- Choice of Transilluminator single, dual or triple wavelength
   UV Transilluminator models, and blue light models



# Integrated VisionWorks Software with Touch Screen Simplicity

The system is controlled by a touch screen with intuitive image acquisition and analysis software.

### Intuitive Software with easy access to capture controls:

The VisionWorks software on the UVP GelSolo 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.

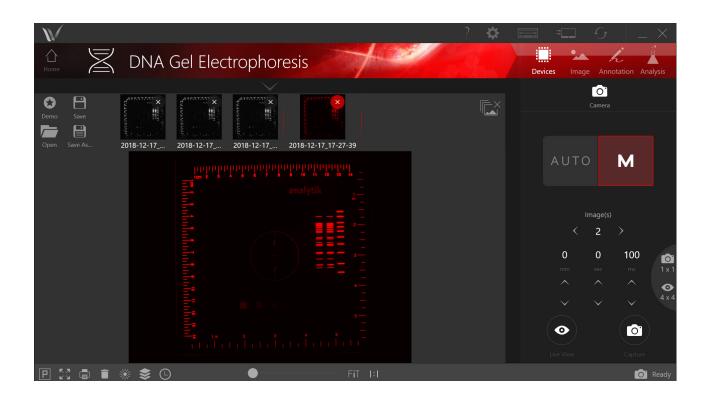
#### Extensive image enhancement and analysis tools:

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.

### Choice of switching to an advanced software interface:

Users can swiftly switch to an advanced version of the user interface by selecting 'Advanced' UI under the About tab in the Settings menu. The advanced version offers additional features such as Stacks and Series capture modes under the Device tab, a preloaded list of preset 'Actions' (automated workflow templates) for common gel imaging applications, image enhancement tools such as background subtraction and compositing, and more.





## **Optimized Gel Documentation and Analysis**

The main application of the UVP GelSolo is saving and printing gel images. VisionWorks software allows for gel analysis.

## Easily switch between emission filters

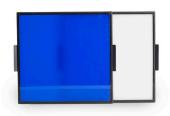
The three-position emission filter tray can be used to place three different filters and switch between them for different applications. An Ethidium Bromide filter is included with the system, but a variety of other emission filters are available for additional purchase.

#### **Transilluminators**

Seven different UV Transilluminator options are available based on filter size and UV wavelength (Filter sizes: 20 x 20cm, 21 x 26cm or 25 x 26cm; Wavelength: 1UV 302nm, 2UV 302/365nm or 3UV 254/302/365nm, 100-115V/60Hz or 230V/50Hz). A blue light transilluminator is also available.

## 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 blue light 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. In addition, a UV to long-wave UV converter plate can be used to reduce the risk of damaging DNA during gel excision. All the converter plates are meant to be directly placed on top of a UV transilluminator.



Visi-Blue and Visi-White Converter Plates





## **Maximum UV Protection for Users**

We prioritize UV protection, ensuring safe operation for all users.

Opening the front door of the UVP GelSolo automatically switches off the UV light. A UV-safe gel viewing window in the front door allows a direct and safe view to the fluorescent gel under UV illumination for visual control. For cutting gels under UV illumination, two side-access doors are included.

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.



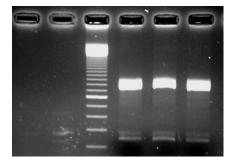


## **Technical Data**

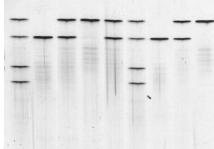
Specifications/features	UVP GelSolo		
Camera/Lens	GelCam 315, 5.0 MP, with 8-48mm, f/1.2 manual zoom lens		
Darkroom features	■ 11.6" large articulating touch screen		
	Wide front door with UV safety switch		
	Gel viewer window		
	Epi white and epi blue LEDs		
	Side access doors		
	USB ports		
	3-position emission filter tray		
Accessories included	Ethidium bromide filter		
	<ul> <li>Choice of UV transilluminator (Filter sizes: 20 x 20cm, 21 x 26cm or 25 x 26cm; Wavelength: 1UV 302nm, 2UV</li> </ul>		
	302/365nm or 3UV 254/302/365nm, 100-115V/60Hz or 230V/50Hz), or blue light transilluminator		
Dimensions: H x W x D	80.5 x 39.4 x 38.4 cm (31.7 x 15.5 x 15.1 inch)		

# **Applications**

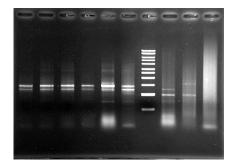
- Fluorescent DNA gels
- Fluorescent protein gels
- Colorimetric protein gels



Ethidium bromide stained agarose gel (UV light)



Silver stained polyacrylamide gel (white light)



Ethidium bromide stained agarose gel (UV light)

## **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
38-0409-02		UVP Visi-Blue™ Converter Plate 16.8 x 21cm, Elite Mount
98-0124-01		UV Protection Shield for Transilluminator
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

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