Molecular Imager Gel-Doc XR+ with Image Lab Software

Manufacturer: Bio-rad

Model: Gel-Doc XR+



Descriptions:

Gel Doc XR+ imaging system is a high-resolution gel documentation system that allows fast and easy quantification and analysis of nucleic acid and protein gels, blots, and macroarrays. The Gel Doc XR+ system consists of a darkroom hood, CCD camera and software-controlled motorized lens, UV and white light illuminators, filter slider with standard filter, and UV-protection shield. The system supports fluorescence and colorimetric detection methods and is an ideal accompaniment to PCR, purification, and electrophoresis systems, enabling image analysis and documentation of restriction digests, amplified nucleic acids, genetic fingerprinting, RFLPs, protein purification and characterization

Specifications:

Applications	
Chemiluminescence	No
Fluorescence*	Yes
Colorimetry/densitometry	Yes
Gel documentation	Yes
Hardware Specifications	
Maximum sample size	28 x 36 cm
Maximum image area	19.4 x 26 cm
Excitation source	Epi-white light and trans-UV (302 nm) are standard (optional 385 nm lamp available); optional trans-white conversion screen and XcitaBlue™ UV/blue conversion screen available
Illumination control	3 modes (trans-UV, trans white, epi-white)
Detector	CCD
Image resolution	4 megapixels
Pixel size (H x V)	4.65 x 4.65 μm
Filter holder	3 positions (2 for filters, 1 without filter)
Emission filters	1 included (standard), 3 optional
Dynamic range	>3.0 orders of magnitude
Pixel density (gray levels)	4,096
Dynamic flat fielding	Application specific, for all applications
Instrument size (L x W x H)	36 x 60 x 96 cm
Instrument weight	32 kg
Operating Ranges	
Operating voltage	110/115/230 V AC nominal
Operating temperature	10-28°C (21°C recommended)
Operating humidity	<70% noncondensing
Automation Capabilities	
Workflow automated selection	Application driven; user selected or recalled by a protocol
Workflow automated execution	Controlled by a protocol via application specific setup for image area, illumination source, filter, analysis, and reporting
Workflow reproducibility	100% repeatability via recallable protocols; from image capture to quantitative analysis and reports
Autofocus (patent pending)	Precalibrated focus for any zoom setting or sample height
Image flat fielding**	Dynamio; precalibrated and optimized per application
Autoexposure	2 user-defined modes (intense or faint bands)

Instruction Manuals: available upon request from laboratory