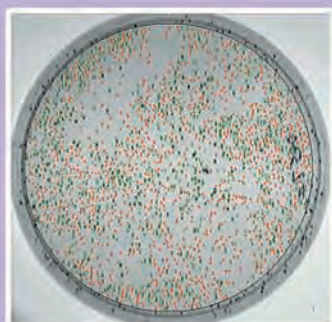
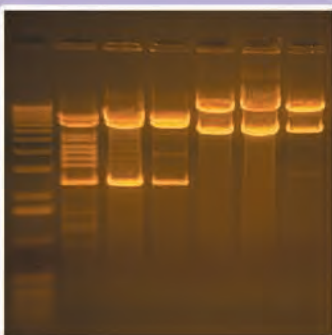
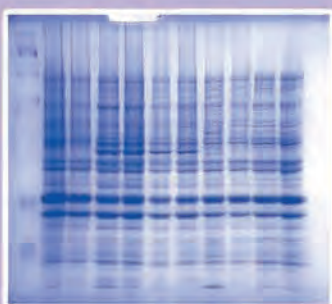
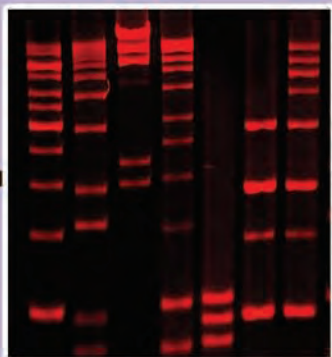


# GelDoc-It Imaging Systems



**With Next Generation VisionWorksLS Software!**



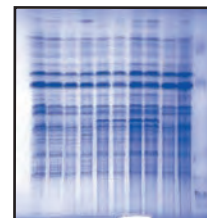
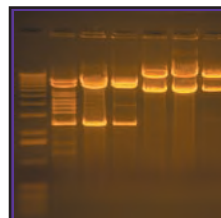
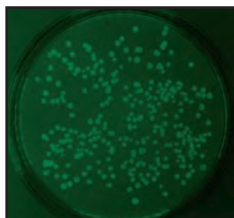
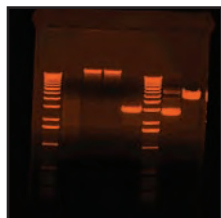
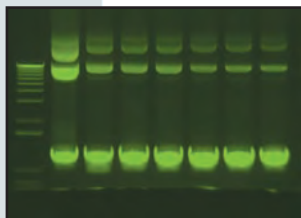
**Advanced Gel Documentation  
and Image Analysis**



Biolmaging Systems for the Science of Life

# GelDoc-It® Imaging Systems

**Advanced, modular designs for superior fluorescent and colorimetric gel imaging and analysis!**



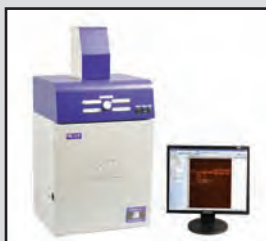
**A wide range of dyes and fluorophors that can be used with the GelDoc-It Systems include:**

Ethidium Bromide | GelRed™ | GelGreen™ | SYBR® Green | SYBR® Gold | SYBR® Safe | GelStar®  
SYPRO® Red | SYPRO® Ruby | Coomassie Blue | Silver Stains | Deep Purple™ | GFP

## GelDoc-It TS



## GelDoc-It



## Systems Overview

Component	GelDoc-It	GelDoc-It TS
Camera	GelCam 310	GelCam 310
Zoom Lens	Motorized or manual	Motorized or manual
Computer	External (not included)	Internal
Monitor	External (not included)	15 inch, integrated touch screen
Emission Filters	4 position, EtBr filter included	1 position, EtBr filter included
Lighting	Epi white light	Epi white light
Transilluminator	Benchtop or FirstLight	Benchtop or FirstLight
Software	VisionWorksLS Acquisition/Analysis*	TS Software or VisionWorksLS Acquisition

- Industry leading 2 megapixel, scientific grade CCD camera for high resolution images
- Configured to users' requirements of image capture, enhancement, documentation, analysis and reporting
- GelDoc-It TS with integrated computer and 15" color touch screen or GelDoc-It with separate PC and monitor (not included)
- Compact footprint minimizes lab bench requirements
- Modular design allows addition of BioLite, UV modules and white light transilluminator for multiple applications
- Network connectivity for file transfer

### Scientific Grade Camera



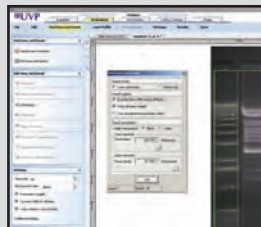
and lens are mounted to the top of the darkroom. CCD camera is noted for its high resolution and sensitivity. Select a motorized (pictured) or manual fixed lens.

