

**DEPARTMENT OF BIOTECHNOLOGY – INDIAN INSTITUTE OF
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**Dr.KARUNAGARAN
Prof & Head**

Date: 16th Jan 2015

**Ref : BT/SMAH/ 2014/035/SPL
Due date: 30th Jan 2015**

Terms and Conditions

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) Should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for ExGo down, delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner Stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Go down, Packing, forwarding and freight charges must be indicated.
8. The rates of Sales/General Taxes and the percentage of such other taxes legally livable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. The taxes livable should take into consideration that we are entitled to have concessional sales tax applicable to non -government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.

10. Goods shall not be supplied without an official supply order.

11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is late

Specification

Specifications for chemi doc System

- 1- Versatile system to support wide range of applications like- Fluorescent dye like sybr green, sybr safe, Western blotting, 2-D, 1-D, Dot Blotting, Nucleic acid detection, Densitometry 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 or larger
- 4- Image acquisition with automatic focus and iris adjustments at any zoom level.
- 5- Dynamic range of more than 3 orders of magnitude.
- 6- Dynamic flat fielding for correcting positional bias & for higher reproducibility.
- 7- Large & stand-alone trans-illuminator area of minimum 25 X 26 cm.
- 8- Should be compatible with “Stain Free Technology”.
- 9- Should have motorized zoom lens- f/1.2, 12-75mm with numerical feedback.
- 10- It should be capable of Optimizing, saving, and quickly recalling the imaging acquisition settings
- 11- Should come with 1 D analysis software with following features:
 - Automatic generation of customizable reports
 - Complete flexibility with automatic and manual detection of lanes and bands, using several algorithms
 - Easy copy/paste functionality, crop, zoom, 3D viewer, and colors.
 - User Specified Publishing resolution (dpi) and publishing with a one-click image export for publication.
 - No requirement for license registration of the software & installable in multiple PC's.
 - Mac and PC compatible software
 - 16-bit and 8-bit tiff images with a one-click export option
 - The system should be capable of accommodating & simultaneously running 1 to 4 mini gels in less than an hour.

- The system should be easy to assemble, include a casting stand and glass plates with permanently bonded gel spacers for leak proof casting of gels and avoid messy agarose sealing & tape casting of gels.
- The system should be capable of accommodating interchangeable modules for tank transfer, 2-D electrophoresis & electro-elution.
- The system should come with molded, one-piece buffer dam when running (only) one or three gels.
- The system should come with color coded electrodes to prevent accidental reversal of polarity.
- The system should be capable of accommodating 5 well, 9 well, 10 well, 15 well & Prep/2D combs for sample volumes ranging from 20-150 μ l.
- The system should be capable of accommodating both hand cast & precast gels of the below said dimensions :
 - Gel size (W x L): Precast 8.6 x 6.8 cm , handcast 8.3 x 7.3 cm.
- The supplied Power Source should be capable of delivering constant voltage, constant current & Constant Power output with automatic crossover.
 - The output range of the supplied Power Source should be 5-250V, 0.01-3.0 A, & 1-300W.
 - The Power Source should come with safety features like No Load Detection, Sudden Load change Detection, Ground Leak Detection, overload/short circuit detection & overvoltage protection.
 - The power unit should be stackable, compact with a small footprint.
 - Should come with a built in timer (1 min to 99hr 59mins), pause & resume function.
 - The power source should be capable of accommodating 1-4 mini/midi & maxi gels simultaneously/in parallel.
 - The system should be capable of accommodating Tank Transfer, Semi –Dry Apparatus, Horizontal Gel Electrophoresis units & Electro elution Apparatus.
 - System should provide rapid, high quality western transfer
 - Must accommodate at least two mini gels of size at least 10*7.5cm
 - Transfer time for both gels must be supported in a time frame of One hour
 - Overnight transfer must also be taken care
 - Preferably with a cooling unit to take care of heat generated
 - Buffer requirement should not exceed 450 ml – 500ml per run
 - Modularity of same tank to run PAGE gels must be provided