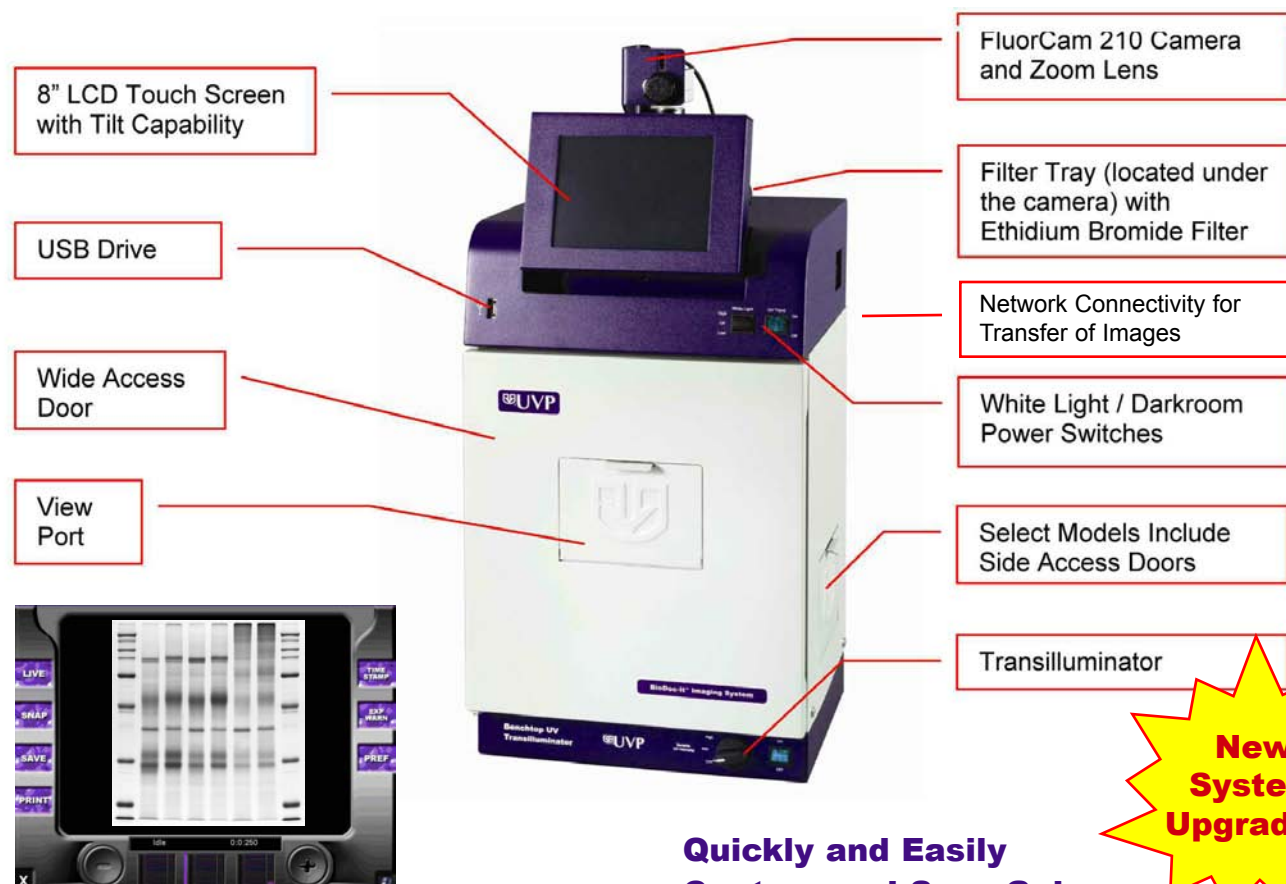


Basic Imaging Systems

BioDoc-It and VisiDoc-It Enable Fast, Easy Gel Imaging with New User-Friendly Features