### Transilluminator



fits on the roll out tray for easy access to the transilluminator surface. Select from Benchtop UV or FirstLight® UV Transilluminator models.

### VisionWorksLS Software



can be configured with the system to offer comprehensive image capture, enhancement and analysis capabilities. The software controls the camera and motorized fixed lens.

### Light Tight Darkroom



creates optimum conditions for imaging samples. The wide access door allows easy entry to the darkroom interior.

## Modular designs for multiple imaging applications

# GelDoc-It TS Imager

## Stand-Alone Design with Touch Screen Technology

Self-contained design with built in computer and monitor reduces lab space requirements. Users can capture high resolution images and save to the USB drive or transfer via a network connection.

Large **15"** color touch screen technology for selecting image capture and system functions

Save images to the internal hard drive, **USB thumb drive** or transfer via a **network** connection

**Unique gel viewer window** blocks UV while allowing visualization of samples without opening the door

**Access port** for connecting to the external **BioLite™** (optional) high intensity multispectral light source



**High resolution 2 megapixel**, scientific grade CCD GelCam 310 camera

**Motorized or manual zoom lens**

**Single filter tray** is located under the camera for easy access, includes Ethidium Bromide filter

**Darkroom power controls** are conveniently located

**White light sources** include epi and optional **LED** white light transilluminator for Silver stains and Coomassie Blue

**Ultraviolet light sources** includes transillumination or optional epi UV modules for exciting UV fluorophors

**Built-in computer** allows the addition of a keyboard, mouse and VisionWorksLS analysis software to create a complete networkable, stand-alone system

## TS Software



**TS Software interface (GelDoc-It TS):** Touch the screen with a finger or **stylus pen** (included) to enable easy control of the image acquisition (and optional analysis) functions.

- Generate preview of images using the LIVE button
- Capture images quickly using the SNAP button
- Save images to USB thumb drive or hard drive
- Connect to a network to transfer images
- View overexposed bands before capturing image
- Apply a date and file name stamp to images
- Print to a thermal printer or connect to a network printer



# High Resolution Gel Imaging and Analysis

## GelDoc-It Imager

### Dedicated Design for Rapid Gel Imaging and Analysis

System with separate computer and monitor allows users to capture high resolution images and perform quantitative analysis, image enhancements and generate reports.

**Ultraviolet light sources** includes transillumination; optional epi UV modules for exciting UV fluorophors

**White light sources** include epi white light; optional LED white light transilluminator for Silver stains and Coomassie Blue

**Unique gel viewer window** blocks UV while allowing visualization of samples without opening the door

**Access port** for connecting to the external **BioLite** (optional) high intensity multispectral light source



High resolution **2 megapixel**, scientific grade CCD GelCam 310 camera

**Motorized or manual zoom lens**

Easy to turn **four position filter wheel**; includes **Ethidium Bromide filter**

**Darkroom power controls** are conveniently located

**Computer required** for the GelDoc-It System (order separately)



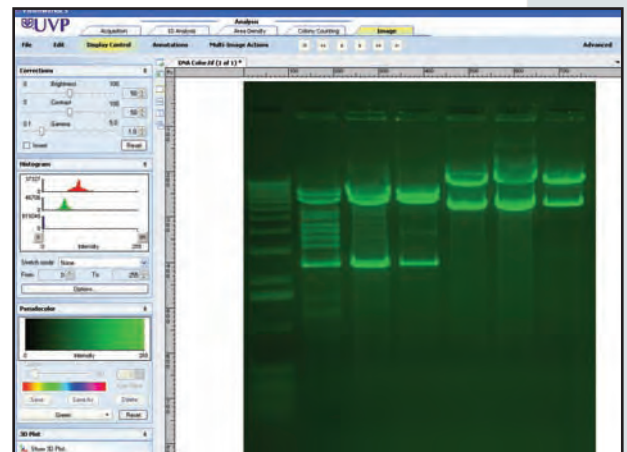
**VisionWorks®LS Software** allows image acquisition, enhancement, analysis, documentation, printing and publishing of gels, plates and colonies

