

Specification for Gel Doc

Item	Make	Model
Complete Gel documentation system	BioRad	XR+

- 1- Versatile system to support wide range of applications - Fluorescent dye like sybr green, sybr safe, Western blotting, 2-D, 1-D, Dot Blotting, Nucleic acid detection ,Densitometry with both fluorescent and colorimetric stains etc.
- 2- Should have true 12 bit CCD camera with image resolution greater than 4 megapixel.
- 3- Pixel size; 4.65 x 4.65 um
- 4- Image acquisition with automatic focus and iris adjustments at all zoom levels for all compatible applications.
- 5- Dynamic range of more than 3 orders of magnitude.
- 6- Dynamic flat fielding for higher reproducibility.
- 7- Large trans-illuminator size capable of taking sample of size upto 28 X 36 cm.
- 8- It should have universal dark hood & should be upgradeable to chemiluminescence.
- 9- Should have motorized zoom lens- f/1.2, 12-75mm with a fixed position of sample tray.
- 10- It should be capable of Optimizing, saving, and quickly recalling the imaging acquisition settings
- 11- Reproducibly position or center the sample on the image platen by using gel alignment templates.
- 12- It should have USB connectivity for fast data transfer; firewire data transfer not preferred.
- 13- Instrument should have an in-built UV transilluminator which can be used as a stand-alone transilluminator for visualizing and cutting bands from gels.
- 14- System should be supplied with a UV protection shield to protect end user from unintentional exposure to UV light during band excision.
- 15- Should have single software for image acquisition and analysis with no license registration and capability to install in unlimited computers with full functionality.
- 16- Should come with 1 D analysis software with following features:
 - Automatic generation of customizable reports
 - Snapshot tool to copy images, lane profiles, and graphs
 - Complete flexibility with automatic and manual detection of lanes and bands, using several algorithms
 - Easy copy/paste functionality, crop, zoom, 3D viewer, and colors.
 - Publishing resolution (dpi) and publishing dimension can be specified with a one-click image export for publication. Provides functionality to produce image at user-defined dpi and dimension
 - No requirement for license registration
 - Mac and PC compatible software
 - 16-bit and 8-bit tiff images with a one-click export option
 - These accessories should also be supplied: White Light Transilluminator; UV goggles, filter for SYBR Green/GFP/SYBR Gold/fluorescein.
 - Should be supplied with compatible power back up for at least one hour, PC with minimum i5 processor and original windows 10 operating system, softwares etc.