BioDoc-It™ Imaging Systems



**New
System
Upgrades!**

Quickly and Easily Capture and Save Gels

Easy to use **BioDoc-It and VisiDoc-It Imaging Systems** offer dedicated gel documentation workstations for fluorescent imaging. Colorimetric imaging is possible with an optional UV to White Light Converter Plate. No separate computer is required to operate the systems, however, network connectivity is possible for transfer of images to another computer. New user-friendly features include:

- **Live** – See a live preview of the gel
- **Snap** – Capture the image
- **Save** – Save the snapped image; select from TIFF, GIF and JPEG file formats
- **Print** – Connect to an optional printer
- **Time Stamp** – Set the date and time for each image captured
- **Exp Warn** – Set the exposure warning
- **Preferences** – Set user preferences
- **Integration** – Increase or decrease integration times

- The LCD screen with new touch screen technology allows users to easily select screen options with the stylus pen.
- The integrated software provides increased simplicity for capturing and saving images.
- New USB drive allows users to save captured images to the USB thumb stick (1 GB stick included).
- New camera and lens supply super image quality and fast capture.



Anything You Can Imagine, UVP Can Image!

BioDoc-It Ordering Information

PART NUMBERS		BIODOC-IT W/ SIDE ACCESS DOORS (3 DR)	
115V	230V	Model	Description (w/Transilluminator)
97-0174-01	97-0174-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/LM-20
97-0175-01	97-0175-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/LM-26
97-0176-01	97-0176-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/LMS-20
97-0177-01	97-0177-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/LMS-26
97-0178-01	97-0178-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/M-26XV
97-0179-01	97-0179-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/FI-26X
97-0182-01	97-0182-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/M-20V
97-0183-01	97-0183-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/M-26V
97-0189-01	97-0189-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/FI-26
97-0190-01	97-0190-02	BioDoc-It 3DR	BIODOC-IT 3 DR W/FI-20

PART NUMBERS		BIODOC-IT SYSTEMS W/O SIDE DOORS	
115V	230V	Model	Description (w/Transilluminator)
97-0165-01	97-0165-02	BioDoc-It	BIODOC-IT IMAGING W/M-20V
97-0166-01	97-0166-02	BioDoc-It	BIODOC-IT IMAGING W/LM-20
97-0167-01	97-0167-02	BioDoc-It	BIODOC-IT IMAGING W/M-26V
97-0168-01	97-0168-02	BioDoc-It	BIODOC-IT IMAGING W/LM-26
97-0170-01	97-0170-02	BioDoc-It	BIODOC-IT IMAGING W/LMS-20
97-0171-01	97-0171-02	BioDoc-It	BIODOC-IT IMAGING W/LMS-26
97-0172-01	97-0172-02	BioDoc-It	BIODOC-IT IMAGING W/M-26XV
97-0173-01	97-0173-02	BioDoc-It	BIODOC-IT IMAGING W/FI-26X
97-0187-01	97-0187-02	BioDoc-It	BIODOC-IT IMAGING W/FI-26
97-0188-01	97-0188-02	BioDoc-It	BIODOC-IT IMAGING W/FI-20

Optional Equipment

Thermal Printer: The systems use a digital thermal printer. The printer supplies 256 grayscale for archive-quality thermal prints.

Converter Plates: **UV to White Light Converter Plate** converts the transilluminator UV to white light for viewing Coomassie blue and Silver stained gels. **Visi-Blue™ Converter Plate** converts UV to 460-470nm for viewing SYBR Green, SYPRO Orange GFP stains. **UV to UV Converter Plate** converts 302nm to 365nm UV.

Doc-It®LS Analysis Software: Perform extensive image enhancement and analysis functions with the Doc-ItLS Analysis Software which loads on your computer. Win XP compatibility.

