

Equipment name:	<b>Gel Documentation System along with complete gel electrophoresis system</b>			
S.No	Technical specification	Complied (yes or No)	If compliance given, mention the page no. of your technical document where the details are provided.	
1	Imaging system should have Automatic capabilities with Application driven, user selected or recalled by a protocol.			
2	Should have 100 % repeatability via recallable protocols.			
3	System should have pre-calibrated focus for any zoom settings & sample height.			
4	Should have appropriate flat fielding correction automatically & consistently applied to image data for every application..			
5	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 , Quantitation etc.			
6	System should take maximum Sample image size 28 X 36 cm.			
7	System should have precalibrated & optimized dynamic image flat fielding			
8	It should universal dark hood & upgradeable to chemiluminescence.			
9	Should have motorized zoom lens with auto exposure feature for imaging both intense and faint bands.			
10	Reproducibly position or center the sample on the image platen by using gel alignment templates.			
11	Should come with 1 D analysis software with following features and preferably multiple licenses.			
12	Single mouse click from image capture to results and reports, very fast and efficient.			
13	Should have comprehensive automated quantitative analysis of proteins & DNA samples in seconds.			
14	Intuitive and well organized (efficient) selection of workflows based on applications			
15	Should calculate precisely continuous focus curves that are consistently and automatically applied for every zoom position and sample height. No user intervention for focusing. All calculations are done at setup, once and for all image captures			
16	Should carry licensed one copy of Software for imaging and analyzing 1-D electrophoretic gels,dot blots, slot blots, and colony counts. Software should quantitate and analyze a variety of data.			
17	➤ Should be able to image stain free gels and blots with software having stain free normalization function.			
18	<b>Specifications for the Power Pack for electrophoresis Apparatus</b>			
19	Output specifications 20-5000 V, 0.01-500mA, 1-400W			
20	Output range (programmable) 5-250 V, fully adjustable in 1 V increments			
21	fully adjustable in 1W increments			
22	Type of output Constant voltage, current, or power with automatic crossover			
23	Output terminals 4 pair recessed banana jacks in parallel			
24	With Pause/resume function.			
25	<b>Specifications Large Format SDS-PAGE electrophoresis Apparatus:</b>			
26	Runs 1-2 gels of size not less than 16 x 16 cm to perform SDS-PAGE and the second dimension 2-D using IPG			
27	Accommodate 11 cm IPG Strips			
28	The casting stand with single screw clamp to exert even pressure along the entire length of the glass plates, providing a leak-proof seal without grease or agarose plugs			
29	System must come with central cooling core to connect via recirculation ports to tap water or a cooled recirculation bath, or filled with coolant to act as a heat sink, providing smile-free patterns with as little as 1.5 L buffer			

29	System must be quoted with four sets of spacers, glass plates both inner and outer and also combs		
	<b><u>Small format SDS-PAGE Electrophoresis Apparatus.</u></b>		
30	System should run 2 mini gels of 8.5 x 6.7 of precast and 8.2 x7.2 of handcast simultaneously in less than hour.		
31	Should be compatible with both pre-cast and hand cast gels.		
32	System should come with casting stand and casting frames with clamp closer for precision alignment and casting and with all hand casting accessories required.		
33	System should come with glass plates with permanently bonded Spacers for leak free casting.		
34	System should have sample loading guide to prevent skipped or repeated loading lanes.		
35	Total Buffer volume 700 ml		
36	Glass plate 10.1 x 8.2, 10.1x7.3 cm		
37	Option of up gradation to four gel system		
	<b><u>Specifications for Horizontal Gel electrophoresis for Mini Gel:</u></b>		
38	The apparatus should be able to resolve 30 samples.		
39	The small DNA fragments to be separated in as little at 150V.		
40	The Mini cells resolve Eco RI or Hind III digests of lambda DNA in only 1.5 hours at 60 V.		
41	The electrodes to be easy to remove and clean		
42	The electrodes to be color coded and labeled base guarantee correct positioning of the lid on the base.		
43	The direction of the run to be guided by the arrow mark and ensures for proper orientation of gel.		
44	The cell size ( W X L X H) 9.2 X 25.5 X 5.6 cm		
45	The Gel tray sizes to be 7 x7 cm and 7 x 10 cm		
46	The base buffer volume to be 270ml		
47	The bromophenol blue migration to be around 4.5 cm/hr at 75 V.		
48	Double booster stabiliser should be supplied along with equipment		
49	Computer with suitable UPS (for approx. 20 minutes back up) with following configuration should be supplied with the equipment		
50	I. Processor –Intel core i7-8 <sup>th</sup> gen or equivalent		
51	II. OS-windows 10 professional pre installed		
52	III. 16 GB RAM		
53	IV. 1 TB hard Disk		
54	V. 21inch LED monitor with HDMI port		
55	VI. Suitable NVIDIA/AMD graphic card for image processing		
56	VII. HDMI display port		
57	VIII. 1 Gig Ethernet port		
58	IX. 802.11ac 2.4/5 GHz wireless adaptor		
59	X. Warranty 2 years		
	<b><u>Others:</u></b>		
60	Voltage and plugs adopted to meet Indian conditions		
61	The manufacturer must have the management system certified by ISO9001		
62	Certificate should be provided that the instrument was calibrated at the factory		
63	All standard accessories and consumables and part require to operate to be included in the offer.		
64	Warranty & Service: The equipment should be supplied with 1 year warranty 2 year comprehensive annual maintenance contract (include spares and service visit) and 2 year Annual maintenance contract (only service visit).		
65	Immediate response upon system failure should be guaranteed. Response to service calls should happen within 48 hours.		

66	The unit must be quoted by Original Equipment Manufacturer's with Sales and service support facilities in India through their branch office / Indian Agent (or) Indian agent with extensive sales (Minimum 5 years) and service support in India representing foreign principals / Original Equipment manufacturers. The Indian agency / dealership certificate with details of sales and service support should be enclosed with the technical bid.		
67	The firm should provide necessary original documentary evidence of the features of the offered model in the technical bid to facilitate proper technical evaluation.		
68	Purchase orders, contact details and user satisfactory reports of the quoted model from Nationalized or reputed laboratories all over the India must be shared with quotation.		
69	Complete installation and testing the main system and the accessories to their specifications done at the site of installation free of cost. All utility requirements for installation and running the system should be mentioned in the offer.		
70	Please indicate the year in which the model offered was introduced into the market and confirm whether the spares for the system would be available for a minimum period of 10 years and shall not be obsolete within five years of procurement.		
71	Special discount on list price for all spare parts must be given up to 10 years.		
72	Availability of local service support and response time for a service call during and after warranty specified.		
73	Technical specification are intended to be descriptive only and not restrictive. The bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the purchaser's satisfaction that the substitutions ensure substantial equivalence or superior to those designated in the "Technical Specifications		
74	Certificate should be provided that the instrument was calibrated at the factory		
75	All standard accessories and consumables and part require to operate to be included in the offer.		