#### Imaging



Molecular Imager® **Gel Documentation** Systems



**The Worldwide Leader in Gel Imaging** 



# The Unmistakable Leader in High-Resolution Systems

Bio-Rad is the worldwide leader when it comes to providing high-quality imaging products. Whether your research includes everyday imaging of PCR products, more demanding low-light applications such as chemiluminescent western blots, or both, the Molecular Imager® Gel Doc<sup>TM</sup> XR and ChemiDoc<sup>TM</sup> XRS imaging systems meet your needs.

## Two Complete Gel Documentation Systems

Molecular Imager Gel Doc XR and ChemiDoc XRS systems ship complete with darkroom, camera, UV and white light illumination, filter slider with EtBr/SYBR Green bandpass filter, UV protection shield, Quantity One® 1-D analysis software, and unlimited copies of Quantity One Basic software for data sharing.

#### Extra Resolution

#### **Gel Doc XR**

The Gel Doc XR system is a high-resolution gel documentation system for all of your everyday imaging needs.

The 1.4 megapixel imaging system is fast and easy to use. Follow the onscreen prompts and get your results with only three clicks of a mouse. The motorized zoom lens allows a hands-free approach to finding the perfect focus, zoom, and iris settings. The intuitive and easy-to-use Quantity One software interface allows you to expose and print directly from the acquisition window. The Gel Doc XR system provides a detection range of >3 orders of magnitude and utilizes a FireWire interface for fast data transfer.

- High-resolution imaging with 1.4 million pixels
- Motorized zoom lens for hands-free gel documentation
- Real-time imaging for quick positioning and focusing of samples
- Onscreen integration no need to save an image; simply "freeze" the image at the desired intensity and print
- USB interface for rapid data transfer
- White light transilluminator allows documentation of visible dyes
- Upgradable to the ChemiDoc XRS system

The Gel Doc XR system provides extra resolution for the acquisition, optimization, quantitation, and documentation of all of your gel data.

# Extra Resolution and Sensitivity



The ChemiDoc XRS system is an advanced chemiluminescent

detection system offering extra resolution and sensitivity. The system features flat fielding technology for superior uniformity and quantitation, and the flexibility to image chemiluminescent, fluorescent, and colorimetric samples. The system includes a supersensitive charge-coupled device (CCD), supercooled for excellent detection of faint samples. The ChemiDoc XRS system can be used for imaging in a wide variety of applications that require high resolution (such as 2-D gel electrophoresis) and excellent sensitivity (such as chemiluminescent western blots).

- Supercooled high-resolution CCD camera with 1.44 megapixel resolution
- User control of camera bin settings
- Exceptional dynamic range and sensitivity
- Real-time imaging
- Dynamic flat fielding
- Excellent collection efficiency f/1.2 motorized zoom lens or f/0.95 wide-angle lens

The ChemiDoc XRS system is optimized for high-resolution chemiluminescent and fluorescent imaging.



#### **Quantity One 1-D Analysis Software**

Close 4 Reset View (1) Help

Quantity One software is a powerful package for imaging and analyzing 1-D electrophoretic gels and blots, dot blots, slot blots, and colonies. Quantity One software analyzes a variety of data collected from densitometers, storage phosphor imagers, fluorescent imagers, and gel documentation systems. Quantity One software automates analysis for fast, high-quality results.

#### **User-Friendly Interface**

- Built-in quick guides
- Large selection of predetermined settings for the most commonly used detection reagents
- Annotation tools

#### **Analysis Tools**

- Automatic band and lane detection
- Molecular weight determination
- Colony counting and volume analysis
- Automation Manager for archiving and retrieving your most commonly used analysis templates
- 3-D viewer for critical analysis of closely spaced bands

#### **Data Output**

- Data sharing with unlimited copies of Quantity One Basic software
- TIFF file import, export, and publishing
- JPEG file export
- Mac and PC compatibility
- Networkability

#### **Now With Data Security**

 Tools for compliance with U.S. FDA 21 CFR Part 11 regulations

### Molecular Imager Gel Documentation Systems

#### **Specifications**

	Gel Doc XR System	ChemiDoc XRS System	
CCD resolution (H x V)	1,360 x 1,024 pixels	1,392 x 1,040 pixels	
Pixel density	4,096 gray levels	65,536 gray levels	
Pixel size (H x V)	4.6 x 4.6 μm 6.45 x 6.45 μm		
Resolution	1.4 megapixel	1.44 megapixel	
Dynamic range	>3 orders of magnitude	4 orders of magnitude	
Camera cooling system	_	Peltier	
Camera cooling temperature	_	-50°C	
Motorized zoom lens	C-mount, f/1.2, 8.5-51 mm	C-mount, f/1.2, 12-75 mm	
Illumination modes	Trans-UV, trans-white, epi-white	Trans-UV, trans-white, epi-white	
Excitation source	254, 302, 365 nm, and white light	254, 302, 365 nm, and white light	
Filter positions	Fluorescence: 2	Fluorescence: 2; chemiluminescence: 1	
Emission filters	1 included (EtBr/SYBR Green bandpass filter), 4 optional	1 included (EtBr/SYBR Green bandpass filter), 4 optional	
Transillumination area	25 x 26 cm	25 x 26 cm	
Dynamic flat fielding	_	Yes, CV* ≤5%	
Operating system compatibility	Windows XP/2000/Vista and Mac OS X	Windows XP/2000/Vista and Mac OS X	
Computer interface	USB	FireWire	
Dimensions (W x D x H)	60 x 36 x 96 cm	60 x 36 x 96 cm	
Weight	32 kg (70.4 lb)	32 kg (70.4 lb)	

<sup>\*</sup> Coefficient of variance.

#### **Ordering Information**

С	atalog #	Description		
G	iel Document	ation Systems		
1	70-8170	Molecular Imager Gel Doc XR System, PC		
1	70-8070	Molecular Imager ChemiDoc XRS System, PC		
1	70-8071	Molecular Imager ChemiDoc XRS System, Mac		
1	70-9600	Quantity One 1-D Analysis Software		
1	70-9615	Quantity One CFR Module		
Α	ccessories			
1	70-7950	White Light Transilluminator, universal hood		
1	70-8001	White Light Conversion Screen		
1	70-8072*	f/0.95 25 mm Wide-Angle Lens		
1	70-8073*	f/0.95 17 mm Wide-Angle Lens		
1	70-8074	Filter, 520DF30 62 mm for SYBR Green/GFP/SYBR Gold/fluorescein		
1	70-8075	Filter, 560DF50 62 mm for Cy3/rhodamine		
1	70-8076	Filter, 630BP30 62 mm for SYPRO Ruby/Texas Red		
1	70-8077	Filter, 480BP70 62 mm for Hoechst/coumarin		
10	61-0376	Precision Plus Protein WesternC Standards, 250 µl, 50 applications		
1	70-5070	Immun-Star WesternC Chemiluminescent Kit, includes 50 ml		
		luminol/enhancer, 50 ml peroxide solution		
1	70-8098	254 nm UV Lamps, 6		
1	70-6887	365 nm UV Lamps, 6		
1	70-8097	Standard 302 nm UV Lamps, 6		
1	70-8089	Mitsubishi P93DW Printer		
1	70-7581	Mitsubishi Thermal Printer Paper, 4 rolls		
1	70-8067	Sony UPD895 Printer Paper, 5 rolls		
С	computers	Inquire		
*	For ChemiDoc	XRS system only.		
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