PART NUMBERS	DESCRIPTION
89-0069-06	Thermal Printer, Digital 115V (Mitsubishi)
89-0069-07	Thermal Printer, Digital 230V (Mitsubishi)
89-0357-01	Thermal Printer, Digital 230V (Sony for Europe)
89-0038-01	Paper, Mitsubishi (4 rolls - 800 images)
89-0174-01	Paper, Sony High Gloss (5 rolls - 1000 images)
89-0031-01	Paper, Sony Gloss (5 rolls - 1000 images)
38-0191-01	UV to White Light Converter Plate 21x26cm
38-0191-04	UV to White Light Converter Plate 25x26cm
38-0325-01	UV to UV Converter Plate 25x26cm
38-0200-01	Visi-Blue Converter Plate 21x26cm
38-0200-04	Visi-Blue Converter Plate 25x26cm
97-0185-02	Doc-ItLS Analysis Software

BioDoc-It System Specifications

Darkroom:

Gel viewing window
Wide access door
Side doors (with or without)
Built-in 8 inch LCD touch screen
Filter tray with Ethidium Bromide filter
USB stick (1GB minimum), removable
Network connectivity

Software:

Integrated capture software
Integration system control
Capture and save functions

Lighting:

Epi: Overhead white LED lights with Hi/Lo settings
Transillumination: Select from several Benchtop and FirstLight models

Dimensions:

External with camera: 30.7"H x 14.2"W x 13.3"D (780 x 361 x 338mm)
Internal: 11.7"D x 12" W x 12.8" H (297 x 305 x 325mm)

Power: 115V 60Hz or 230V 50/60Hz

Camera Specifications

Model: FluorCam 210 Camera
Type: Monochrome
CCD Bit Depth: 8 bit
File Bit Depth (A/D): 8 bit
Grayscale Range: 0-256
Pixel Resolution: 640 x 480 (VGA)
Chip Source: Sony 1/3" ICX424AL
Captured Image Size (TIFF): 300kb @ 8bit
PC Interface Connection: USB 2.0
Lens: 5.7-34.2mm zoom

Transilluminator Specifications

Select from several Benchtop and FirstLight Transilluminator Models:

M-20V: 302nm UV, 20x20cm filter, Mid/Hi/Lo Variable Intensity Settings
M-26V: 302nm UV, 21x26cm filter, Mid/Hi/Lo Variable Intensity Settings
M-26XV: 302nm UV, 25x26cm filter, Mid/Hi/Lo Variable Intensity Settings
LM-20: 365/302nm UV, 20x20cm filter
LM-26: 365/302nm UV, 21x26cm filter
LMS-20: 365/302/254nm UV, 20x20cm filter
LMS-26: 365/302/254nm UV, 21x26cm filter
FI-20: 302nm UV, 20x20cm filter, FirstLight UV uniformity
FI-26: 302nm UV, 21x26cm filter, FirstLight UV uniformity
FI-26X: 302nm UV, 25x26cm filter, FirstLight UV uniformity

Fluor Camera and zoom lens

Screen tilts for optimum viewing angle and live preview of images

CompactFlash memory card port

Dedicated fluorescence and colorimetric imaging in a stand-alone gel documentation

No computer required with this system! If transfer of images to your computer is required, transfer images in a flash with the Compact Flash USB connector (PC or MAC).

Overhead LED white light with Hi/Lo settings

Touch pad control of:

- 17 integration times
- Save options: tiff or jpeg
- Oversaturation warning

Wide door for access and placement of samples on the transilluminator surface; UV automatically shuts off when the door is opened

Darkroom mounts onto the transilluminator

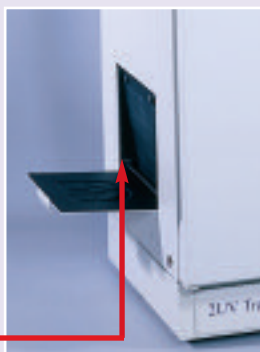
Choose from a large selection of benchtop models from single UV, 2UV, 3UV and FirstLight

BioDoc-It Imaging System is an all in one gel documentation package.

