

Automated Electrophoresis System **with scanner /Densitometer**

Required to carry out electrophoresis based special assays on patient samples for a super speciality hospital. This has to cater to the needs of a complete oncology and nephrology set up.

I. Automated electrophoresis system for hospital clinical laboratory,

Featuring

- Automated electrophoretic run , drying staining and de-staining
- System machine should use Cellulose Acetate or Agarose strips as Matrix for Electrophoresis and separate strips and kits for Immunofixation.
- Should have two sample applicators made of special stainless steel.
- Automated control of voltage, time and current
- Gel temperature control with peltier effect
- Facility to separate serum proteins, haemoglobin, lipoproteins, CK, LDH & Alkaline phosphatase ,isoenzymes
- Facility for immunofixation
- Facility to store at least 30 application protocols
- Facility to run serum, urine & CSF samples without prior dilution or concentration
- Alarm for level sensing, timer and doors
- Samples for one gel should not exceed 10
- Equipment must not have any water sources or pumps.
- Migration Chamber should be monobloc with carbonium electrodes and should be able to give uniform distribution of current on the full strip.
- Should have multireagent (atleast 7) independent tanks.
- Process Control System should be guided by electromagnetic heads with optical sensor built in the Head.
- II. Densitometer (or) Gel scanner with the necessary accessories and software
- Either of these with the following features to be procured along with electrophoresis system
 - Scanning & processing all gels including those specified above
 - Facility to store the scanned image of the gel
 - Facility for curve editing and entry of patient demographics
 - Availability of quantification and quality control features
 - Storage of patient data and results – upto a minimum of 10000 samples
 - Facility to generate a comprehensive report containing patient demographics, scanned image of the gel, curve and quantification data

III Software upgradation to be provided free of cost upto 5 years

IV All necessary standard accessories like those required for sample application to be provided

along with the instrument.

V Suitable PC with colour ink jet printer to be provided along with the equipment.

VI Online UPS suitable for the entire system with 30 minutes back up.

VII One set of standard spares

VIII Two kits of serum protein electrophoresis, one kit each of Lipoproteins, and isoenzymes of LDH and alkaline phosphatase to be provided as starter kits.