

Specifications for Gel Imaging System:

1. System should be compact, have minimum footprint, a light-tight compact darkroom & a Slide-Out UV Transilluminator.
2. Versatile system to support wide range of applications like Fluorescence, colorimetry/densitometry & Gel documentation, Stainfree imaging.
3. The Gel Imaging System should support the following dyes – SYBR Green, SYBR Safe, Ethidium Bromide, Stain Free Gel , Coomassie Blue, Zinc Stain, Flamingo, Oriole, Silver Stain, Coomassie Fluor Orange, Sypro Ruby, Krypton & Colorimetric Blots
4. The Gel Imaging System should feature touch screen of size 9.7" or more which is Multitouch capable & offer a Display resolution of 1,024 x 768 pixels.
5. The Gel Imaging System should offer Smart Tray Technology that automatically recognizes your application-specific tray and adjust imaging parameters and software options accordingly
6. The Gel Imaging System should offer precalibrated focus for any zoom setting or sample height.
7. The Gel Imaging System should have a high-resolution scientific grade 16 bit CMOS camera of resolution greater than 6.3 megapixels & carry a pixel size of 2.4 μm x 2.4 μm , with Pixel density (gray levels) – 65535
8. Maximum image area - 21 x 14 cm (W x H)
9. Dynamic range - >3.5 orders of magnitude
10. Emission filter -535–645 nm
11. Data output -16-bit or 8-bit: SCN, TIFF, JPEG image files
12. The Gel Placement door should be drawer type allowing access to Gels from either direction for facilitating easy/clutter free gel excision applications.
13. The Instrument should offer Trans-UV ,Epi White and Trans White as Standard Illumination. Stain Free & UV/Blue Conversion should be available as optional.
14. Appropriate flat fielding correction should be automatically and consistently applied to image data for every application.
15. System should come with white light tray.

Specifications of the Image Analysis Software:

1. Automated lane and band identification, molecular weight or base pairs evaluation, band sizing, and quantitation based on a reference band or quantity standards
2. Snapshot tool to copy images, lane profiles, and graphs

3. Allow Publishing resolution (dpi) and publishing dimension to be specified with a one-click image export for publication. Provides functionality to produce image at user-defined dpi and dimension
4. No requirement of license for registration. The full version software should be installable in large number of computers. Lifetime free upgrades of Software & Firmware should be available. Software should be single for imaging and analysis.
5. Autoexposure – 2 user defined modes (intense or faint bands)
6. Mac and PC compatible software
7. 16-bit and 8-bit tiff images with a one-click export option
8. Software should produce customizable reports with data organized as desired, including, Lane and band identification, molecular weight or base pair evaluation. Band sizing and quantification are based on a reference band or quantity standards.
9. Software should offer live update of results with any change of analysis parameters.
10. Local/Global background subtraction for individual bands
11. Warrantee: 1 year