UV blocking viewport for quick sample viewing without opening the door



EtBr filter fits in the easy access tray; other filters are available and interchangeable

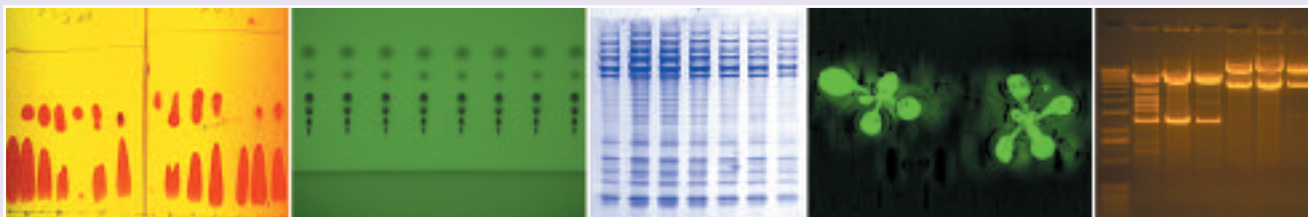


"Three door" models include side access ports for positioning gels without opening the door

System Components

- Darkroom, compact with wide access door
- Overhead white light
- Gel viewer window, UV blocking
- UV Transilluminator (variety available)
- Emission filter: EtBr (others available)
- CCD Camera (Fluor Camera) and zoom lens
- CompactFlash Memory Card and USB connector

Fluor Camera. Monochrome non-cooled CCD camera for laboratories performing routine electrophoresis of DNA and protein gels.



BioDoc-It™ Imaging System

Capture, preview and save gel images with new user-friendly features that enable fast, easy to use gel documentation for fluorescent and colorimetric images. The enhanced, upgraded components allow users to perform image capture functions with a touch of the new screen. The configuration is excellent for multiple user laboratories. An external computer is not required; though network connectivity is possible for transfer of images directly to your computer.



Applications

- Fluorescent Gels
- Colorimetric Gels with addition of UV to White Light Converter Plate

System Names	Camera
BioDoc-It	Fluor Camera (210)



- Features
- Specifications
- Options
- Part Numbers

Main Features

- The 8 inch LCD screen with new touch screen technology allows users to easily select screen options with the stylus pen.
- The integrated software provides increased simplicity for image capture and live preview of images and saving images.
- Save images in TIFF, JPEG or GIF file formats.
- New USB drive allows users to save captured images to the USB thumb stick (1 GB stick included).
- New camera and lens for super image quality and fast capture.

New Capture Software

- Live - See a live preview of the gel
- Snap - Capture the image
- Save - Save the snapped image; select from TIFF, GIF and JPEG file formats
- Print - Connect to an optional printer
- Time Stamp - Set the date and time for each image captured
- Exp Warn - Set the exposure warning
- Preferences - Set user preferences
- Integration - Increase or decrease integration times

CCD Camera

Biolmaging Systems	↓
UV / Laboratory Products	↓
Light Sources	↓
Applications	↓
Where to Order	↓
News / Events / Articles	↓
Tech Support	↓
Inquiries	↓

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- 8-bit scientific grade monochrome CCD camera and zoom lens
- Assembly connects to the darkroom for easy access and control of the zoom lens

Compact Darkroom

- Compact darkroom mounts onto choice of Benchtop or FirstLight transilluminator
- The LSC screen pivots for optimum viewing angle
- Touch screen technology allows users to select system functions with a stylus pen
- Overhead white light is built into the darkroom
- Ethidium Bromide (EtBr) filter located in the sliding filter tray under the camera
- Unique gel viewer window blocks UV while allowing visualization of samples without opening the door

Three Door Models

- Access doors (on select models) are positioned on each side of the darkroom for moving or cutting gels without opening the front door

Specifications

- Camera: Fluor 210 Camera
 - Type: Monochrome
 - CCD Bit Depth: 8 bit
 - File Bit Depth (A/D): 8 bit
 - Grayscale Range: 0-256
 - Pixel Resolution: 640 x 480 (VGA)
 - Chip Source: Sony 1/3" ICX424AL
 - Captured Image: Size (TIFF): 300kb @ 8bit
 - PC Interface Connection: USB 2.0
 - Lens: 5.7-34.2mm zoom
- Darkroom:
 - 8" inch LCD color touch screen
 - USB drive and USB stick (1 GB stick included)
 - Wide access door with UV safety shutoff
 - Gel viewing window
 - Overhead white light
 - Optional side access ports
 - Integrated software
 - Network connectivity
- Emission Filters
 - Ethidium Bromide EtBr Red 570-640nm
- Transilluminators select from:
 - FirstLight UV Illuminator: select from three filter sizes
 - Benchtop UV Transilluminator: select from single UV, 2UV and 3UV models in three filter sizes)

Dimensions:

External with camera: 30.7"H x 14.2"W x 13.3"D (780 x 361 x 338mm)

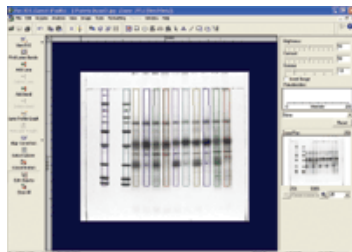
Internal: 11.7"D x 12"W x 12.8"H (297 x 305 x 325mm)

Options

- Cameras: Fluor Camera
- Doc-It LS Analysis Software: Image acquisition plus extensive enhancement and analysis capabilities
- Transilluminators: Select from the FirstLight or Benchtop models
- Converter Plates:
 - Visi-Blue Converter Plate
 - Longwave Converter Plate
 - UV to White Light
- Camera Filter: SYBR Green/EGFP P/N 38-0219-01
- Thermal Printer: For archive quality prints in seconds
- Gel-Tools:
 - Gel-Sentry
 - Step Tablet
 - Gel-Cutter
 - Gel-Ruler
 - Gel-Scooper
 - Gel-Trays

Doc-It®LS Image Analysis Software

Doc-It®LS Image Analysis Software is designed as an easy-to-use software package for 1D analysis of gels, plates and membranes as well as colony counting.



[Click for larger picture](#)

BioImaging Systems	↓
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Key Features:

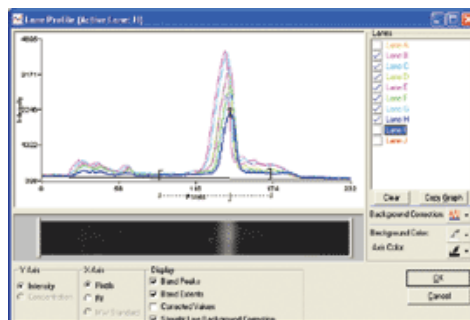
The software offers many image enhancement tools, gel analysis functions, reporting capabilities and supports 21 CFR Part 11 compliance. The user friendly design allows users to configure many features to their preferences.

Image Analysis Functions

- Detect straight, curved or slanted lanes and bands automatically or manually
- Create histograms for detailed visual analysis
- Generate easy to interpret quantitative data of lanes and bands
- Calibrate using multiple Molecular Weight (MW) standards
- Apply one of four multiple background correction curve methods for more accurate analysis
- Measure angles, areas and lengths with

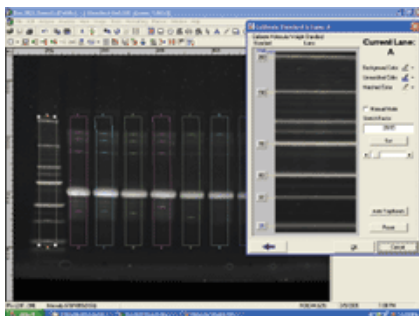
Measurement Tool

- Open any 8, 12 or 16 bit images captured with UVP's BioImaging Systems or transfer images from scanners with a Twain interface



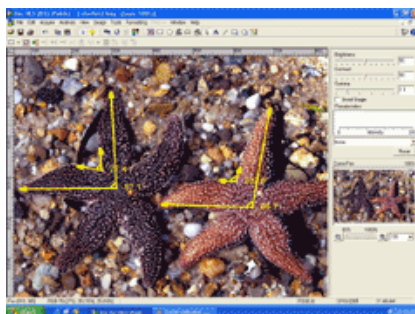
[Click for larger picture](#)

Lane Profile Graph creates a line graph in different colors of one of more lane selected. Display band peaks, extents and values.



[Click for larger picture](#)

Calibrate Molecular Weight standards with just one click. Add your own MW standards to the preset standards list.