## VisionWorksLS Acquisition and Analysis Software

VisionWorksLS\* is a powerful and easy to use image capture and analysis software package with comprehensive tools to facilitate the capture of high resolution images. Software capabilities include:

- Image acquisition capabilities with one-touch capture buttons
- Image enhancement functions
- 1D quantitative analysis
- Area density analysis
- Colony counting
- One-touch automated macros
- User defined templates and preference settings
- Report generation and export of data to Excel
- Support for 21 CFR Part 11 compliance

*Introducing  
new optimized  
workflow layout!*



# VisionWorksLS Tools

## New One-Touch Capture Buttons



The simplified software interface integrates with the camera to efficiently and easily achieve superior quality of captured images.

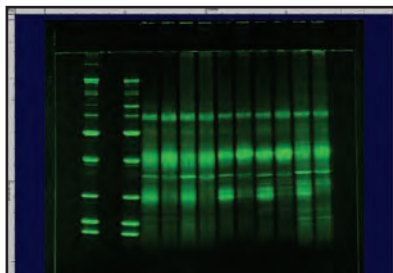
- One-touch image **capture settings** for fluorescent and colorimetric images
- **Preview** images for sample placement
- **Saturation preview** detects over exposure of bands

## Streamlined Image Enhancement Tools

The software offers many enhancement features, process filters and annotation capabilities as non-destructive tools for visualization and publication. The imaging tools include:

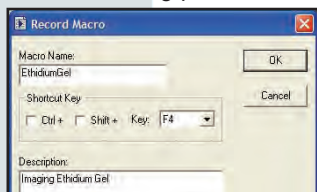
- **Annotations** can be added such as text, lines and highlights
- **Filter tools** include align, rotate, emboss, sharpen, resize and background correction

**Pseudocolor** images for export to presentations and reports.



## One-Touch Automated Macros

Create personalized, custom macros to automate routine, time consuming procedures involving image capture, enhancement, analysis and data archiving. Record keystrokes that perform a series of functions. Assign a function key to the recorded macros for **one-touch automation**. Macros can be used to auto-adjust dark images to perfection.



## IQ/OQ Documentation

Installation Qualification (IQ) and Operational Qualification (OQ) documents are available for on-site system installation and operation and enable researchers to comply with regulatory bodies.

## Reports and History Tracking

- Create reports showing extensive analysis results including Molecular Weight (MW), Rf, band intensities and area density calculations. Export data to Excel.
- VisionWorks software image history tracking, with change logs, support 21 CFR Part 11 compliance.

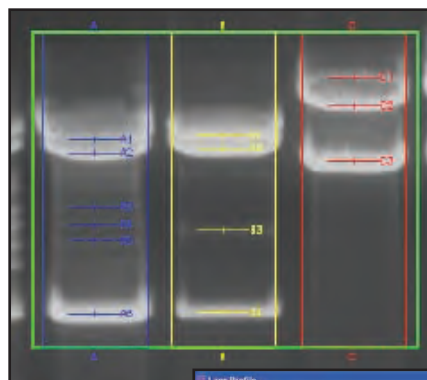


**Area Density** Use the Area Density function to determine intensity information for bands using the 'Magic Wand' tool. Shown here with Pseudocolor and Annotations.

## Extensive Analysis Capabilities

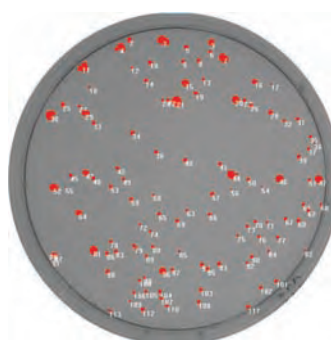
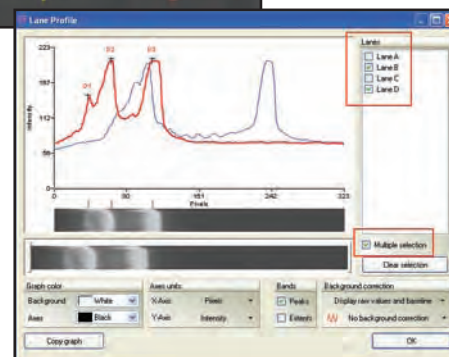
The system may be configured with the VisionWorksLS\* analysis package and provides complete tools for quantitative analysis. Easy to use functions automate research to:

- Automatically find lanes and bands
- Generate lane profile graphs
- Visualize area density for bands
- Perform dendrogram analysis
- Calculate concentration curves
- Count colonies and much more



**Find Lanes and Bands** Use the 1D Analysis function to automatically find and label lanes and bands. Easily adjust the parameters.

**Lane Profile Graph** Use the 1D Analysis Lane Profile Graph function to generate graphical representation of lanes and bands data.



**Count Colonies** Use the Colony Counting function to automatically generate a colony count and send results to Excel.

# Accessories



## Thermal Printer

is compact and generates archive quality, 256 gray scale prints. Matte or glossy paper available.



## LED White Plate

emits uniform white light with <5% coefficient of variance (CV) for viewing Coomassie Blue and Silver Stains.



## UV Modules

can be mounted into the darkroom for epi UV illumination. The modules can be removed for hand held use.



## BioLite Light Source

directed fiber optic epi source with one excitation filter. Select from a wide range of filters.

## Ordering Information and Specifications

*\* System configurations may vary by country. Contact a BioImaging Specialist or Authorized Dealer for system details.*

### System Configurations

**GelDoc-It 310 Imaging System**  
**GelDoc-It TS 310 Imaging System**

### System Components

- GelCam 310 Camera with manual or motorized zoom lens
- Darkroom with UV blocking gel viewing window
- Overhead light: white light (high/low settings)
- UV Transilluminator (25 x 26cm, 21 x 26cm or 20 x 20cm); select from single UV, 3UV™, 2UV™ or FirstLight models
- Emission filter: Ethidium Bromide (EtBr); others available
- GelDoc-It includes VisionWorksLS Acquisition/Analysis Software
- GelDoc-It TS includes TS Software or VisionWorksLS Acquisition Software
- 100-115V or 230V

Dimensions:

GelDoc-It: 18.5W x 15D x 32H in. (47 x 38 x 81 cm)

GelDoc-It TS: 18.5W x 15D x 35H in. (47 x 38 x 89 cm)

### Camera Specifications

Camera:	GelCam 310
CCD Bit Depth:	12 bit
File Bit Depth:	16 bit
Grayscale Range:	65,536
Pixel Resolution:	1600 x 1200
Megapixels:	2.0
Captured Image Size (TIFF):	3.7mb @ 16-bit
PC Interface Connection:	USB 2.0
Lens (Manual or Motorized):	f/1.2 12.5-75mm zoom lens

### Software Specifications

#### GelDoc-It TS Software

Capabilities: Image acquisition

Documentation: Save images to system or USB thumb drive

#### VisionWorksLS Software

Capabilities: Image acquisition; system may be configured with analysis functions

Tools: Macros, templates, image enhancement, annotation

Documentation: Create reports/export data

Compatibility: Windows XP, Vista, Windows 7 (32 Bit only)

**Ask about VisionWorksLS network version for multiple users.**

### Optional Accessories

#### UV Modules

UVGL-25 (254/365nm) Epi UV Module (2 recommended)

UVL-21 (365nm) Epi UV Module (2 recommended)

UVG-11 (254nm) Epi UV Module (2 recommended)

UV to 480nm Converter (Clip On) for UV Modules

**LED Uniform White Light Transilluminator:** 11Wx11D in. (28x28 cm)

#### Converter Plates (21x26cm or 25x26cm sizes):

302nm UV to White Light, 302nm UV to 365nm

302nm UV to 480nm

**Filters:** SYBR Green, SYBR Gold/Safe

**Thermal Printers:** Archive quality 256 grayscale prints; Thermal Paper rolls (matt or glossy)

**Emission Filters:** Standard and custom filters available

**BioLite MultiSpectral Light Source** and Excitation Filters

**PC and Monitor** Ordered separately



For information contact: