

### **Specifications for Gel Documentation System**

- 1- Must have 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- Should acquire image with automatic focus and iris adjustments at all zoom levels for all compatible applications.
- 4- Should have large trans-illuminator size capable of taking sample of size at least 28 X 36 cm.
- 5- It should have universal dark hood & should be upgradeable to chemiluminescence.
- 6- Camera should have motorized zoom lens with a fixed position of sample tray.
- 7- Should be supplied with compatible power back up for at least one hour, PC with minimum i5 processor, 4GB ram and original windows 10 operating system, software etc.
- 8- Instrument should have an in-built UV transilluminator which can be used as a stand-alone transilluminator for visualizing and cutting bands from gels.
- 9- System should be supplied with a UV protection shield to protect end user from unintentional exposure to UV light during band excision.
- 10- Should have minimum 2 years warranty and 5 years annual maintenance contract
- 11- These accessories should also be supplied without any additional cost: White Light Transilluminator; UV goggles, filter for SYBR Green/GFP/SYBR Gold/fluorescein.
- 12- Should have single software (free of cost) for image acquisition and analysis with no license registration and capability to install in unlimited computers with full functionality.
- 13- The system software should have following features:
  - Should provide automatic generation of customizable reports
  - Should have snapshot tool to copy images, lane profiles, and graphs
  - It should be capable of Optimizing, saving, and quickly recalling the imaging acquisition settings
  - Complete flexibility with automatic and manual detection of lanes and bands, using several algorithms
  - Publishing resolution (dpi) and publishing dimension should be specified with a one-click image export for publication. Should provide functionality to produce image at user-defined dpi and dimension
  - Reproducibly position or center the sample on the image platen by using gel alignment templates
  - No requirement for license registration
  - Must be windows 10 compatible software
  - 16-bit and 8-bit tiff images with a one-click export option