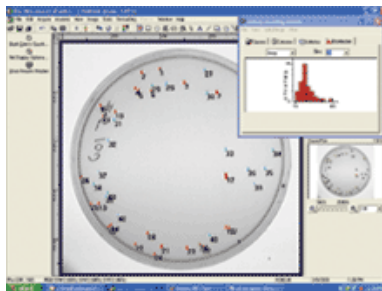
[Click for larger picture](#)

Measurement Tool enables researchers to measure angles, areas and lengths.

Automated Colony Counting

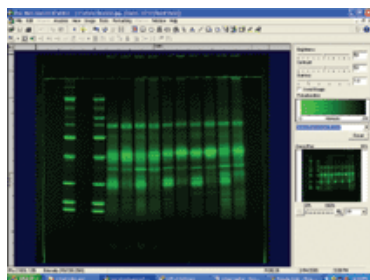
This object counting recognition tool is suited for identifying bacterial colonies in a petri dish.

- Click through the wizard commands to set the automatic colony counting
- Split and merge colonies as well as add and remove colonies
- Use the free-form Region of Interest (ROI) tool to precisely define the area
- Automatically perform extensive statistics with the colony histogram function
- Select specific filtering criteria such as area or size of colonies



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Colony Counting function allows automatic counting. Toolbar on the left shows easy to use colony icons.



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Pseudo Color images highlight specific intensities for analysis purposes.

Image Enhancement Capabilities

- Enhance images with brightness, contract, gamma, emboss, invert and pseudo color
- Annotate with text, lines, arrows, ellipse, and highlighter tools' show, hide or burn into image
- Select from filters to sharpen, blur and remove frequency based noise

Support for 21 CFR Part 11 Compliance

Doc-ItLS Software fully supports image security and change logs

Image History records changes made

to assist with 21 CFR Part 11 compliance.

- Track image and analysis history and show image properties and user comments
- Control of account setup by Administrator, determine usernames and passwords, as well as permissions for viewing and editing images
- Maintain login history of all accounts

to images. Report shows actions taken along with user information, notes, date and time.



Click for larger picture



Click for larger picture

User Profiles and Preferences

- Researchers can personalize their workspace by placing tool bar icons along the side or across the top, with or without text, then save the profiles by user name. Set up user accounts with passwords to protect user data.

Tool Bar layout can be saved for different users. The navigator tool bar prompts users to the next step in the analysis process. The navigator can be customized for different types of analysis.

Report Generation

- Save images as various file formats including TIFF, JPEG, BMP and GIF for use in presentations or documentation
- Create detailed and user-configured reports showing extensive analysis results on MW, Rf, precise position of bands, band intensities, etc.
- Use the Filter Data button to choose specific data for reports
- Configure the Qwik-Link icon to automatically open any external software application
- Perform Direct Data Exchange (DDE) and export to other software formats
- Personalize images and reports with identifying descriptions on lanes and bands

A screenshot of the Data Explorer window in the Doc-It@LS software. The window displays a table with analysis results. The table has columns for 'Lanes', 'Bands', 'Concentration', and 'Molecular Weight'. The data is organized into rows, with each row representing a specific band in a specific lane. The table includes numerical values for each of these parameters.

Lanes	Bands	Concentration	Molecular Weight	
1	402.72	244.30	244.30	244.30
2	258	543.50	102.36	102.36
3	351.21	72.92	68.96	68.96
4	75	61.60	60.52	60.52
5	56	48.97	47.90	47.90
6	27.29	37	37.30	37
7	25	25	24.79	25.68

Only use these tags ['table', 'tr', 'th', 'td', 'div', '

Click for larger picture

Reports configure your reports and output to Excel or other software programs.

Ordering Information

Doc-ItLS Image Analysis Software System Requirements: Windows 2000 SP-1 or higher, Windows XP Pro SP-1 or higher	97-0185-02
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Converter Plates

Maximize transilluminator capabilities by using a converter plate to convert the transilluminator's 302nm UV wavelength to different wavelengths for visualizing a variety of gels. Place the specially designed plate on the transilluminator filter surface. Photo shows 21x26cm Visi-Blue Plate and 20x40cm White Light Plate.



Applications

- Variety of wavelengths for Gel Documentation



- Features
- Specifications
- Options
- Part Numbers

Main Features

Several specially designed converter plates convert a transilluminator's 302nm ultraviolet radiation .

- To white light for viewing protein gels, coomassie blue stained or silver stained media. The Converter Plate's uniquely phosphored glass assembly (patent pending) converts the UV radiation via a white diffuser
- Convert UV:
 - To 460-470nm with the Visi-BlueT plate for viewing GFP stains
 - To 365nm UV with the UV/UV plate for preparation and gel excision
- The scratch-resistant glass is mounted in a metal housing for durability
- Rubber seal stops the plate from sliding
- Handles are situated on two sides of the plate for easy handling
- Several standard plate sizes are available; custom sizes are also available

Biolmaging Systems	⬇
Advanced Imaging Systems	
Basic Imaging Systems	
Imaging Accessories	
Anesthesia System	
VisionWorks LS Software	
Doc-It LS Analysis Software	
Thermal Printers	
Gel Tools	
Glowell Standards	
Transilluminators	
Converter Plates	
Flat Field Correction Plate	
UV / Laboratory Products	⬇
Light Sources	⬇
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Thermal Printers

Quickly document gels, films and membranes with archive quality thermal printer. The printer easily connects to imaging systems for low cost prints in seconds.



Applications

- Gel Documentation

Features

Specifications

Options

Part Numbers

Main Features

- 256 gray scale
- High resolution, archive-quality thermal film prints
- Compact printer is excellent for limited laboratory bench space
- Process low-cost prints in seconds

BioImaging Systems	↓
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- **Specifications**
- Gray scale: 256 high resolution
Dimensions: 6W x 10D x 3.5H in. (15.2 x 25.4 x 8.9cm)

Options

- Standard or high gloss paper
- Bioluminescence Imaging Systems
- Download Brochure

Gel Tools

Gel tools are helpful for researchers working with transilluminators and gel imaging systems.



Applications

- Gel Imaging
- Transillumination



- Features
- Specifications
- Options
- Part Numbers

Main Features

Gel Tools

- The Gel-Cutter's edge allows for easy cutting and removal of gel material.
- Gel-Scooper, made of strong acrylic with a beveled edge, is designed for easy transfer of gels from electrophoresis equipment to viewing equipment.
- Gel-Trays (in two sizes), made of UV transmitting plexiglas, can be used for moving gels to the transilluminator. The tray protects the transilluminator's filter surface from scratches. Side panels on the Gel-Tray, angled at a 45 degree bend, extend upward from the tray surface for easy handling. Two sizes available.
- The Gel-Ruler has centimeter markings that fluoresce under 365nm and 302nm ultraviolet wavelengths, providing reference marks for DNA analysis.

Fluorescent Standard Step Tablet

Place the non-photo bleaching Fluorescent Standard Step Tablet (patent pending) next to your gel on a [FirstLight UV Illuminator](#). The step tablet has a calibrated 21-step gradation with density from totally clear (step 1) to totally opaque (step 21). The gradation on the step tablet allows accurate, consistent comparison of the bands and spots on acquired images for variations in lighting and optical conditions and for maximizing fluorescence calibration of images. The guide lets researchers evaluate the image against the values of gray, maximizing fluorescence calibration and providing a standard reference for images.

Gel-Sentry™ DNA Preparation Plate

Unique design features UV blocking panels to protect the gel from damaging UV. The layers of panels can be aligned to isolate specific lanes and bands to minimize UV exposure during cutting. Place gels on the top UV transmitting glass plate. The sliding acrylic panels below are 98% UV blocking at 302nm UV.

Biolmaging Systems	↓
Advanced Imaging Systems	
Basic Imaging Systems	
Imaging Accessories	
Anesthesia System	
VisionWorks LS Software	
Doc-It LS Analysis Software	
Thermal Printers	
Gel Tools	
Glowell Standards	
Transilluminators	
Converter Plates	
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